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Cover: "Barbours' Seabird leaving Newtown"

David Blackwood
Etching
24 × 36

Photo by Michael Wallace
Courtesy Emma Butler Gallery
St. John's, Nfld.



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Charting a course for rural medicine

John Wootton, MD, CM, CCFP, FCFP
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CJRM 1998;3(3):135

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[[français](#)]

This month's journal cover is a coup of sorts. Not only are we able to showcase David Blackwood, one of Canada's leading artists, but we are also able to celebrate, through his work, a very successful, some might say historic, rural medicine conference that was held by the Society of Rural Physicians of Canada in St. John's in May.

Blackwood's print depicts the deceptively benign departure of the ketch "Seabird" as she leaves Newtown on her way to the Labrador Sea. It is an apt image for focussing the mind on some aspects of rural medicine. These sailors were on their own when they were at sea. The gathering skies in the upper left of the print and the icebergs on the distant horizon foretell the violence that nature may place in their way, and the organized busyness on deck suggests the experience and ingenuity which will be drawn upon when they are tested. Newfoundland sailing history is full of such tests at sea. Dramatic and at times tragic, many are tales of misfortune, others tales of perseverance, triumph, bravery and endurance.

It may be stretching the metaphor to apply all this to rural medicine, but the small society of sailors who might be found aboard a sailing vessel such as "Seabird," is not unlike a small Newfoundland coastal community, isolated at all times by geography, isolated at other times even more so by weather.

Many of the sessions at the conference dwelt on this theme in one way or another (see Society news, [page 157](#)). What local resources are adequate? Nurse practitioners? Solo GPs? Either (or both) with telemedicine links? What to do about emergency transfers? Who to send? Who stays? What if you can't go because of weather? What about on-call frequency? (see SRPC discussion

paper, [page 139](#)) These and other excellent questions flowed through the sessions, and out into the hallways, and beyond, into the ALARM course which was held the weekend after (for those who had not yet had enough "rurality" for one week!)

Were there answers? Some. It was clear in the presentations at the conference, and in the session on special skills (in an upcoming issue of CJRM) and reinforced by the anecdotes of rural docs themselves, that no matter how glitzy or high tech, machines don't always work. Unforeseen conditions, from bureaucracy to blizzards, may prevent them from getting off the ground. In the end it is people who are manning the ship; medical professionals with links to, and responsibility for, their communities. Like the crew of the "Seabird" they must be well trained and able to depend on themselves. They must have a good ship around them and have a bit of luck. In the end they are the best solution to isolation and the people most likely to get everyone safely home.

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Fixer le cap pour la médecine rurale

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JCMR 1998;3(3):136

[[English](#)]

La couverture de ce mois-ci est en quelque sorte un coup d'éclat. Nous pouvons non seulement présenter David Blackwood, un des grands artistes canadiens, mais aussi célébrer, par son œuvre, une conférence sur la médecine rurale qui a connu un franc succès, que certains pourraient même qualifier d'historique, et que la Société de médecine rurale du Canada a tenue à St. John's en mai.

La gravure de Blackwood décrit le départ, dont l'apparence anodine est trompeuse, du ketch «Seabird» quit-tant Newtown en route vers la mer du Labrador. C'est une image qui fait réfléchir à certains aspects de la médecine rurale. Ces marins étaient livrés à eux-mêmes en pleine mer. Le ciel qui s'assombrit en haut à gauche et les icebergs que l'on peut discerner à l'horizon présagent de la violence des éléments, tandis que l'activité ordonnée sur le pont témoigne de l'expérience et de l'ingéniosité auxquelles puiseront les matelots face à l'adversité. L'histoire maritime de Terre-Neuve fourmille d'épreuves en mer de cette nature. Beaucoup de ces cas spectaculaires et parfois tragiques sont des exemples d'infortune, de persévérance, de triomphe, de bravoure et d'endurance.

Appliquer cette métaphore telle quelle à la médecine rurale, c'est peut-être exagérer un peu, mais la petite société de marins que l'on trouve à bord d'un voilier comme le «Seabird» n'est pas sans ressembler à une petite communauté côtière de Terre-Neuve, isolée toujours par la géographie et parfois encore davantage par le mauvais temps.

Un grand nombre des séances de travail organisées au cours de la conférence ont abordé ce thème, d'une façon ou d'une autre (Voir "Society news", [page 157](#)). Quelles sont les ressources locales suffisantes? Infirmières de première ligne? OP seuls? L'un ou l'autre (ou les deux) dotés de liaisons de télé-médecine? Que faire face aux transferts d'urgence? Qui envoyer? Qui garder? Que faire si le mauvais temps empêche de partir? Et la fréquence des périodes de garde? (voir le

document de travail, en [page 139](#)). Ces questions et d'autres encore, excellentes, ont circulé pendant les séances de travail, dans les couloirs et au-delà, jusqu'au cours GESTA (ALARM), qui a eu lieu la fin de semaine suivante (pour ceux qui n'en avaient pas encore assez de la «ruralité» après une semaine!).

Y a-t-il eu des réponses? Dans certain cas. Les exposés présentés à la conférence ont démontré clairement que, aussi perfectionnées soient-elles, les machines ne fonctionnent pas toujours, comme on l'a vu au cours de la séance sur les compétences spécialisées (dont il sera question dans un prochain numéro du JCMR) et comme l'ont démontré les anecdotes des médecins ruraux eux-mêmes. Toutes sortes d'imprévus, des problèmes administratifs jusqu'aux tempêtes, peuvent empêcher un avion de décoller. Les membres d'équipage sont des personnes, des professionnels de la médecine qui ont des liens avec leur communauté et des responsabilités envers elle. Comme l'équipage du «Seabird», ils doivent avoir reçu une bonne formation et pouvoir compter sur leurs propres ressources. Ils doivent disposer d'un bon navire et avoir un peu de chance. En bout de ligne, ils représentent la meilleure solution à l'éloignement et ce sont les personnes les plus susceptibles de conduire chacun à bon port.

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President's message: Watching things grow

Patricia Vann, MD
Dryden, Ont.
President, Society of Rural Physicians of Canada

CJRM 1998;3(3):137

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[[français](#)]

It is with great pride that I become the third president of the SRPC. However, it is also with mixed emotions that Neil Leslie and I step into the positions vacated by Fred French, now past vice-president, and Keith MacLellan, now past-president: they will be a hard act to follow and we all owe them a vote of thanks.

The SRPC is now truly a national organization, recognized not only by those of us in the field but by provincial, national and international medical organizations and governments, community-based groups, universities and licensing bodies. This has come about because of the hard work of your former executive and the founding members of this society working on their own time and at their own expense. Thanks to them our voices are being heard and actions are being undertaken to promote our twin goals of sustainable working conditions for Canada's rural physicians and equitable conditions for health in all of rural Canada.

Recently, participation by the Society in national conferences on home care and telemedicine and risk reduction has meant that our interests were well represented. In St. John's the SRPC policy conference "Nurse Practitioners and Rural Medicine: Voices from the Field" brought interested parties together from across Canada (see [page 159](#)) as did the forum on advanced skills for rural physicians (more information in the next issue of this journal). The sixth annual general meeting and Rural and Remote Medicine Course were attended by over 150 physicians from each province and territory in Canada.

Our regional committees are helping to meet the needs of physicians and their communities.

Their efforts are characterized by achievements such as those of the Atlantic region (outlined in Regional Review on [page 149](#) of this issue). Continuing medical education programs for rural physicians by rural physicians are also being developed on a regional basis with the first being held this September in Revelstoke, BC. These committees are also able to reach out and help other regions at the grassroots level, as evidenced by the support and information shared with our colleagues in British Columbia to help them in their deadlock with their government over remuneration for on-call services (see related "on-call" discussion paper on [page 139](#)) and other items relating to their rural practices.

The obstetrics, anesthesia, emergency and working conditions committees continue to produce well-researched papers and to provide information to other agencies on realistic expectations in rural medicine. Plans are under way for establishing a national registry of rural physicians wishing to provide elective opportunities for medical students. Working groups studying advanced skill sets are being formed as are committees for students and residents and for rural specialists.

The work of the SRPC is based on volunteers working to meet the needs of members and their communities. Please join us, because by working together we do not need to feel alone while working in the country.

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Message de la présidente : Regarder grandir

Patricia Vann, MD
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Présidente, Société de médecine rurale du Canada

JCMR 1998;3(3):138

[[English](#)]

C'est avec beaucoup de fierté que je deviens la troisième personne à occuper la présidence de la SMRC. C'est toutefois aussi avec toutes sortes d'émotions que Neil Leslie et moi-même occupons les postes qu'ont quittés Fred French, maintenant vice-président sortant, et Keith MacLellan, maintenant président sortant : il sera difficile de leur succéder et nous avons une énorme dette de gratitude envers eux.

La SMRC est maintenant une organisation vraiment nationale reconnue non seulement par nous, ses membres sur le terrain, mais aussi par les organisations médicales provinciales, nationales et internationales et les gouvernements, les groupes communautaires, les universités et les ordres des médecins. Cette reconnaissance est attribuable aux efforts incessants des anciens membres de l'Exécutif et des membres fondateurs de la Société, qui y ont consacré leur temps et leur argent. Grâce à eux, nous pouvons nous faire entendre et nous avançons vers notre double objectif, qui est d'obtenir des conditions de travail viables pour les médecins ruraux du Canada et des conditions équitables pour toute la population rurale du Canada dans le domaine de la santé.

La Société a participé récemment à des conférences nationales sur les soins à domicile, la télémédecine et la réduction des risques, où nos intérêts ont été bien représentés. À St. John's, la conférence stratégique de la SMRC intitulée «Nurse Practitioners and Rural Medicine: Voices from the Field» a réuni des participants de toutes les régions du Canada (voir [page 159](#)), tout comme le forum on advanced skills for rural physicians (d'autres renseignements paraîtront dans le prochain numéro du Journal). La sixième assemblée générale annuelle et le cours sur la médecine en région rurale ou éloignée ont attiré plus de 150 médecins de tous les coins du Canada.

Nos comités régionaux aident à répondre aux besoins des médecins et de leur communauté. Des réalisations comme celles de la région de l'Atlantique (décrite dans la chronique Actualités régionales à la [page 149](#) du présent numéro) en témoignent. Nous travaillons aussi à mettre sur pied des programmes régionaux d'éducation médicale continue destinés aux médecins ruraux et dispensés par des médecins ruraux : le premier aura lieu en septembre à Revelstoke (C.-B.). Ces comités peuvent aussi aider dans d'autres régions, comme en témoignent l'appui que nous avons accordé à nos collègues de la Colombie-Britannique et les renseignements que nous avons partagés avec eux pour les aider à dénouer l'impasse où ils se trouvaient face à leur gouvernement au sujet de la rémunération des services de garde (voir le document de discussion connexe sur les services de garde à la [page 139](#)) et d'autres questions portant sur la pratique en milieu rural.

Les comités de l'obstétrique, de l'anesthésie, de la médecine d'urgence et des conditions de travail continuent de produire des documents fondés sur des recherches solides et de fournir à d'autres organismes des renseignements sur les attentes réalistes en médecine rurale. Des plans en cours visent à établir un registre national des médecins ruraux qui veulent offrir des stages au choix à des étudiants en médecine. Nous constituons aussi des groupes de travail sur les compétences avancées ainsi que des comités d'étudiants, de résidents et de spécialistes en milieu rural.

Le travail de la SMRC dépend de bénévoles qui cherchent à répondre aux besoins des membres et de la communauté. Venez vous joindre à nous parce que si nous travaillons tous ensemble, nous n'aurons pas à nous sentir seuls, même si nous œuvrons en milieu rural.

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Physician on-call frequency: Society of Rural Physicians of Canada discussion paper

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CJRM 1998;3(3):139-41

[[résumé](#)]

This article was endorsed by the Executive of the Society of Rural Physicians of Canada at its policy meeting in St. John's in May 1998.

This article has been peer reviewed.

This document was endorsed by the SRPC council as a discussion paper. We realize that the subject, although of great importance to rural doctors, will generate considerable debate, not only within the SRPC but outside it as well (e.g., in some provincial divisions of the CMA.) The SRPC council is determined to lead this debate to a successful conclusion and may host a national conference. First, the debate should start. Let us know your views. Keith MacLellan, MD, Past-President, SRPC

See also:

- [President's message: building bridges - don't let them crumble!](#)

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Abstract

The Society of Rural Physicians of Canada (SRPC), considering the evidence of excessive working hours and on-call periods on physician performance and well-being, recommends that formal on-call schedules include at least 5 participating physicians.

In communities or facilities where there are less than 5 physicians available to share the after-hours work, it is the position of the SRPC that these physicians neither be required nor expected to provide continuous 24-hour per day coverage. Possible solutions such as cross coverage of regional institutions or periods of no coverage must be determined on an individual community or facility basis.

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Résumé

Compte tenu des retombées démontrées que les heures de travail et les périodes de garde excessives ont sur le rendement des médecins et leur mieux-être, la Société de médecine rurale du Canada (SMRC) recommande qu'au moins cinq médecins participent aux horaires officiels de garde.

Dans les communautés ou les établissements où il y a moins de cinq médecins disponibles pour se partager le travail après les heures, la SMRC est d'avis que ces médecins ne devraient pas être obligés d'assurer une couverture continue 24 heures sur 24 et qu'on ne devrait pas s'attendre à ce qu'ils le fassent. Les solutions possibles comme la couverture réciproque entre établissements régionaux ou les périodes sans couverture doivent être définies selon la communauté ou l'établissement.

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The Canadian Medical Association's Code of Ethics states that a physician should, having

accepted professional responsibility for a patient, continue to provide services until they are no longer required or wanted; until another suitable physician has assumed responsibility for the patient; or until the patient has been given adequate notice that [the physician] intend[s] to terminate the relationship.¹

This concept, to "continue to provide services," is expanded by other regulatory bodies to imply a full 24 hours:

An ethical physician will ensure continuity of, and availability of the medical care of his/her patients. When unavailable, the physician will make a specific arrangement with another physician or group for the care of his/her patients. Physicians with whom these specific arrangements have been made will accept responsibility for the care of these patients.

It is not sufficient for physicians, or their offices, or their answering services, to simply direct patients to the nearest emergency department unless they have made prior arrangements with the physician(s) working in that department to care for their patients.²

This burden of responsibility seems to apply equally to general practitioners and specialists. In addition to being continuously available for their own patients, rural general practitioners are usually expected to provide primary emergency care for nonpatients and transients. This expectation is sometimes formalized in employment contracts or as a hospital medical staff regulation. Rural specialists, fewer in number, also have the responsibility of being on call more frequently than their urban counterparts.

With a sense of dedication and self-sacrifice, physicians have largely, without question, accepted this role. Some have organized themselves into call groups to cope with the after-hours demand. However, where there are very few or only 1 physician in the group, the workload can lead to exhaustion. Despite all this, the CMA Code of Ethics exhorts physicians to "practise the art and science of medicine competently and without impairment."¹

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Research

It is clear that irregular hours of work can affect sleep and this in turn can lead to many psychosocial problems in workers. In shift workers, a maladaptation syndrome has been described, characterized by chronic sleep disturbance and waking fatigue, gastrointestinal symptoms, alcohol or drug misuse or abuse, higher accident or near-miss rates, depression, malaise or personality changes, and difficult interpersonal relationships.³

Most of the research applicable to physicians is focussed on hospital interns, residents and house officers. Asken and Raham⁴ and Samkoff and Jacques⁵ have reviewed this research. Surveys of residents' moods and attitudes demonstrated deleterious effects of sleep deprivation and fatigue, including decreased work efficiency and poor relationships with patients. Psychological testing has revealed that mood disturbances such as anger and depression are negatively correlated with the amount of sleep. Tests on residents have shown no deterioration in the performance of high-intensity short-duration tasks but have revealed significant impairment in tasks requiring sustained vigilance and repetitive or routine work.

Studies are scarce on the effects of being on call from home. One study comparing 2 similar groups of French utility supervisors, half of whom were on call 24 hours a day for 1 week every 2 to 5 weeks showed the on-call group to be less socially active and to have significantly lower scores on Global Well Being and Psychological Equilibrium indices.⁶ In this small study group there was a trend for those more frequently on call to have lower scores than those less frequently on call.

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Existing guidelines for other occupations

Pilots flying aircraft with crews of 2 or more are limited to a maximum flying period of 9 to 14 hours.⁷ With rest periods, this can be extended to 18 hours. A single "day off" must include 2 nights. Crew members must not work more than 7 consecutive days and should have 2 consecutive days off in any consecutive 14 days, a minimum of 6 days off in any consecutive 4 weeks of work. Maximum cumulative hours should not exceed 50 hours per week, 100 hours over 4 consecutive weeks or 900 hours per year.

Truck drivers are not permitted to drive more than 13 hours in 24 hours and must rest for at least 8 hours before the next trip.⁸ Maximum cumulative hours should not exceed 60 hours per week.

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Existing guidelines for physicians

Britain, New Zealand and some states in the United States have enacted legislation restricting the hours that residents or house officers are permitted to be on duty.⁷ There is no similar Canadian legislation, but some of these restrictions are written into collective agreements.

Of note, the Royal College of Physicians and Surgeons of Canada and the College of Family

Physicians of Canada have no policies regarding on-call frequency. The Canadian Medical Protective Association does not produce clinical guidelines or standards.

Few Canadian medical bodies have tackled this issue. The Canadian Association of General Surgeons endorses a maximum 1 in 5 night-call system (Dr. W.G. Pollett, St. Clare's Mercy Hospital, St. John's: personal communication, 1998). The College of Physicians and Surgeons of Manitoba addresses the problem in their guideline on cross coverage in rural hospitals:⁹

It is considered unacceptable by The College of Physicians and Surgeons of Manitoba for a physician to be on call "all the time" or otherwise so frequently that chronic fatigue may impair the judgment, decision or procedural skills of the physician. To help deal with this, many smaller rural institutions are organizing into physician call groups (PCGS) in order to maintain essential services within a defined region. . . . Ideally, therefore, at least four physicians should participate in a PCG. This would ensure an on-call frequency of not more than one-in three, even in the event one member is away.⁹

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Guideline for on-call frequency for rural physicians

In his review of small rural hospitals in Ontario, Scott¹⁰ suggested that the maximum on-call frequency for physicians covering the rural emergency departments be 1 in 5. Rural hospitals that provide obstetrical and surgical services will also have physicians on call for obstetrics, anesthesia, and/or surgery at frequencies greater than that for the emergency department. Specialists in larger rural referral centres might also be on call "all the time" or at unsustainable frequencies.

There are at least 2 different approaches to calculating a maximum on-call frequency guideline: (1) minimum hours of rest and (2) maximum hours of work. Although it is true that in many situations physicians may be taking call from home or hospital and often sleeping during a portion of the on-duty period, it is important to ensure that any guideline accommodates the situation where the physician is actively attending patients for the whole on-duty period.

Minimum hours of rest

After a 24-hour work day, physicians should take at least a full day off. Using the pilot's recommendation of at least 2 nights rest per day off, a minimum of 4 physicians would be required to provide uninterrupted coverage. Three are needed to create a schedule that gives 2 nights of rest before the next call period. The fourth physician enables all participants to take time off for holiday, educational or sick leave.

Maximum hours of work

Using the maximum annual 900 hours of flight time recommended for pilots, 10 physicians would be needed to provide 24-hour a day coverage for 1 year.

Alternatively, if one assumes that physicians should not be expected to work more than the standard 37.5 hours per week with 4 weeks vacation and 2 weeks educational leave per year, at least 5 physicians would be necessary to cover the 8760 hours in 1 year.

There is obviously room for individual interpretation of work intensity, the degree of responsibility associated with the work, and the amount of rest necessary to remain vigilant and unimpaired by sleep deprivation. This is exemplified by the contrast between the work standards of pilots and others.

The "hours of work" method is the more reasonable way of calculating a maximum on-call frequency, because it considers the total burden of work in a year. The scenario of 5 physicians working a standard labour work week including night duty is reasonable and should be considered a minimum standard of care.

Where rural communities do not have 5 physicians from which to draw, it may be possible for neighbouring communities to share the on-call coverage. The maximum distance between those communities participating in "cross coverage" should be the subject of another guideline. For example, the College of Physicians and Surgeons of Manitoba recommends a time of 30 minutes or 50 km for emergency room services.⁹

Another option, for isolated communities with fewer than 5 physicians is to have frequent locum tenens relief. This could be provided in the form of sufficient weekend and holiday coverage to give an annual individual average workload equivalent to the 5-physician roster. Obviously, there would have to be appropriate financial incentives to attract locum tenens physicians.

There may be other creative options, but the ultimate and least desirable solution for such understaffed communities is to have periods of time with no physician coverage. This would require some communities to lower their expectations regarding physician availability and to respect their doctors' time off duty. Although this is not an ideal solution, it could make the difference between having a physician some of the time or having no physician at all.

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Interhospital transfers from rural hospitals: suggestions for your jump kit (what you shouldn't leave home without)

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The transfer of critically ill and injured patients to centres of higher care is a reality of rural medicine. Most often it is the responsibility of the rural physician to accompany and manage the care of that patient during the transfer. This often requires the use of drugs and equipment that must be collected before the transfer, which results in valuable time being lost and things being forgotten. To prevent this, a dedicated jump kit was developed and then tested over an 18-month period and was found to improve transfer efficiency. This paper outlines the basic requirements of a rural jump kit, which can then be modified to suit the needs of an individual rural hospital.

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Résumé

Le transfert de patients gravement malades ou blessés vers des centres de soins de plus haut niveau est une réalité de la médecine rurale. Il incombe la plupart du temps au médecin rural d'accompagner le patient et d'en gérer le traitement pendant le transfert. Il faut souvent réunir des médicaments et du matériel avant le transfert, ce qui entraîne une perte de temps précieux et des oublis. Pour prévenir ces problèmes, on a mis au point une trousse d'urgence réservée dont on a fait l'essai sur une période de 18 mois pour constater qu'elle améliorerait l'efficacité des transferts. Ce document décrit les besoins essentiels liés à une trousse d'urgence rurale, que chaque hôpital rural peut ensuite modifier en fonction de ses besoins.

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The arrival of a critically ill or injured patient to a rural emergency room is the beginning of one of the most stressful times in the practice of medicine. Depending on the resources available, the decision to transfer the patient to a regional or tertiary centre often is made during the resuscitation and stabilization of the patient. With approximately 30% of the Canadian population living in rural areas,^{1,2} the number of critical interhospital transfers is significant and can be expected to increase with the growing trend toward regionalization. This will result in an increasing strain on rural emergency systems.^{3,4}

Although the decision to transfer a patient is often easy, the arrangement of that transfer can be frustrating to the attending physician and can actually be more stressful than the patient care. Although some rural centres have access to urban-based transfer programs, many rural physicians must initiate, organize and undertake the transfers themselves.⁴ Unfortunately, very little is available in the literature on preparing and undertaking emergent transfers from rural centres. In addition, this is an area that is poorly covered in most urban-based residency training programs. Transport medicine, although not exclusive to rural medicine, is a reality to the practice of rural medicine in Canada and should be a part of every rural physician's training.¹ It is neither safe nor fair to expect medical, nursing or paramedical staff to accept responsibility for the transfer of a

critically ill patient without ensuring that they have received appropriate training. Even with that training, any physicians who have found themselves in a ground or air ambulance have quickly realized that a moving vehicle is no substitute for a spacious and well-equipped emergency room.

The general principles of a good patient transfer include: (1) the appropriate triage into the emergency system, (2) adequate resuscitation and stabilization before transport, (3) appropriate transfer personnel and (4) good communication with the receiving facility. These principles are supported by both the Canadian Association of Emergency Physicians¹ and the American College of Emergency Physicians.⁵ The principles include ensuring that the transporting personnel are prepared to deal with any deterioration of that patient during the transport. In most cases, this involves the respiratory, cardiovascular or neurologic systems. Therefore, the appropriate equipment and drugs to deal with these systems must be readily available as must the skills needed to use them. Whereas some rural centres in Canada are fortunate to have fully equipped advanced life support (ALS) ambulances available for transfers, most rural centres rely upon a basic life support (BLS) ambulance. In other words, it falls upon the transporting physician and/or nurse to anticipate all equipment and drugs that may be required during the transport and to collect them from the hospital before leaving that facility. Vital time may be lost and equipment forgotten if that process is not well organized.

This paper evolved from the development by the rural committee of the Canadian Association of Emergency Physicians of Recommendation 17.9, dealing with interfacility transport by ground and air teams from rural areas.¹ Our paper is meant to encourage rural hospitals to anticipate their need for equipment and drugs before transporting a critically ill patient. The development and use of an emergency transport, or "jump" kit would increase the efficiency and reduce the potential risk of emergent interhospital transfers. The paper also suggests a framework that hospitals can further modify to meet their individual demands.

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Development

The Shuswap Lake General Hospital (SLGH), with its approximately 45 acute care beds, is located in the southern interior of the province of British Columbia. The hospital serves the city of Salmon Arm (population 15 000) and its surrounding population of approximately 20 000 spread out over an area of 3000 km². There are approximately 14 000 visits to the emergency department annually. The hospital is a level 5 rural centre.¹ Although specialty services at the hospital include general surgery and general internal medicine, transfers are required for consultations such as orthopedics, ENT, neurosurgery, CT, angiography and prolonged ventilator support. Depending upon the requirement, the regional referral centres are approximately 60 km (minor, Vernon) or 120 km (major, Kelowna and Kamloops) away and the tertiary university centre (Vancouver) is approximately 600 km away.

Prior to January 1996, any equipment and/or drugs that might be required during a patient transfer were collected just before that transfer. This took valuable time and was often a source of great stress for the transporting personnel. It became apparent that if a standardized transport or "jump kit" was readily available to the transporting team, then the efficiency of that patient transfer could be increased.

A literature search using MEDLINE found several articles that suggested reasons to transfer critically ill patients from rural to urban centres¹⁻⁵ but few that pertained to equipment and drugs that might accompany patients on transfers between hospitals.⁶⁻⁸ A clear list has not been published detailing what should be transported with a critically ill patient from a rural to urban centre when transport times may involve hours.

[Table 1](#) lists all the equipment carried in our jump kit during transfers of critically ill patients. [Table 2](#) lists all the drugs we include. Each reflects the experience and comfort of our transfer team and may be expected to vary in different settings across the country. The kit represents an amalgamation of the literature and of practical experience. Part of the development process was how the transport kit should be packaged. After several trials, the box we chose was a large sportsman box. However, there are several specialty bags/boxes available through medical supply companies that would also function well.

From June 1996 to June 1997 the jump kit was used on 230 transfers that were made to regional or tertiary centres. This represented approximately 3% of all emergency visits to the hospital. Approximately 20% of those transfers were for critical injuries and/or illness. In addition, 24 transfers were required from our intensive/cardiac care unit. The total of emergent interhospital transfers from SLGH in the above time period was 70. Our transfer team for critically ill/injured patients always included a critical care nurse and most often a physician, in addition to the BLS ambulance crew.

All physicians or nurses accompanying the patient must be familiar with all equipment and drugs that have the potential to be used during the transport. In addition, it should be known what equipment the ambulance has available (i.e., oxygen, suction, IV fluids) and what experience the ambulance/paramedical personnel have. This includes both ground and air ambulances. Although the jump kit is well stocked, any additional or specialized equipment or medication should be added as needed.

Finally, a review of the jump kit contents must be arranged on a regular basis. In our hospital, the pharmacy department reviews and restocks the drug portion monthly and after each use, and a designated physician similarly reviews the airway equipment.

What is not included in the jump kit but should accompany each transfer is some form of communication equipment to allow contact among transporting vehicle, sending and receiving

hospitals (usually through the ambulance [EMS] dispatch; however, a cellular phone is often useful).

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Discussion

The transfer of critically ill/injured patients is an essential part of medical practice in rural Canada.⁴ Thompson and Ratcliff⁴ indicated that approximately 3% of patients presenting to a rural emergency department required transfer to a higher level of care. This was similar to the percentage shown during our study period. Although this number is small and will vary based upon the resources available to each rural centre, it represents the group of patients who require the most intense care from rural nurses and physicians.

Whereas some areas of the country are fortunate to have the availability of specialized urban-based medical transport teams, many areas are not and, because of distance, weather and geography, hospitals in these areas must arrange and undertake the interhospital transports themselves. It is essential, therefore, that rural physicians recognize when to transfer patients, know how to initiate transfers from their centres and when to accompany patients during the transfer.¹ It is also important for rural physicians to have the skills and equipment to provide optimum patient care during the transfer. Some of this comes from experience, but it is important that this area be taught to potential rural physicians during their training and updates be provided to practising rural physicians through appropriate continuing medical education.¹ By planning for the potential complications before transfers are initiated, the risks of transfers can be minimized.

The use of an appropriately stocked jump kit is an essential part of any transfer.^{1,6,7} Although many rural emergency health care facilities (REHCFs) may use a hastily assembled equipment bag, which has served quite well, the advantage of developing a specific and dedicated jump kit is to improve the efficiency and delivery of patient care during a transfer. It also assures the accompanying physician or nurse that essential drugs and equipment will be available.

The equipment and drugs that are suggested in this paper are meant to serve as a resource that each REHCF can customize to meet its own needs and experiences. The jump kit must be compact and easily transportable and is not meant to replace monitoring devices that may need to accompany the patient. The most important part of any kit must be the provider's knowledge of its contents.

This paper has not included suggestions for the transfer of obstetrical and newborn patients. These patients require special consideration in the planning of their transfer and often require separate sets of drugs and equipment. This would make our jump kit too large and unwieldy to be

practical. We have solved this problem by having 2 separate kits, one dedicated specifically to obstetrics and newborns. This kit will be discussed in a future paper.

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Focus on Nova Scotia

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Physicians who practise in rural areas of Nova Scotia received somewhat of a reprieve in 1997 with the introduction of payment for on-call services. This hard-fought recognition was not achieved without some discomfort. Clearly the government saw the need to have rural physicians involved, given the difficulty with recruiting and retention of rural physicians, but the potential for divisiveness was always present when funding of new programs was set aside in the context of a global budget. The final tariff agreement (between the Medical Society of Nova Scotia [MSN] and the Government of Nova Scotia), in which was included a rural stabilization fund, was met with widespread relief, but some fence mending remains. The fact that the government saw fit to set aside new money for the fund further contributed to the impression that government may be too focussed on rural concerns. As a group rural physicians have failed to articulate the differences between rural and urban physicians in a manner that does not invite finger pointing. The omission of a "voting seat" designated as rural at the MSNS Board level points to the lack of understanding of these critical differences. (The current "rural seat" on the Board is 1 of 5 seats designated for general practice.) It is important to recognize the goal of a stable rural physician work force: improved access to evidence-based health care for all Nova Scotians

Two years ago, prior to the incorporation of the Society of Rural Physicians of Nova Scotia (SRPNS), physicians based in rural Nova Scotia were polled to determine the factors that would enhance, not only their quality of life as physicians, but also their quality of life as members of a rural community. Ten concerns were listed, with continuing medical education, locum relief and payment for on call, being the front runners. The MSNS and the Nova Scotia Department of Health (DOH) were asked to present strategies to remove the barriers to both retention and

recruitment of rural physicians to Nova Scotia outlined in the survey. Minister of Health Bernie Boudreau invited interested parties to present their views to the government on this issue in February 1997.¹

A "Green Paper" entitled "Securing doctors' services requires a partnership"² was delivered to the minister on Mar. 17, 1997, outlining the SRPNS position. The SRPNS was the only organization to formally respond to the minister's challenges. The DOH, to date, has not responded to this paper. Much of the "Green Paper" dealt with Graham C. Scott's report to the Government of Nova Scotia and the assumptions on which it was built.³ Given that Mr. Scott had been instrumental in brokering a deal for rural physicians in Ontario, the government saw fit to ask Mr. Scott, at the urging of the SRPNS, to assess the problems of securing rural physicians' services in rural Nova Scotia. Unfortunately Mr. Scott's terms of reference (and budgetary parameters for the "solution") in Nova Scotia were outlined without consultation with either the MSNS or the SRPNS. Although Mr. Scott did have wide consultation with some of the stakeholders, as part of the process, the fact that he had to craft a solution within restricted guidelines limited his imagination. The executive of the SRPNS presented vigorous opposition to the Nova Scotia Scott Report in a written dissertation to the minister of health⁴ Despite Scott's recognition of a need to compensate physicians for being on call, a "poison pill" was included in his report: Graham Scott recommended that physicians be made to work in designated emergency rooms to receive compensation for on call and suggested that physicians would serve their patients better if they worked in group practice situations.

In Nova Scotia, as in other provinces, there are solo physicians (some of whom are not affiliated with designated emergency rooms), especially in very rural areas, who continue to offer on-call service to their patients. Although there are many who feel that this is detrimental to the well-being of all concerned, this service needs to be compensated until some other process is in place to serve the needs of those patients. This is particularly critical for those specialties located in rural areas. Internal medicine, surgery, pediatrics, ophthalmology and neurology are only some of the specialties in need of urgent assistance with on-call compensation, to say nothing of manpower planning.

The SRPNS maintains that before manpower issues can be addressed, financial stability must be brought to rural health care. In Nova Scotia rural pediatric specialists are in need of urgent assistance with their practice situations. Pleas for reprieve from unworkable and unsafe work places have fallen on deaf ears. Mr. Scott did not consult with the physicians in question nor did he spend any time discussing the matter with community representatives. It is interesting to note that he made similar recommendations in New Brunswick. All stakeholders recognized the disruption caused by forcing physicians to take call from recognized emergency rooms and they realized that a compromise was required. Like all compromises no one can claim total victory.

After considerable debate, the following was agreed upon: First, all physicians providing on-call service in a registered emergency room would receive compensation based on a formula that

factored in volumes of patients seen in the departments. Level III emergency care physicians would be compensated at a rate of Can\$85/h. Rural emergency care on-call remuneration would be divided into 3 categories: the larger volume rooms (category A) would compensate their physicians at approximately Can\$65/h, mid-volume rooms (category B) would compensate Can\$55/h (in lieu of fee-for-service compensation), with solo physicians (category C) receiving a fixed Can\$20 000 a year in addition to fee for service.³

Although explicitly prejudicial to the more rural, less supported physicians, it was a compromise needed to gain support from colleagues. The DOH pledged to entertain an alternative remuneration scheme to address the inequities. The issue of compensation for rural specialists would be deferred until a new model of primary health delivery could be implemented and an alternative remuneration mechanism devised.

No one can speak for rural physicians on the fundamental issues of remuneration, education and lifestyle better than rural physicians. The MSNS is the only body legally able to negotiate remuneration for physicians. The establishment of the rural stabilization fund in Nova Scotia that eventually led to on-call remuneration and other initiatives was made possible because rural physicians were involved in a meaningful and productive manner. In any negotiation process the players must choose the battles they can win. Success should be measured in quantum that will provide the building blocks of a sound foundation for stable rural health care. In Nova Scotia the first block of the foundation was acceptance of remuneration for call, the second is the creation of an information management infrastructure and the third will be input into the training of medical students for rural practice.

No single measure has served to have a more positive impact on the lives of rural physicians than payment for on call. This compensation has provided physicians with hope: hope that there will soon be an alternative remuneration package that will fairly compensate rural physicians, not only for the long hours they work but, more importantly, for the extraordinary responsibility and skills set these physicians must maintain. Rural physicians will be the first to admit that on-call remuneration is not about increasing physicians' take-home incomes.² Rural physicians have finally come to the realization that compensation for on call is about self-respect and the ability to control their lives. The ability to have locums come to relieve rural physicians for a weekend has confirmed that the help is there if the funds are made available to make it happen.

Payment for on call, the recently signed tariff agreement and the funding of re-entry positions have allowed physicians to take a breath, but the structural anomalies that have contributed to a gradual erosion of confidence in the health care system continue to exist. There are areas of the province with a critical shortage of physicians. Amherst, Yarmouth, L'Ardoise, Port Hawkesbury, Guysborough, Shelbourne, Springhill, Arichat, Digby, Windsor and Liverpool are all looking for 1 or more physicians immediately. Many more communities have a marginal complement when one considers factors such as age, backup, spousal employment, educational concerns and other issues.

Physicians, especially rural physicians, remain outside the planning and implementational levels of the DOH both at the provincial and federal levels. As this article goes to press, there is a Nova Scotia DOH initiative to review primary care. Although rural physicians are clearly at the centre of any current primary care model, they have not been asked to participate at any level. It is clear that a crisis of confidence in the ability of physicians to participate as knowledgeable partners in the reform of health care in this country continues to pervade departments of health. The question that begs an answer is: how meaningful will the recommendations to revamp primary care be, if major stakeholders are not involved?

Realizing objectives as ambitious as those outlined here requires the cooperation of many groups. In the past, the lack of communication among stakeholders has contributed to misinterpretations of motives. The time has come for a new approach to be developed to address our common problems -- an approach where each group will have to realize that some autonomy may have to be relinquished to achieve the greater goal. Rural patients through their representatives are demanding nothing less.

A paradox exists however: The majority of rural physicians do not belong to an organized professional group. Forty percent of the Canadian population lives in rural Canada where the bite of health care reform has had the greatest impact. Individual voices have little impact on those who would have you believe that they know what is best for health care in this country. The SRPNS has been instrumental in articulating the needs of rural physicians.

Many issues remain to be explored. The lack of a comprehensive and universally available locum service remains a priority. There are many reasons why this service (announced Apr. 16, 1997) has not been established. Probably the most critical is the DOH admission that there are not enough warm bodies to make this a reality. The SRPNS believes the problem is more complex: training, fair remuneration, logistics, regulatory issues and overall government funding of health care are unresolved issues affecting the availability of locums; a problem not unique to Nova Scotia. However, we have an opportunity to craft a unique solution to the problem by involving rural physicians who are the major beneficiary of a locum service. Departments of health need to reconsider the value they place on physicians who are prepared to undertake this rather extraordinary roll in health care. The issue of value for locum service does not differ greatly from the issue of value for on call -- it is a matter of facing the reality of market forces. Rural physicians are ready to deal with this subject, but first they need to be asked.

The SRPNS is aware that the other items listed need attention if rural health care is to be regarded as a sustainable resource in this province. The ability to cope with these complex issues is compromised by a lack of interest (demonstrated by the membership) in coming forward to develop strategy to grapple with alternative remuneration, curriculum, work-place stress and spousal factors, to name but a few. It can be said that the SRPNS has not been as communicative as it could have been. It can also be said that many physicians in rural Nova Scotia are busy treading water and have little energy to pursue these goals even though they will be the first to

admit that the lack of resolution will eventually lead to their own demise. It can also be said that the MSNS has not been as open to dialogue with the SRPNS as it could have been. There are legitimate reasons for each observation, but in the long run both organizations will do a disservice to the people of Nova Scotia if these common problems are not resolved.

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Country cardiograms case 9

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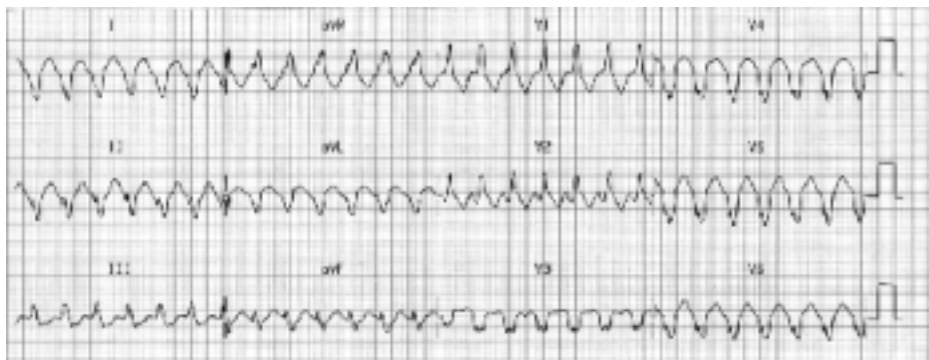
CJRM 1998;3(3):153

This paper has been peer reviewed.

"Country cardiograms" is a regular feature of the Canadian Journal of Rural Medicine. In each issue we will present an electrocardiogram and discuss the case in a rural context. Submit cases to Dr. Jim Thompson, c/o Canadian Journal of Rural Medicine, Box 1086, Shawville, QC J0X 2Y0; cjrm@fox.nstn.ca

Case presentation

A 67-year-old woman with a history of diabetes, obesity, hypercholesterolemia and coronary artery disease presented to a small rural hospital emergency department with palpitations that had been present constantly for several hours. She had no chest pain, and her vital signs were within normal limits except for the fast heart rate.



What is her differential diagnosis, and how would you manage this problem in your rural setting?
See answer and discussion on [page 177](#).

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The occasional varicose ulcer

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This paper has been peer reviewed.

Occam's razor states we should not multiply our phenomena. It is a useful principle in clinical diagnosis that, when one explanation fits a seemingly disparate set of signs and symptoms, it is more likely to be right than multiple explanations for the same set. A corollary would be that when there are many different treatments for the same condition, none is likely to be perfectly right. There is, after all, only one way to cure appendicitis (notwithstanding the experience of a certain Montreal Canadiens goalie several Stanley Cup Series ago).

All treatments of varicose ulcers of the lower extremities involve some sort of compression to relieve stasis and excessive pressure within the vein. Placing an Unna's boot is a time-honoured method to accomplish this. Several other methods have since evolved, none, though, gaining the grace of absolute truth. I still find this method as good as any other, although it does take time. In rural medicine, time is best wasted with patients you like, so I often look forward to a chat when I apply an Unna's boot.

I assume the reader has already properly diagnosed a varicose ulcer, excluding marked arterial insufficiency, infection, cancers and other strange beasts. Here's what you need:

Formula

- a piece of petroleum jelly gauze (Adaptic)

- 2 rolls of dry gauze wrap (i.e., 4-inch Kling)
- 2 boxes of zinc oxide impregnated gauze (Viscopaste)
- 1 elastic bandage (Ace bandage)
- some tape



Fig. 1

A suitable varicose ulcer in the medial malleolus area.



Fig. 2

Place the petroleum gauze over the ulcer.



Fig. 3

Wrap the lower leg with the dry gauze.



Fig. 4

Follow with 2 layers of the zinc oxide gauze, much like putting on a cast, starting from the distal end, from foot to upper calf. Cover with 4-inch Kling.



Fig. 5

Cover with the elastic bandage, again with snug compression.



Fig. 6

Tape securely in place. Warn about arterial compromise.

Patients can walk with this dressing because it is flexible. They should return in 2 weeks for a new one, or before if it unravels or if there is a lot of serious drainage from the ulcer. Be patient. This technique will heal most stasis ulcers no matter how large although it may take many weeks. I wonder if Unna and Occam were related?



Society news: conference highlights

CJRM 1998;3(3):157-58

The SRPC sixth annual rural and remote area conference was held in St. John's in early May and was, by all accounts, a great success. The executive met before the conference began and, among other business, endorsed Eugene Leduc's on-call paper (see [page 139](#)) as a discussion paper to get everyone talking about the problems rural doctors have with on call. Tuesday, the SRPC held its day-long policy session, which focussed on the role of nurse practitioners in Canada's health care system (see [page 159](#)). Wednesday, the SRPC's 3rd annual National Rural Critical Care (NRCC) Course (see CJRM 1997;2[3]:143 [[full text](#)] for history of the course) was held at the Medical School at Memorial University of Newfoundland. The hands-on course has become so popular that the 40 lucky registrants who took the course signed up long before the conference. Unfortunately many other doctors had to be turned away. Once again, in keeping with the SRPC belief that rural doctors learn best from their rural peers, all of the faculty teaching the NRCC courses were rural docs with a special interest in their subject.

The SRPC's annual general meeting was opened by Ms. Sally Rutherford, executive director, Canadian Federation of Agriculture. She spoke about how to keep rural doctors in the area and how many of the needs of rural doctors are similar to those of all rural residents -- quality medical care, quality education and the need to no longer be undervalued. The evening saw the changing of the guard as Dr. Keith MacLellan of Shawville, Que., handed over the presidency to Dr. Patricia Vann of Dryden Ont. Dr. Fred French of Norris Point, Nfld., stepped down as vice-president and Dr. Neil Leslie of Revelstoke, BC, stepped in. Dr. Ken Babey of Mount Forest, Ont., remains as secretary and Dr. Simon Goodall of Mount Forest, Ont., as treasurer. Secretary-elect is Dr. Robert Martel of Dartmouth, NS, and treasurer-elect is Dr. Ian Park of Whitney by, Ont. Lee Teperman of Charteris, Que., has replaced John Clark as administrative officer. Membership in the Society, which costs \$200, has more than doubled since last year's conference, but we are still only in the 3 figures (500 and growing at last count in April) and need to continue to grow to help finance all the committee work that the SRPC is doing on behalf of rural doctors in Canada. The projected deficit is about \$13 000 on a total budget of \$122 000. Members are our life blood, volunteering for the committees and, through their dues, funding the committees' work. If you are not a member, please join and convince a friend to join (see carrier

card insert with this issue for application form).

The SRPC has 5 regional committees: North/West, chaired by Dr. Stuart Johnson; Central, chaired by David O'Neil; Ontario, chaired by Dr. Peter Hutten-Czapski; Quebec, chaired by Dr. Maurice Lamarche; and Atlantic, chaired by Dr. Robert Martel. Each region gave a short synopsis: In the North/West, rural doctors are cut off from much of what goes on in government. They communicate through the media. Johnson says there are 15% fewer rural doctors than there were 4 years ago. There is a mass exodus now. In Johnson's own community of 23 physicians he says 8 are thinking of leaving. The British Columbia Medical Association is strongly supporting rural doctors in BC as is the SRPC executive. The Atlantic region meets via teleconference and email as do most of the SRPC committees, for obvious reasons (see [page 149](#) for a full report of what is happening in the Atlantic region). Ontario region has been doing much of its work via email and is working with the Professional Association of Internes and Residents of Ontario (PAIRO) on a rural blueprint. The Central and Quebec regions are just starting up.

The SRPC now has 11 active standing committees: Obstetrics; Emergency; Anesthesia; CME; Working Conditions; Specialties; Student/Resident; Communication; Rural Community Economics; Finance; Memberships and Nominations. Four other standing committees stand alone, looking for volunteers to take them up: Annual Meeting; Aboriginal Issues; Spousal/Family; and Allied Health Care. The chairs of the active committees gave their reports.

Dr. Hal Irvine, Anesthesia Committee, says that forging links with the Canadian Anaesthetists' Society is going to be difficult. We need to hear from rural anesthetists, and it could be useful to have a specialist anesthetist on the committee to serve as a bridge he says.

Dr. Graham Dodd, Emergency Committee, says that their first big project is to provide a rural focus to the national triage scale "coming soon to Canada" as put forward by the Canadian Association of Emergency Physicians (CAEP).

Dr. Stuart Iglesias of the highly active Obstetrics Committee (see CJRM 1998;3[2] [[full text](#)] for policy on obstetrics spearheaded by this group) says that the future of special skills is endangered and there is a fear that "rural medicine will be left to become a combination of triage and public health." We need to reclaim these specialist skills and we need a national training program for teaching advanced obstetrics he says. Iglesias organized a special skills night at the conference and CJRM will publish the proceedings in a future issue.

Dr. Eugene Leduc, the only member of the Working Committee until the AGM, produced the discussion paper on on-call policy (see [page 139](#) of this issue).

Dr. John Wootton, scientific editor of CJRM said that a contract has been signed between the CMA and SRPC to publish CJRM and that the feedback on the journal has been very positive.

(Judging by the number of change of address cards sent to us, doctors are not only reading it but missing it when it doesn't arrive at their new address!)

The AGM ended with 2 honorary rural doctor awards being handed out to Dr. André Lalonde (in absentia) and Dr. Michael Klein. Our new president, Dr. Patricia Vann, presented outgoing president, Dr. Keith Maclellan, and outgoing vice-president, Dr. Fred French, with gifts (see future cover of CJRM!) for their significant contributions to rural medicine.

Thursday and Friday belonged to the conference proper: 2 days filled with workshops, lectures and hands-on practice. Between workshops, conference participants were able to browse through the many booths set up outside the conference rooms (including an SRPC/CJRM booth) and in "The Clinic," which housed 30 exhibits on technology in health and education. The Women in Rural Medicine luncheon, now a conference fixture, was successful, being attended by some 50 women.

The only complaint heard at the conference was that there was so much jam-packed into 4 short days, with all evenings booked, that some meetings of special interest groups had to be held at 7:00 a.m. Staying a day longer was no solution as many doctors had signed up for the ALARM's course held on the weekend to coincide with the rural conference. Plans are in the works to manufacture more time! If you missed it this year, plan for St. John's next year.

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Nurse practitioners and rural medicine: voices from the field

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Acknowledgement: Prepared with the help of notes from Dawn Chamberlain

The SRPC continued its tradition of inviting key players to discuss difficult topics at the annual day-long policy conference held this year in St. John's. This year nurse practitioners (NPs), rural doctors, nurses and various members of the government, medical associations and licensing bodies discussed the role of NPs in rural medicine. At the end of the day 5 resolutions were passed by the conference participants.

- There should be a national process to develop guidelines for the scope of practice of NPs.
- There is an enhanced skills set and specific education required by NPs.
- The activities within the role of NPs are location specific.
- Funding models must be developed to enhance cooperative and collaborative care.
- Innovative education is needed to provide core competency and an enhanced skills set.

The presenters of the day's 2 panel discussions on the NP-MD relationship and training and maintenance of competence were The Honourable Joan Marie Aylward, minister of health for Newfoundland and Labrador, and her assistant Deputy Brenda FitzGerald, Lydia Hatcher, MD, CCFP, representing the Newfoundland and Labrador Medical Association (NLMA), Sharon Dore, RN, McMaster University, NPs Shari Glen, Ontario, and Gertie Bromley, Newfoundland, Madge Applin, RN, Centre for Nursing Studies, Newfoundland, Jeanne Keegan-Henry, MD, British Columbia, and Conleth O'Maonaigh, MB BCh, Newfoundland.

The minister noted that in Newfoundland and Labrador it was a challenge to provide rural health care in a province "with over 10 000 miles of rugged coastline and with a population less than Winnipeg." Late last fall the province passed unanimously an NP program, with the help and support of many players, including rural doctors. Three pilot sites have been set up where doctors, NPs (working within a defined role), registered nurses and other allied health care professionals will work in a teaching capacity in a "clustered" environment.

The NP program was set up because of public demand. It was recognized that there needed to be more than one way to deliver the service. Minister Aylward emphasized that NPs are not meant to replace physicians but should be used wherever they can improve services in conjunction with physicians, health care boards and the public.

The legislation would not prevent an NP from working in the city but s/he must work in collaboration with a physician. Much remains to be resolved and the government is working on a number of issues, including the definition and scope of practice, what NPs can and cannot do, guidelines and the payment method.

According to Lydia Hatcher the NLMA is concerned that the NP program in Newfoundland was put in place with little consultation with doctors. The NLMA essentially supports an expanded role for nurses as long as the clinical scope of practice is well defined, that it assists and contributes to enhanced care, that doctors remain as coordinators of care and patient referrals to a specialist remain in the hands of family doctors. The NLMA has set up a list of standards including admission requirements, internship, assessment, liability, examinations, physician involvement in training, and maintenance of competence and notes that training programs should have national accreditation. The NLMA also feels that admission should be contingent on agreement of future employment. This drew a question from the floor: "What other profession needs an admission requirement for future employment?" NPs will not solve the shortage of rural doctors since they are not physicians and the NLMA supports the CMA belief that "primary care is best delivered by a physician educated in comprehensive care."

NP Shari Glenn said that much of what the NP does is similar to what a physician does but that they approach it from different contexts, and she felt this can only enhance patient care. She works with 2 physicians. Collaborating works, she says, but it did take 2 to 3 years of juggling to understand where everyone's level of expertise was.

NP Sharon Dore noted that the training programs for nurses, including Master's, Diploma and Certificate programs, differ across the country with different levels of preparation, depending on where you graduated. This has caused much confusion over educational requirements and practice standards for nurses and NPs and clarification is needed. She asked, will the role of NPs be supportive or collaborative, who will pay NPs and what about liability insurance? RN Madge Applin, Centre for Nursing Studies, outlined what the NP course should be teaching.

Dr. Jeanne Keegan-Henry, once an advocate of NPs, said she is now not so sure after an unpleasant confrontational experience on Mayne Island in BC where she took part in an experimental look at expanding the nursing role in the rural community. Initially things went well, but a personality conflict between the doctor and nurse and lack of collaboration and any structure made for a deteriorating situation.

The need to collaborate was stressed over and over again by participants throughout the day.

Comments from the floor made it clear that guidelines are needed for the collaborative method to work. Some doctors expressed their fears at being replaced by NPs as governments search for less expensive alternatives. The challenge for physicians is how they want to be paid and how they see themselves fitting in. Many doctors fear that a new layer of professional will mean less money for them. Many procedures done by NPs are the bread and butter of rural doctors in less isolated areas. What will happen if this work is taken over by NPs?

NPs feel they have their own skill set at which they are as good or better than doctors so they should be allowed to practise interdependently, not just as assistants. NPs and doctors can have shared practices as equal partners, each with their own skill set. One question from the floor was that collaboration does not work just because you might legislate it and if the doctor is the coordinator of care and the nurse is the assistant how does that foster an interteam approach to care?

After the presentations and questions from the floor the conference broke into working groups whose reports follow.

Reports of the working groups

Group 1: problems and barriers

There are several problems and barriers to collaborative relationships between NPs and physicians. These include financial competition, especially within the fee-for-service environment and concerns regarding job security, with physicians fearing they will be replaced.

Professional relationship

Currently, there is a lack of definition of the NP-MD relationship. Should NPs and physicians have an employer-employee relationship or can it be of a more collegial nature? Who functions as supervisor and takes responsibility? Skills sets and roles must be clearly defined.

Duties and relationships

Do not place the 2 professions in a position of financial competition. Establish national or provincial legislation or regulations to define scope of practice, with local or regional guidelines for further clarification. Medically delegated tasks should be on a provincial list with local delegation.

Liability, accountability and responsibility need to be defined and a strategy to build a relationship of trust and confidence among the professionals must be established.

Group 2: entry to primary care

The issue of changing public access to the health system is ongoing and inextricably linked to changes in the remuneration system or models that will allow for collaborative practice and provision of integrated services along the continuum of care.

Group 3: emergency care

Areas of concern include:

Triage

Policies and guidelines for triage must be established to address the following concerns:

- performed by a doctor or an NP?
- should guidelines be instructive versus limited in nature?
- remuneration for advice
- who assumes responsibility for phone advice?
- volume and competence
- confidence
- initial training ability

What is an emergency?

Emergency services must be available 24 hours a day. Ultimately, the patient decides what constitutes an emergency.

Who is responsible?

Criteria for assumption of responsibility must be set. Information should be clearly given and interpretations clarified.

Call

Schedules must address the following conditions:

- relief/time out
- standards
- level of responsibility
- contract limits
- liability
- understaffing/funding
- evidence-based income
- level of responsibility/backup

Transport

Guidelines for the transport of patients must address the following conditions:

- time frames
- weather
- skills of the transport team
- protocols for initiating treatment

Availability of personnel

This is always a concern. Without the personnel to staff the ER, development of guidelines is futile.

Group 4: obstetrics

- The role of NPs should be based on location and specific patient needs.
- There is a need for national guidelines for education, standards of practice, certification and evaluation for NPs.
- Enhanced skills are needed to provide perinatal care.
- A low volume of patients has a detrimental effect on the maintenance of competence.

Group 5: training issues

Situation in Newfoundland

The previous family practice nurse education program ended in the 1970s and the outpost nursing program ended in the 1980s. The discontinuation of these programs was greatly influenced by increases in medical school enrolment.

The current NP program comprises 3 semesters. The first semester consists of classroom instruction and clinical simulations in assessment, pathophysiology and pharmacology. The second semester deals with community health nursing and the third consists of a dedicated practicum paired with a rural physician.

Entrance requirements

These consist of possession of an RN diploma with 2 or more years of experience. A BN is not required, as it was decided this would restrict the applicant pool. To date, 85% of the applicants are RNs. There is no evidence so far that would suggest the BN training is significantly helpful to the rural NP, although expert opinion suggests that there is benefit.

Terminology

Semantics are creating some problems. Do we need to define what these roles are by title? What are we training them to do? What are the desires of those who enrol in the NP program?

The group felt that interested individuals would like the challenge and freedom of an NP position

and that it takes a certain mindset to be interested in this type of practice.

What are the needs?

Training will be predicated on the intended role, with individualized training and curriculum. Sufficient elective time must be allowed to cater to these needs. Training methods should be largely practice-based.

Standardization

The group recommended that curricula not be focussed on the upper end, concerned with limiting what NPs are allowed to do, but rather should focus on a minimum set of knowledge, skills and attitudes.

Generalists need more training than specialists do and clinical assessment skills need more emphasis. Therapeutic trends change more rapidly than other criteria. Modularized training is recommended, especially for special skills.

Who decides on the content?

Group members recommended curricula developers take a leaf from residency training, allowing content to be decided by the learners. It should also be patient centred and take into consideration what is wanted by patients.

Who does the training?

The group suggested that residents be incorporated as teachers in certain areas and certain roles. This would obviously not be appropriate for all areas. Residents tend to have a different perspective and are very tertiary-care based because that's where their experience lies. There is also much value to be gained in the opposite direction from having NPs teach residents. Collaboration and communication are very important components of this process.

Where are we training them?

NPs should be educated in the same type of location where they will practise.

Principles

The future practice role is a major determinant of a relevant educational program and is determined by needs, resources, available methods and circumstances. The closer to the end of the program, the more the practice role should approximate the actual practice environment.

Group 6: recruitment and retention

This is presently an issue regarding physicians but will in future apply to NPs as well.

Clarity of roles

The need exists to provide specific education for rural practice for both the NP and the physician. Training for multidisciplinary practice needs to start early in the professional training process.

Lifestyle issues

Lifestyle issues become important early in rural practice. Support systems need to be in place for safety purposes. Accessibility to NP programs is vital. Immediate needs include sufficient funding for support staffing and well-screened locum pools.

Long-term goals

These include job sharing for NPs and physicians with flexible working arrangements. A large group practice in a large centre, which travels to outlying areas, may be the best system to meet the needs of both professionals and the public. Administration need to recognize basic needs of MDs and NPs.

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Kitchen-table appendectomy in 1916 Alberta

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Rural Roots features items on the history of rural medicine, to show where we've been and therefore where we're going. Submissions are welcome. Please send your submissions to the Editor: Box 1086, Shawville QC J0X 2Y0 or email them to cjrm@fox.nstn.ca

The Yo Ha Tinda Ranch is a federal government horse ranch in a beautiful, remote mountain valley west of Sundre, in south-central Alberta, on the eastern slopes of the Rocky Mountains. Today Sundre's ambulance can drive there, up a dirt road at the end of a paved country highway. In 1915 there were no doctors in Sundre, and the only access to the ranch was by horse path, or through the mountains from Banff to the south.

Muriel Eskrick, a local resident and amateur historian, told the story of a little girl's appendectomy this way.¹ [Quoted with permission.]

In the winter of 1915-16, Ike's stepdaughter, Frances, was stricken with ruptured appendix. Unable to move her, with no roads but pack trails, Ike saddled and rode to Sundre. He phoned a doctor in Olds, who refused to make the trip to the ranch. Ike turned back for the Yo Ha Tinda, changing horses at John Morgan's ranch. Reaching home, he paused long enough to again change horses, and then headed through the mountains to Banff. Obtaining fresh horses from L.C. Crosby at Banff, Ike and Doctor G.M. Atkins began the treacherous trek back over the ice of the Cascade and Panther Rivers and the snow-blown mountains, the doctor first making arrangements for his nurse, Miss Pulcher, to start for Sundre, via Calgary and Olds, by train. In those days the pack trail crossed and re-crossed mountain

streams, and while making one crossing, the doctor's horse plunged through the ice, throwing the doctor right under the water. They stopped long enough to light a fire and dry out a bit. Ike had brought along some cheese and a bottle of whiskey for sustenance on the trip. One can imagine the whiskey being put to good use right about then. In all, twenty-one river crossings had to be made in order to reach the Brewster Ranch. Those, plus snow-filled gulches and wind-swept mountain ridges, must have made this trip a nightmare ordeal.

They arrived at the ranch to find the little girl dangerously ill Without rest, Dr. Atkins turned the kitchen into a makeshift operating room and placing Frances on the table, proceeded to operate, with Billie Winters assisting.

N.T. Hagen of Sundre, always a willing neighbor in times such as these, was waiting in Olds with his faithful Model T, and met Miss Pulcher at the station. He brought her as far as Coal Camp. Billie Winters met her with a team and buggy and they headed west as fast as they could. The wagon trail went as far as Bill Logan's ranch. When they arrived they found the house in darkness. Bill Logan was away, but they made a quick lunch and Winters saddled the team he had been driving, and in the pitch black night, they started the final twenty-mile stretch of the trail to the Yo Ha Tinda.

Dr. Atkins stayed with the young patient for several days before returning to Banff. He must have been a very weary, but extremely satisfied man, for the operation was successful. He was called to the ranch a few days later, when Frances' condition seemed worse. He made this trip by train to Olds, with N.T. Hagen once more supplying transportation from there to Coal Camp and Rube Brooks meeting him at that point with saddle horses. Frances made a complete recovery.

Dramatic as this anecdote seems, it describes common practice in rural Alberta until the 1940s. Surgery often was done out of saddlebags on kitchen or schoolroom tables, and transport to hospital often was not available in winter.

Today a Basic Life Support ambulance can pick up a septic patient in the Yo Ha Tinda after a radiotelephone call from Sundre, a 2.5-hour round trip. The patient would be assessed by 1 of 6 doctors in the Emergency Department at Sundre Hospital. Depending on the patient's condition, he or she might be admitted to Sundre hospital for antibiotics, transferred to Olds by ground ambulance for surgery, or transferred to Calgary by helicopter for intensive care management.

Reference

1. Eskrick M. Road to the Yo Ha Tinda -- a story of pioneers. Sundre (AB): Sundre Round-Up Press; 1960. p. 20-1.



Listening to patients: a lifetime perspective from Ian McWhinney

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CJRM 1998;3(3):168-69

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Last year I was involved in a distant education pilot year in the 20-year-old Master's in Clinical Sciences degree. It is essentially a Master's degree in family medicine that for the first time is being given over the Internet. Dr. Ian McWhinney, who was recently awarded the Order of Canada, is one of the instructors.

I had the pleasure of sitting down with Dr. McWhinney last October in London, Ont. Dr. McWhinney is considered by many to be the father of family medicine and his textbook of family medicine (first published in 1981),¹ is well respected world wide (See review on [page 175](#)). Dr. McWhinney, now retired from active patient care, identified some of the common and touching aspects of what we do. It was reassuring to hear his sentiments echo some of the issues that become part of our experience as we develop in our practice over the years. In our lives as physicians, there are parts of our work that are pervasive to our experience and yet are seldom discussed: listening to patients, the spiritual aspect of our work and the art of medicine. I found his thoughts very enlightening and would like to share some of them with you.

On listening to patients

"If we could all just learn to listen, everything else would fall into place. Listening is the key to being patient centred."

"You can learn to be a better listener, but learning it is not like learning a skill that is added to what we know. It is a peeling away of things that interfere with listening, our preoccupations, our fear, of how we might respond to what we hear."

"Being able to listen well to patients is more like a personal development, that needs an internal change of heart. It is a fallacy to think of it as a skill, like plumbing. It's never that straightforward. One's inner life affects one's ability to listen."

"One way to teach it is to listen to students."

On the spiritual aspect of care

"Palliative care led me to an interest in the spiritual aspect of caring for others."

"Talking to the dying showed me that we shy away from asking about fears, when often the fears are quite specific: 'Will I have pain?' 'Will I suffocate?' "

"The spiritual aspect of patient care is often seen as another compartment, an added layer to either the 'psychosocial' or 'biomedical' compartments."

"Terms like psychosocial, denote a mind/body dualism, which conveys a fragmentation of the patient and their needs."

"I have come to think in a more integrated way of the spiritual aspect of care as an inner change we go through ourselves, not just something we do, but rather like an attitude, a part of delivering a baby, or changing a dressing. Perhaps we should stop using dualistic words and start using organismic terms -- function, growth, healing -- that don't have that sense of being compartmentalized."

On the art of medicine

"I remember the instruction of Dr. Stevenson, the Dean of Graduate Studies (at U.W.O.) when we were beginning the Master's program in family medicine program 20 years ago: 'Teach them to be artists. I want a family doctor who is an artist'."

"I think that being a good scientist is an art. Seeing patients in their own home, for example, is a part of the poetry of medicine and many physicians miss out on that these days."

Reference

1. McWhinney IR. A textbook of family medicine. New York: Oxford University Press; 1989.



Literature / Littérature scientifique

CJRM 1998;3(3):171

Rural training

Discussions about rural medicine inevitably resolve themselves into a small number of central themes, prominent among them being the issue of training. Three recent papers from south of the border outline experiences with rural training tracks (RTT).

One-two rural residency tracks in family practice: Are they getting the job done? Rosenthal TC, McGuigan MH, Osborne J, Holden DM, Parsons MA. *Fam Med* 1998;30(2):90-3.

It has been recognized in the US that a shortage of primary care physicians in rural areas exists, as it does in Canada. Rural training sites have been developed across the US since residents "tend to practice in the region where they trained." These are so called "one-two" programs in which the first year of a 3-year family medicine training program consists of traditional internship rotations, followed by 2 years spent almost entirely in a rural practice and rural hospital. The above paper reviews the results of a 1996 survey of the 13 existing RTT programs, in which 74 residents were enrolled in 1996 in the 2nd and 3rd years. Of these, 76% of graduates entered rural practice after graduation.

In a commentary in the same issue, Dr. Tom Norris provides an historical overview of the contribution of family medicine training to social change in the US.

Family practice residency programs: Agents for positive social change? Norris TE. *Fam Med* 1998;30(2):100-2.

In this essay the author advances the view that in the 1970s, in a desire to "begin the reversal of the trend toward 'specialism'" decisions were made that had the effect of "moving the graduate education process out of teaching hospitals and into model outpatient practices." Since residents tended to practise where they trained, this process was expanded "to local family practice training programs in all 50 states and multiple regions in many states." More recently it has been

recognized that in spite of adequate overall numbers, shortages continued to exist in rural areas. The changing face of residency programs reflect social needs and have resulted in the move to locate training sites (RTTs) in rural areas. The author, noting the emergence of information technologies in health care, adds that "we must learn how to apply videoconferencing and telemedicine technologies to these educational situations in ways that add benefit."

J.R. Damos and associates detail in the same issue the process of setting up an RTT.

A process for developing a rural training track. Damos JR, Sanner LA, Christman C, Aronson J, Larson S. *Fam Med* 1998;30(2):94-9.

The authors review the rationale behind the development of RTTs as follows:

- "1. The hypothesis that training residents in rural sites will attract them into rural practice.
2. The belief that rural training will provide a wider range of clinical experience.
3. The desire to expose residents to rural pregnancy care taught primarily by family physician role models.
4. The hypothesis that they will learn better . . . in an area in which on-site specialty backup is not always available.
5. The interest expressed by medical students.
6. The willingness of rural family physicians to participate in training."

The authors track the process through assembling a planning group, defining site criteria, selecting a site, establishing partnerships and responsibilities, developing a budget, integrating communications technologies, developing a curriculum and organizing faculty development. The process has been found to be viable and has served to set up several rural training sites in Wisconsin. At the time of publication the number of RTTs in Wisconsin was "increasing rapidly."

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Book Reviews

CJRM 1998;3(3):175-76

A Textbook of Family Medicine. 2nd edition. Ian R. McWhinney. 448 pp. Oxford University Press, Don Mills, Ont. 1997. Can\$50. ISBN 0-19-511518-X

This is one of the best books currently available about family medicine. I have no hesitation in recommending it to all medical students, family medicine residents and family doctors. Anyone who reads it will have a much deeper understanding of our discipline. I would also like to recommend it to our specialist colleagues.

Some textbooks try to cover a field of knowledge, others try to define and conceptualize it; this book is of the second kind. Family medicine covers any type of problem, and there is thus no disease that may not be encountered. Realizing this, Dr. McWhinney has not tried to produce a watered down textbook of internal medicine (such an undertaking would be ludicrous); rather, he has tried to show how family medicine differs from other medical disciplines in some very fundamental ways.

Half of his book (10 chapters), which has been extensively revised and expanded since the first edition appeared in 1981, is devoted to a conceptualization and description of the field. These chapters would constitute a masterly work if they stood alone. They cover the origins and principles of family medicine and its philosophical and scientific foundations. There are chapters on illness in the community; illness, suffering and healing; doctor-patient communication; the family in health and disease; and the enhancement of health and the prevention of disease. Dr. McWhinney's elegant prose style is evident throughout, and he makes copious and repeated reference to historic and literary sources. Who else would quote Hannah Arendt in one paragraph and Jane Austen in the next? The only worry I had when reading the first part of the book was that it might be too well written and too brainy for the average physician — we weren't trained to read this kind of stuff!

The second part of the book is devoted to 5 of the most common clinical problems that family doctors face. Dr. McWhinney devotes a chapter each to the acute sore throat, headache, fatigue,

hypertension and diabetes. By reviewing the literature in each of these fields, he is able to show how the diagnostic and management skills of family doctors, concerning both acute and chronic conditions, differ from those of institution-based physicians. For example, he shows how family doctors should be aware of the low predictive value of most investigations in the low-prevalence situations of primary care, and how the predictive value of the doctor's actions will improve as the illness advances. All this is information that experienced family doctors have always known instinctively, but now we can explain it clearly to students and other doctors.

The third and fourth sections of Dr. McWhinney's book are less satisfactory. They deal with the record-keeping and management skills needed in family medicine, relationships with other health professionals, continuing self-education and research in family practice. I feel these could have been better dealt with in another book.

Nonetheless, this is an excellent text, written entirely by one erudite and concerned physician(see also [page 168](#)). It contains a satisfying and rigorous description of the underlying philosophy, scientific evidence and practical ramifications of true family medicine. It is easy to read, entertaining and instructive, and will provide much opportunity for thought and discussion, among family physicians themselves, their students and their professional colleagues.

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Griffith's 5 Minute Clinical Consult. 6th ed. Edited by Mark R. Dambro. 1345 pp. Williams & Wilkins, Baltimore. 1998. US\$54.95. ISBN 0683-30578-6

Rural physicians often are faced with diagnosing illnesses that are relatively uncommon. Usually they must do so without specialist support. This book, the sixth annual edition, is a useful tool for confirming diagnoses and for reviewing specific illnesses quickly. It addresses 585 topics in an expanded outline format and 414 topics in a condensed form. The expanded topics are arranged in alphabetical order from "abortion, spontaneous" to "Zollinger-Ellison syndrome," and each illness is presented on 2 pages for quick reference.

Topics such as "atrial fibrillation" or "pneumonia, bacterial" completely fill 2 pages with text, whereas others such as "irritable bowel syndrome" do not fill the allotted 2 pages. Each illness is approached in a standard fashion under 6 column headings:

- basics -- includes in brief outline form a description of the illness as well as its prevalence, signs and symptoms, causes and risk factors,
- diagnosis -- covers the differential diagnosis, laboratory tests, imaging, special tests and

- procedures (such as biopsy, if indicated),
- treatment -- outlines general measures, surgical measures, diet, activity and patient education (including names and addresses of relevant US resource organizations),
 - medications -- covers the drugs of choice, their dosages, interactions, contraindications, precautions and side effects as well as alternative medications,
 - follow-up -- covers patient monitoring, prevention/avoidance, potential complications and expected progress,
 - miscellaneous -- lists outlines of associated conditions, age related factors, synonyms, ICD-9 codes and selected references.

The short topics from "acanthosis nigricans" to "zygomycosis," brief to the point of uselessness, are included in the last 45 pages of the text as summary descriptions, synonyms, causes, treatments (without drug dosages) and ICD-9 codes. There are 2 indices; 1 for medications and 1 for topics. Unfortunately there are no illustrations, which are always useful especially in dermatologic conditions. Nor are there any tables or flow charts. The book is intended as a rapid reference source. Certainly it will help to jog one's memory when dealing with less common conditions. It would benefit any busy general practitioner and assist students studying for examinations who require a quick review of specific topics. It is by no means a replacement for a textbook of internal medicine but can be used effectively in conjunction with a more detailed text, along with a good dermatology book. A CD version does exist that includes numerous illustrations.

Martin Benfey, MD
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Letters / Correspondance

CJRM 1998;3(3):178-80

Please send us your comments and opinions. Letters to the editor should be addressed to:
Canadian Journal of Rural Medicine, Box 1086, Shawville, QC J0X 2Y0; cjrm@fox.nstn.ca; fax
819 647-2845

UBC rural elective program

The eyes of medical students in British Columbia contemplating a career in rural medicine are opening wide as we witness the job action in our province. Specifically, the strike of doctors in the north-central communities of Burn's Lake, Fraser Lake, Fort St. James and others. It appears that the situation of rural doctors in our country is in the midst of a crisis. As medical students interested in rural health, we want to know how we can be part of the solution to problems such as overwork and under supply.

Thus, a group of students in the "Medical outreach elective program" at the University of British Columbia believe that fourth year electives for medical students may be an avenue to encourage new graduates to work in underserved areas. Traditionally, the program has been to send students overseas, but Canada has underserved areas of its own, so we are hoping to extend electives into rural Canada.

We are writing to ask physicians in rural/underserved parts of Canada to contact us if they are interested in having senior medical students for 4 to 8 weeks. Students will have completed their clinical year covering exposure to all hospital-based specialties and most will have experienced rural family practice for at least 4 weeks. We are in the process of organizing a profile of exactly the level of training the students will have. Students are responsible for organizing their elective objectives with their supervisor for subsequent approval by the Dean.

In addition, an interdisciplinary student group, GOSA (Global Outreach Student's Association) of the University of British Columbia is working to make contacts in northern Canada for interdisciplinary projects. Thus, we are looking for specific people in communities who are

involved in health care. These people would include public health nurses, First Nations chiefs, teachers and others.

Anyone who is interested or has contacts for us, can reach us at: stephanb@unixg.ubc.ca or etches@unixg.ubc.ca (email) or Attention: Vera Etches or Stephanie Buchanan, Room 3250, LSP, Faculty of Medicine, Vancouver Hospital, University of British Columbia, 910 West 10th Ave., Vancouver BC V5Z 4E3.

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The Scott Report

A response to Dr. A. Drummond's "Critique of the Scott Report" (CJRM 1998;3[1]:27-32 [[full text](#)]) is both necessary and probably healthy for a proper discussion of the issue of how best to provide emergency care in rural areas. Perhaps because of our respective roles within the Ontario Medical Association (OMA) (Dr. Drummond within the Section of Emergency Medicine and myself as Past-Chair of the Section on Rural Medicine), Dr. Drummond and I have agreed to disagree on several issues, including one that Dr. Drummond refers to in his article.

Dr. Drummond would argue that it is better to demote or close a small rural emergency department because of a perceived failure to reach a "defined minimum standard of emergency care," and instead substitute the dubious principles of regionalization with its paramedics, nurses and helicopters to provide acute care.

I would argue that it is better to strive to maintain the rural emergency department, with its dedicated rural doctors, and recognize that even with support for continuing medical education, locums and the like, we will not be able to meet the lofty standards proposed by some, including those in academic settings, insulated as they are from the real-world situation in rural areas. The reason is simple and well known to all who truly understand rural issues. The rural physician must have expertise in ALL areas of medicine -- internal medicine, surgery, obstetrics, pediatrics, psychiatry, to name a few -- AND emergency medicine. We will never quite achieve specialist level in any of these areas because of the vast amount of knowledge necessary coupled with the relatively low frequency of exposure in rural areas to these problems. We also will never have access to the urban level of technology. However, I am still waiting for evidence to prove that the quality of medicine provided in rural areas is deficient.

It is my contention that when all factors are considered (level of expertise, the personal touch, financial efficiency, the benefits of care close to home, and so on), rural doctors will come out on

top every time. Furthermore, continuing developments in technology should allow for even greater improvements in quality care. There is certainly a need for research to confirm these beliefs, but unless Dr. Drummond has evidence, including outcome measurements, to suggest otherwise, it is inappropriate to suggest that rural doctors are offering an inferior level of emergency care. One must also remember that although our volumes may be low, the acuity of our cases remains high and this, combined with the realities of rural life (remember, helicopters do not fly in blizzards), makes it imperative to ensure that well-trained, well-supported, and motivated rural physicians remain active in rural areas.

I would like to respond to several additional points raised in Dr. Drummond's article.

First, Dr. Drummond bemoans the lack of input from "representatives of organized emergency medicine." In fact, Scott acknowledges input from 134 physicians, including physicians such as Drs. Jim Rourke, Ken Babey, Eugene Dagnone (Department of Emergency Medicine, Queen's University), Dennis Psutka (Department of Emergency Medicine, McMaster University) and Alan Drummond himself. I think that Mr. Scott did consult widely, and wisely obtained most of his input from the true experts in rural emergency issues -- rural physicians.

Second, although Dr. Drummond has done a good job of summarizing the history leading up to the Scott Report, unfortunately he did not portray adequately the depth of emotion and tension that finally, after some 5 years of pressure, gave rise to Scott's recommendations. Rural doctors in Ontario were at the breaking point -- the same point that rural doctors in northern British Columbia have reached recently. Scott's advice, although not perfect, provided an excellent, workable solution for some 70 small Ontario hospitals, providing reasonable compensation for emergency work, allowing rural MDs to take time off after a night shift and bringing in outside physicians to help out, usually on weekends and holidays.

Third, I note, with some dismay, Dr. Drummond's recommendation to review the \$70/h stipend, because of to the perceived need to "demonstrate cost-effectiveness" and that "the plan has . . . improved the standard . . . of emergency care." The Scott Report received the unanimous endorsement of the OMA Section on Rural Medicine at a well-attended annual meeting in November 1996. It is a cornerstone in the battle for recognition and adequate compensation for rural physicians in Ontario and should act as a precedent for rural situations across the country. For many of us, it represents the first and only "perk" available to compensate for the many hours and degree of dedication provided by rural physicians. It has functioned well as a successful recruitment and retention initiative. How does one evaluate the "cost effectiveness" of these benefits? Unfortunately, there are some who, perhaps for political reasons, would seek to have the Scott sessional payments altered or reversed. I would argue that the Scott recommendations represent a bedrock accomplishment that is sacred to rural doctors and must not be touched (see related article [page 149](#) on Scott in Nova Scotia [Regional Review]).

Of course, it is necessary to address other issues such as reimbursement for rural specialists on

call, those who provide obstetrical and anesthesia services in rural areas, and emergency physicians in larger rural hospitals. Some of us within the OMA are working on these very issues, and I urge Dr. Drummond to join us.

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Rural maternity care

The Society of Obstetricians and Gynaecologists of Canada (SOGC), the College of Family Physicians of Canada (CFPC) and the Society of Rural Physicians of Canada (SRPC) wish to reinforce the support of our 3 organizations for the recently released joint position paper on rural maternity care ([CJRM 1998;3\[2\]:75-89](#)). We believe this paper clearly emphasizes the critical need to preserve and enhance the provision of obstetrical services for the women of rural Canada and their families.

Included as Appendix I with our paper is a list of the SOGC guidelines for obstetrical care. The guideline entitled "Number of Deliveries to Maintain Competence" has been and remains an integral part of the joint position produced by our organizations. It emphasizes the importance of evaluating the competence of those providing obstetrical care, not by the number of deliveries but by other objective measures of competence. In situations where numbers of deliveries will be small, this guideline emphasizes that the small numbers alone should not eliminate health care professionals from caring for pregnant women and delivering their babies. These women must continue to have the opportunity for complete maternity care as close to home as possible.

The example of less than 25 low-risk deliveries per year used in this guideline was not intended to suggest that such numbers should be used as a reference point, below which a physician or other health care professional should be denied privileges to deliver babies. As indicated in the guideline, we maintain that health care professionals with low-volume obstetrical practices should be participating in appropriate and relevant continuing medical education, including the ALSO (Advanced Life Support in Obstetrics) or ALARM (Advanced Labour and Risk Management) courses offered by the CFPC and SOGC.

We encourage the ongoing discussion and application of the recommendations of this joint position paper by all parties involved in maternity care in Canada.

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Interhospital transfers from rural hospitals: suggestions for your jump kit (what you shouldn't leave home without)

Table 1. Transport equipment: airway management (adult and pediatric)

- Bag/mask system with oxygen reservoir
- Adult masks
- Pediatric masks (toddler/pediatric size)
- Aerosol "nebulizer" masks (adult and pediatric)
- Laryngoscope (and extra batteries)
- Macintosh blades (# 2, 3, 4)
- Endotracheal tubes (5.0 to 8.0 mm ID)
- Endotracheal tube stylet
- Magil forceps
- Oral airways (assorted sizes)
- Nasal airways (assorted sizes)
- Adhesive tape, airway ties
- Suction catheters (ETT and tonsillar)
- Water soluble lubricant
- Oxygen masks and nasal cannulae
- Oxygen tubing
(Oxygen usually available in the ambulance)
- Intravenous management
 - Regular and mini drip administration sets
 - Intravenous catheters (16G to 24G)
 - Needles (assorted sizes)
 - Syringes (assorted sizes)
 - Butterfly needles (assorted sizes)
 - Tourniquets (2)
- Other
 - 2 * 2 sponges
 - 4 * 4 sponges
 - 3-inch Kling wrap
 - Normal saline (1000, 500 mL bags)
 - Scissors
 - ACLS review card

Broslow pediatric trauma tape
Cardiac monitor/defibrillator*
Pulse oximeter*

*Not part of the jump kit but often important monitoring devices to accompany the patient

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Interhospital transfers from rural hospitals: suggestions for your jump kit (what you shouldn't leave home without)

Table 2. Transport medications

Medication	Form	No.*
Adenosine	3 mg/mL ampoule	3
Atropine	1 mg/10 mL PLS	2
Bretylium	50 mg/mL ampoule	1
Calcium chloride	1 g/10 mL PLS	1
Dextrose 50%	50 mL PLS	2
Diazepam	5 mg/mL ampoule	4
Diltiazem	5 mg/mL vial	2
Dimenhydrinate	50 mg/mL ampoule	1
Diphenhydramine	50 mg/mL ampoule	2
Dopamine	40 mg/mL ampoule	2
Epinephrine	1:10 000 PLS	3
Epinephrine	1:1000 ampoule	2
Furosemide	10 mg/mL ampoule	3
Haldoperido	15 mg/mL ampoule	3
Lidocaine	20 mg/mL PLS	4
Magnesium	500 mg/mL ampoule	2
Metoprolol	1 mg/mL ampoule	2
Morphine	10 mg/mL ampoule	2
Midazolam	5 mg/mL ampoule	2
Naloxone	1 mg/mL ampoule	3
Nifedipine	10 mg capsule	4
Nitroglycerine	Sublingual spray	1

Procainamide	100 mg/mL vial	2
Salbutamol	1 mg/mL nebulizers	6
Sodium bicarbonate	8.4% PLS	2
Solu-Cortef	250 mg/mL vial	2
Succinylcholine	20 mg/mL vial	1
Vecuronium	10 mg/vial	2
Sterile water	10 mL polyampoules	6

*No. of vials or preloaded syringes (PLS) carried in our jump kit

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Country cardiograms case 9: Answer

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CJRM 1998;3(3):153

[See [Presentation, page 153](#)]

This paper has been peer reviewed.

"Country cardiograms" is a regular feature of the Canadian Journal of Rural Medicine. In each issue we will present an electrocardiogram and discuss the case in a rural context. Submit cases to Dr. Jim Thompson, c/o Canadian Journal of Rural Medicine, Box 1086, Shawville, QC J0X 2Y0; cjrm@fox.nstn.ca

The ECG shows a wide complex tachycardia (WCT) with regular RR interval, rate 165 bpm. WCT is most commonly due to ventricular tachycardia (VT) or less commonly to supraventricular tachycardia with aberrant conduction (SVT-A). The differential diagnosis more rarely includes ventricular flutter, torsade de pointes or tachycardia with bundle branch block.

Many efforts have been made to simplify the process of interpreting a WCT ECG, but none seems to be perfect.¹⁻³ The physician had a baseline ECG for this patient, which helped to make the diagnosis electrocardiographically ([Fig. 1](#)). VT is more likely in this case because the axis has shifted to the right upper quadrant (195°), the QRS width is greater than 140 ms and the morphology is bizarre relative to baseline. This ECG was difficult to interpret because other criteria supporting VT were not evident. P waves cannot be seen to determine AV dissociation, there did not appear to be QRS concordance in all the precordial leads, and the QRS morphology in leads V1 and V6 did not seem to meet Wellens' criteria for either VT or SVT-Aberrancy. I would be pleased to hear from readers who can point out how this ECG might have been

interpreted with more confidence.

Discussion

WCT causes anxiety for the emergency department physician because often the disorder is difficult to diagnose with certainty, and because there are key decisions that must be made to treat the patient properly.⁴

The clinical picture in this case is classic for VT because the patient was older, had known ischemic heart disease, had multiple risk factors for ischemic heart disease and did not have a prior history of supraventricular tachycardia. A clinician would not be faulted for assuming VT.²

The patient was clinically stable, so immediate electrical cardioversion or defibrillation was not required. Lidocaine is the drug of choice for clinically stable WCT of uncertain type (WCT-U) according to the ACLS protocol.⁵ This patient said she had an "allergy" to lidocaine. Adenosine is the next step in the ACLS protocol, because of the possibility that WCT-U can be SVT-A. When adenosine failed, as would be expected in VT, and following the ACLS protocol, the patient was given a slow infusion of procainamide. That also failed. The next choice in the ACLS protocol is bretylium, but because the patient had been in the rhythm for so long and was known to have ischemic heart disease, cardioversion was carried out.

The rural physician gave fentanyl intravenously followed by midazolam intravenously, then delivered a 100 J synchronized countershock, which converted the heart into sinus rhythm. The patient was transferred by ground ambulance to a cardiology service for further investigation and treatment, where she suffered recurrent VT and was finally stabilized on amiodarone and a pacemaker.

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Country cardiograms case 9: Answer

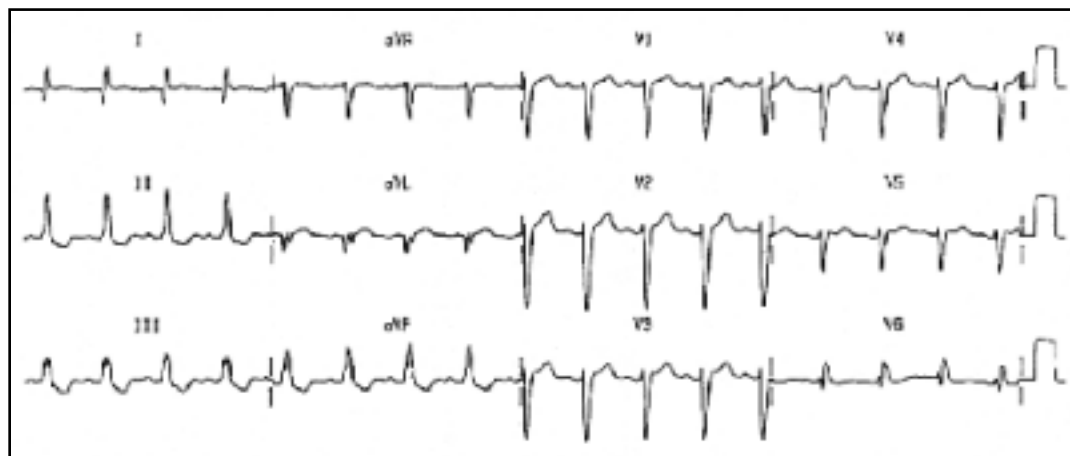


Fig. 1. The patient's baseline ECG obtained 2 months before the arrhythmia.

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