HELSE NORD

NHS Grampian

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Making it Work 2

An Arctic Articulation of Challenges and Solutions for Health in Rural and Remote Areas

September 2005

CONFERENCE REPORT

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INTRODUCTION

Between 21st and 23rd September 2005, over 200 delegates from 8 countries gathered in TromsØ, within the Arctic Circle, to discuss challenges and solutions to rural health issues. The conference was jointly organised by Helse Nord, from Northern Norway, and NHS Highland and NHS Grampian from Scotland. These areas share aspects of demography, geography, economic and social development, but also have sufficient differences to allow meaningful dialogue and joint exploration of new solutions to the challenges faced by rural and remote communities. This report describes key outcomes from the conference.

STRUCTURE AND DESIGN OF THE CONFERENCE

The conference was innovative, recognising that health issues and delivery of care are closely intertwined with many other aspects of rural society. Thus the delegates, who were drawn mainly from Norway and Scotland, included clinicians, managers and administrators, senior policymakers and educationalists, elected local and national politicians, patients and their representatives. In addition to the two organising countries, international experts from countries with advanced thinking about rural health policy were present, together with professionals from Russia and Georgia, whose economic and social situations have their own specific features.

A number of approaches were used to share information and to facilitate debate. As well as the usual mix of keynote lectures, plenary sessions, workshops and poster presentations, a "Knowledge Bank" was established to which delegates could add comment or materials using a "deposit slip" at any stage during the conference. Finally, the organisers provided an outline of a virtual remote community ("Hope"), including some geographic and demographic information, together with 4 case studies of individual health problems faced by residents of the community, around which discussion could be framed for the main topics of the conference.

During the introductory session, a short film was shown featuring the "residents" of this community and introducing delegates to the specific problems they faced. Throughout the conference, delegates were then asked to reflect back to how any recommendations made might apply to the citizens of Hope. The responses to the Hope scenario and the Knowledge Bank (Appendix 1) were used to contribute to this report. A brief description of Hope is as follows.

Hope has a population of 18,000, including two villages: Hope Springs, population 7,000; and Hope Falls population 2,000. In addition there is an offshore island with 2,000 inhabitants (Figure). A University teaching hospital is located at Destiny, 120 miles distant from Hope Springs, across a mountain range. The community of Hope has a largely traditional rural economy with significant deprivation and unemployment. The clinical scenarios presented included a 37 year old pregnant woman in labour during adverse weather conditions; a 17 year old island resident with acute psychosis who attempts suicide; an 80 year old woman living alone who suffers a stroke; and a family of 4 with a complex range of chronic health issues including smoking, alcoholism, diabetes, teenage pregnancy, asthma and depression against a background of deprivation and unemployment.

KEY MESSAGES FROM THE CONFERENCE

Both Norway and Scotland are currently facing reconfiguration of rural health services. Their healthcare systems share some features but also have important differences. In Norway, there is a greater degree of decentralisation of health care with municipalities having autonomy in commissioning and managing services. Primary and secondary health care are separately managed, the latter on a regional basis. In contrast, the Scottish Health Service has a greater degree of centralised control, although administered through regional Boards. In Scotland, a major review of the future of Health Services, including rural health services, has recently been published, entitled the Framework for Service Change ("The Kerr Report"). Throughout the conference, frequent reference was made to the recommendations of that report and their relevance not only to health services in Scotland, but possibly also to a wider audience.

In an introductory keynote lecture, Professor Olav Helge Forde from Tromso drew attention to six generic challenges to the delivery of health services in all developed countries: increasing expenditure; uncontrolled diffusion of medical technology; lack of adequate prioritisation; demographic changes; chronic illness; and consumerisation. In addition to these, rural areas also face particular challenges of geography and supply of key personnel. Dr John Wynn-Jones from the Institute of Rural Health in Wales reminded delegates about the additional rural dimensions of public and population health, occupational health, and community features including development, economy and environment, constituting what we might recognise as social capital. In developing the planning cycle for health services for rural areas, Geir Sverre Braut from the Norwegian Directorate of Health stressed the importance of including considerations of the sociology and social anthropology of communities. This theme of planning with community involvement (listening to the "tribal voices") was featured frequently throughout the conference discussion, recognising that this was not the same as always giving the community exactly what it demanded.

For parallel discussions and workshops, a number of key themes were chosen, linked to the examples highlighted in the "Hope" scenario. These included: maternity services; mental health; chronic disease management; health improvement and illness prevention; supporting healthy rural communities; and education for rural health staff. In this brief summary article, the level and complexity of debate on each topic cannot be fully reflected. However, some key messages can be distilled.

Maternity Services

A large multi-professional group, including patient representatives, discussed maternity services for remote and rural areas. The presentations and discussions reflected the importance of cultural issues in pregnancy and childbirth; the development of appropriately configured services with competent and adequately trained supported personnel; the need for dialogue with communities; and ultimately the achievement of sustainable services. Key messages delivered from the knowledge bank included the importance of defining time critical elements and configuring service accordingly; the observation that training and supporting staff locally can lead to increased local birth rates; recognition that midwives can provide a high quality service if adequately trained and supported; and support for the

use of patient hotels at main hospital sites, a feature well developed in Norway but not in Scotland. From New Zealand, Karen Guilliland described the concept of a Lead Maternity Carer. This individual can be a midwife, general practitioner or obstetrician and will develop responsibility for care of a woman during and after pregnancy. A contractual arrangement is developed to ensure that appropriate care is delivered. Experience from New Zealand shows that implementation of this model is challenging but effective, and can lead to enhanced midwife led care. The integration of other aspects of the woman's care is then also facilitated.

Mental Health

In relation to mental health, a repeated message was the importance of supporting and treating patients and their families locally where possible. In Tasmania, where a service redesign aspiration has been followed up by an implementation plan and a subsequent evaluation, clear benefit of locally based treatment has been obtained, as described by Professor Judi Walker. Models were described from Tasmania in which local members of the community undertook suicide watch and support; from North Norway, technology such as mobile phones is being used to access at risk populations; and in Scotland clear protocols have been developed for the management of psychiatric emergencies in remote and rural settings. In practice, the enhancement of primary care services becomes important, and there is a potential role for telehealth, bearing in mind some of the caveats on telehealth to be discussed later in this paper. Two crucial issues were emphasised: the importance of clarity about the operation and goals of any program, particularly where non-professionals are delivering care or support; and the issue of maintaining boundaries, for the benefit and wellbeing of both patient and health professional or carer. Boundary violations are perhaps more likely in rural and remote settings, where the patient and professional may interact in a variety of social settings as well as their therapeutic relationship. However, boundary crossing need not always be harmful and can be used to therapeutic benefit in some instances.

Chronic Disease Management

In discussing chronic disease management, there was an emphasis in a number of Scottish presentations on the concept of "managed clinical networks". These have been developed in Scotland on a disease-specific basis for common conditions such as diabetes, asthma, cancer, etc. It is recognised that involvement in a range of disease specific networks might be challenging for generalist rural and remote practitioners who may have a broad case mix, but few individuals in each disease category. However, innovations such as the Scottish Primary Care Collaborative, which includes rural practitioners in a broader network of practices targeting quality improvements, might provide a solution to this issue. To support those with chronic diseases, generic support workers who can provide input across a range of services are being studied in Scotland. At a more senior level, role redesign is shifting responsibilities previously held by Scottish general medical practitioners to senior nursing practitioners. In Northern Norway, networking those working in rehabilitation services across a wider area for the purpose of education, training and support is being implemented. Demonstrations were also given of the use of simulation software to plan how patient journeys through the care network might be planned. This has potential application to the rural setting. From the knowledge bank the importance of specialists being available to support local remote generalist professionals was again stressed. It is

important that the specialists engage with the community, e.g. collaborating and performing appropriate procedures locally, and not simply acting as "harvesters", recruiting patients to enhance their own practice.

Health Improvement and Illness Prevention

International morbidity and mortality league data suggest that Scotland has a greater challenge ahead than Norway in the promotion of health improvement and illness prevention. A series of papers from the Western Isles and Grampian Regions of Scotland described interventions to promote healthy eating, to enhance male and teenage health and to provide locally relevant health information. A variety of techniques have been used, including a broad community approach involving agencies other than health, the use of mobile facilities that have a social, as well as health promotional, function and the use of technology in the form of web-based information, available via a home or public access personal computer or via touch screen information kiosks. From the Norwegian perspective, interesting data were presented on the health benefits of rural living, some evidence for which has also been previously reported in Scotland.

Supporting Healthy Rural Communities

Supporting healthy rural communities included a diverse range of topics. The configuration of local health services was explored in relation to two reports, the Scottish "Framework for Service Change" (The Kerr Report) and the Helse-Nord Report "Decentralised Specialist Services". The scope of the former is greater than the latter, given that it relates to the whole health system, including primary, secondary and tertiary care. Specific discussions were held on the potential role for smaller hospitals (community hospitals and rural general hospitals in Scotland vs district medical centres in North Norway). Important lessons can be drawn here from experience in the USA with Critical Access Hospitals. The importance and potential for involving the community in their own care was illustrated by the concept of First Responders, being developed in Scotland. These individuals, who are not health professionals, are trained in basic skills by the ambulance service and can provide a rapid response to health related emergencies in their local communities, pending the arrival of professional personnel. School pupils are also receiving training in basic resuscitation skills. Finally, a number of papers discussed the use of technology such as videolinks, videophones and other technologies in specific clinical applications. There was a repeated theme in the conference that while "tele-anything" could be an invaluable adjunct to health care provision and will continue to undergo development and refinement, the benefit to be gained from direct human contact should not be underestimated.

Education and Training

A vigorous debate on education and training took place, informed by additional expertise from Australia from Professors Campbell Murdoch and Richard Hayes. It is generally recognised that Australia is ahead of the rest of the world in terms of rural clinical schools, the operation of which was described. Models involving distance learning for health professionals were described from both Norway and Scotland. The importance of mapping educational solutions to professional and service needs was discussed and some tools to begin to address this were presented. The value of time spent working in rural settings was demonstrated from Western Isles, Scotland, one outcome being that more students expressed an interest in a rural career, although a survey in TromsØ suggested that the proportion of medical graduates intending careers in remote or rural settings may be inadequate to meet demand.

Generic Issues

A number of more generic issues were also discussed. The link between economic development, social capital and health was acknowledged. A powerful example of joint working between economic development agencies and the health community came from Scotland, where a new Centre for Health Sciences is being built in Inverness as a result of such collaboration. This will provide a focus for education, training and research, much of which will be directed towards rural health issues. The need for more research to provide evidence for policymakers was supported and specific methodological issues were discussed. The importance of transport in rural and remote areas was discussed in the light of future world events. As oil and gas reserves fall it is likely that transport costs will continue to rise, affecting the viability not only of health services, but also of whole communities in remote and rural areas. Addressing this will require joined-up planning involving many agencies.

IMPLICATIONS FOR THE VIRTUAL COMMUNITY ("HOPE")

Drawing from the wide range of expertise and discussion at this conference, we can begin to structure healthcare plans that address the issues facing the community of Hope.

Scenario 1

Consider the 37 year-old pregnant woman in labour during adverse weather conditions. We might expect that the community and the health authorities will have developed a dialogue about the safe and effective provision of services, that takes account of the cultural context. From the early stages of pregnancy, the woman will have had an identifiable professional who takes lead responsibility for her care, most likely, but not necessarily a midwife. The midwife will have had education and training that makes her competent in risk assessment and determination of time critical elements. Ideally, the pregnancy will be entirely managed in the local community, using a facility appropriately configured. This could be located in a community hospital, or District Medical Centre or "Birthing Centre" in Norwegian terminology. If she does require to travel to the teaching hospital centre because a level of risk has been identified that renders local delivery inappropriate, then suitable transport facilities will be in place, a patient hotel may be located at the major hospital centre, and local support will allow an early transfer home after delivery.

Scenario 2

For the 17 year-old island resident with acute psychosis who attempts suicide, again the aim would be to provide a care package in his home community. Clearly, if he has sustained physical injuries in his suicide attempt, these may require medical or surgical intervention that might necessitate transfer off the island. There may be a need for a local "safe house" where he can be managed during the most acute phase of his disturbance. This need not necessarily be located within a hospital facility. If he does require transfer off the island, available guidelines should be followed to effect the transfer. With effective multi-agency working, support in the community for the family, proactive intervention from a service that has been developed locally, possibly making use of new technologies, he should receive quality care.

Scenario 3

The elderly lady who suffered the stroke could be cared for within the context of a managed clinical network. At the acute episode of collapse in the shop, first responder type skills may be invaluable, delivered by local residents.

For the health care professional, a key early clinical decision would relate to the need for imaging of the brain, which might necessitate transfer out of the community. However, time spent outwith the community should ideally be as brief as possible. In a community of this size, rehabilitation services could be provided by an appropriately trained and supported team, including social care as well as physiotherapy, occupational therapy etc. In such a setting, the use of home telecare might have a role.

Scenario 4

For the family with multiple health related risk factors, a variety of inputs might be beneficial. Outreach services, in which health promotion activities are linked with a social aspect would be appropriate, delivered via mobile facilities and/or use of technology (e.g. web based programmes or information kiosks). This family's problems might be ameliorated if the socioeconomic situation in Hope can be improved. Closer involvement with the community could potentially increase this family's feeling of self worth and value. For example, the school resuscitation project described from Scotland can provide young people with an important role in society.

Generic Issues

Planning and integrating the services for Hope and similar communities will require a shared mind-set among personnel on all care levels. Community values will have to be respected and the key role of primary care as the basis for services recognised. Efforts to decentralise specialist services will benefit rural communities only if developed in close collaboration with primary care. Service developments should take account of the local culture. Developing a "First Responder" type scheme may, as well as its specific role, serve to engage the community in health and social care planning. Small inpatient units, in district medical centres or community hospitals, staffed by a team of appropriately trained and supported individuals, will be prioritised as a key platform for collaborative services. Relationships with the distant teaching centre and its specialist services will be explicit, based on mutual trust and understanding of individual and shared responsibilities and working practices. Technology will be used as appropriate, recognising that it is a tool and not a substitute for personal connections and face-to-face interactions. Services will be provided within a national framework that takes account of appropriate clinical and governance standards, but allows for the local context to influence the precise mode of delivery. Finally, the broader efforts of elected officials and economic development agencies will be needed to ensure that the community thrives, recognising the integral linkages between health and social capital.

AWARDS

Throughout the conference, Professor Niels Bentzen (Norway) and Professor Lewis Ritchie (Scotland) judged presentations on their degree of innovation, success, and potential for application in other settings. Amongst a very high general standard of presentations, the following individuals and projects received awards from the organising committee:

Andy Fuller, Scottish Ambulance Service: "Community First Responders, supporting the Ambulance Service in Your Neighbourhood"

Anna Rita Spein, Sami Psychiatric Youth Team, Norway: "A cultural sensitive treatment approach to suicidal behaviour problems and substance abuse in the indigenous Sami"

Helen Branstorp, Tana Legesenter, Finmark: "Fighting for fears – the rural "BEST- project"

Figure: Map of the Virtual Community: "Hope"

APPENDIX i

KNOWLEDGE BANK DEPOSITS

The following points reflect the comments and learning deposited in our Knowledge Bank of Hope Springs and from which we can draw, at a local level, to develop and enhance local services.

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Maternity

- Think more about the time critical elements – what matters in an obstetric emergency is how long it takes to get the woman to the operating table.
- Where you train staff locally to deal with emergencies, including C section, you increase confidence in the service and the dramatically increase the percentage of women giving birth locally
- Go back to basics – Midwives can provide an excellent service, but need support, training and other practical things in place to be enabled.
- The Patient Hotel is a good model with healthcare professional support– for maternity - and for all patients
- Use of language and terminology is important – "Birthing Centres" put the woman and baby at the centre of the service
- We share the challenges and we can work together for solutions

Comments

We are being listened to – health professionals do care – it gives me more confidence! (Public Representative)

I feel the patient hotel was one area we could certainly look at for ideas. The concept of normal low risk care was being given in a homely environment with a nurse and midwife available for help at all times. I feel it would be beneficial for all patients who have to travel.

Karen Guilliland's session on midwifery in New Zealand was excellent and very affirming as this is the model that we are developing in Argyll and Bute. I just wished that some of our local midwives (from Argyll and Bute) had been there for that.
Made me think that we need a conference on maternity services in remote and rural Scotland to help share experiences and for those of us who are slightly further ahead to support those who are not.

Mental Health

- The need to pool expertise and knowledge for the benefit of the patient
- Evidence shows people do better when treated locally
- Listen and know how to listen
- Solutions require a multi-level, multi-professional approach
- Involve the community in a holistic approach to improving mental health

Comments:

I found the examples from Tasmania thought provoking.

The burden of mental health is more than cancer.

You need faces and names in a rural area not organisational charts. Create a centre in the community where multi-professionals are based, a meeting place - create an environment of communication and competence.

If you want to find a solution –consider how you ask the right question

Chronic Disease Management

- Specialists need to support local professionals to do more, locally
- Effective clinical managed networks with clear standards, consistency of approach and evidenced based practice
- Multi-professional ways of delivering services using knowledge, and respect
- Patient Education Centres/Programmes run in partnership with Voluntary Organisations - facilitate self-care
- Appointment of a patient Ombudsman for groups of patients with chronic conditions
- Development of a clinical accord ("contract") for chronic conditions - engages clinicians especially in primary care and provides real time audit/quality results and feedback

Comments:

Nurses and doctors are doing XRays in Norway and Sweden (chest and limbs). We keep being told this is not possible here. (Scotland)

Nurses are working across care settings, both institutional and primary care as integrated teams in rural municipalities in Norway.

Patient learning centres were the thing I think we should implement here asap. (Scotland)

Supporting Healthy Rural Communities

- Rural proof policy for any impact on rural communities – and what can be learnt from them.
- We need expert information in Transport to plan for future – how will we move patients and healthcare professionals if there is an oil crisis?
- Involve the economic community – a healthy economy means a healthy community
- Study Tours promoting international best practice and knowledge sharing
- We need to get better at technology – but it's not everything!
- Communities need to be empowered and equipped to contribute in a real and effective way to local health

Comments:

Key learning point for me from this session was the Community Hospitals are the intermediary between specialist and primary care services and their role is in bridging this gap. We cannot define their core function without considering these other two elements.

The session on the Centre for Rural Health delivered by Stuart Black and Alistair Munro was very good. It will be a major challenge though to make this centre meaningful for those who really do work in remote and rural areas across northern Scotland.

There were so many good ideas but the main one that jumps out at me was the 'Health@Home' project run by Helse-Nord. The Norwegian project links remote people to health care centres via their TV's and they can share information, support and advice with healthcare staff and other patients... The idea being that your 'home is your health care centre' and they are trialling it with patients with Type 2 diabetes. I can see possibilities for linking in with interpreters etc in this system, and using advances in digital TVs to the advantage of the highland community

Health Improvement/Illness Prevention

- Train locally
- Patient education centres can involve the community in their own health
- Stop doing what doesn't work
- Promote quality of life in rural areas
- Royal Colleges need to look at generalism v specialism
- Successful telemedicine can prevent unnecessary hospital admissions
- Mulit-agency working across organisational boudaries

Comments:

Learning and coping centres for patients in hospitals in Norway, support ideas of expert patients/self management.

There seems to be a gap between expectations around generic/general work from support worker and senior clinician level – should we encourage senior clinicians to develop more generic working and a better understanding of the roles of multi-disciplinary team members?

Public wellbeing must be re-organised as an economic good, in economic terms, cost-benefits.

Education

- Rural training for all clinicians (medics, nurses, AHPs etc) "under one roof" – in same establishment
- Build development of leadership ability into training – rural clinicians will be clinical leaders and community leaders
- Ensure that part of assessment process actually takes place in a remote and rural setting

  Tele- education is important, but not the only vehicle
- Ensure that modules can be delivered "out in the patch"
- International development – build in some training abroad/student exchanges
- It is possible to train and recruit professional health workers in rural areas if you are creative. Grow your own can work.

Comments:

I have come away with an idea that I would like to develop around how junior practitioners are supported in remote and specialised areas. It was good because it was acknowledging that the clinicians need to be specialised to undertake the work, however they need the experience in order to skill up to the required level. There are other ways of offering and providing that training than clinicians working in urban specialist centres which work and attract clinicians into the area.

My sense is that that the intangible outcomes of such a conference are immense, because much of the experience and learning will lead to development of new local ideas and ways of practising in the future that will not be directly attributed to going to Tromso.

Photograph shows views of Tromso courtesy of Ruth Cleland.

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