



**The National Framework for Service Change in NHS
Scotland**

Rural Access Action Team

Final Report

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Executive Summary

Issues around access to health services in rural communities are at the forefront of local agendas and are increasingly prominent in a national political context. The Scottish Executive's report (2002) on the availability of services in rural Scotland identified poor access to public services as one of the main causes of social exclusion for rural areas. The loss of local health services can have a significant knock-on effect to the sustainability of fragile local communities and recruitment and retention of healthcare professionals in remote and rural areas presents particular challenges. Health services are but one part of public services integral to the life of rural communities and rural communities are extraordinarily diverse. Some are commuter areas and others consist of a predominantly elderly and retired population, the young having migrated to study or work elsewhere. Tourist areas have their own characteristics and visitors bring their own healthcare needs. 'Rural' does not imply a single community but a wide range of communities: affluent, deprived, agricultural, industrial, stable, mobile and so on. Issues impacting on rural communities are magnified by the remoteness of the community. In Scotland, we see this most obviously in the island areas. The BMA report "Healthcare In a Rural Setting" (2005) describes how rural healthcare in the United Kingdom is given less attention than in other countries such as Canada or Australia, but that it is now increasingly recognised as an issue worthy of specific policies.

The issue of Rural Access was identified as a key area of concern by the National Framework Advisory Group chaired by Professor David Kerr. The Rural Access Action Team was established and this report constitutes the output of the group. The group drew on the expertise of individuals from within the Remote and Rural Healthcare Community, from the Royal Colleges, NES and NHS QIS. The group was co chaired by Roger Gibbins, Chief Executive NHS Highland and Jae Ferguson, Chair of Mid Argyll Maternity Users Forum. The team met formally on 5 occasions between July and December 2004.

The commissioning document at annex 1 lists group membership and provided the framework for the group's work which was subsequently divided into 5 distinct sections:

1. The provision of Out of Hours Care
2. Maximising Services Provided Locally
3. The Role of Remote and Rural General Hospitals
4. The Skilled and Competent Workforce
5. Creating an Integrated Transport System

The Rural Access Action Team believes that their recommendations are highly significant and critical to achieving sustainability of healthcare services to Remote and Rural areas.

The report describes a new index, Clinical Peripherality, which can be applied to all rural and remote general practice communities providing a framework to consider health provision and the support and training of health workers. Clinical Peripherality takes account of characteristics of rural and remote general practices and the communities they serve, including their access to secondary care facilities and to centres of decision- making and professional education and support.

The Rural General Hospital was first described in the report by the West Highlands Solutions group as they felt that it was important make the distinction between the smaller consultant led units and the more urban District General Hospital. It implies a model capable of delivering scheduled and unscheduled care supported by a range of services. The Rural Access Action Team would wish to highlight the educational experience that is offered by Rural General Hospitals to all groups of healthcare professionals. International experience shows clear benefit from coordinated and targeted programmes of training and education. The concept of a “rural track” in mainstream education is a key theme from this experience. The group would recommend developing this as it would expose those working in urban areas to the quality experience of remote and rural healthcare.

Underpinning this is the need to formally develop Managed Clinical Networks that are managed and are accountable. They will ensure safety and sustainability of services in the Rural General Hospital.

1. Background and drivers for change

One fifth of the Scottish population lives in a rural area (Scottish Executive. Annual Rural Report 2004). Of these people a significant number live in very remote areas that require different healthcare arrangements to cope with times of enforced self reliance, due principally to weather and transport difficulties. Despite this the dominant model in health care thinking in Scotland is distinctly urban based. It is from this model that assumptions have been made and systems applied to remote and rural care. This includes assumptions on clinical safety, training and education and workforce planning.

Patients in remote and rural Scotland recognise the value of locally based small teams that deliver high quality care. There are many examples where personal care standards are praised openly by patients and relatives (Farmer *et al*, 2004a). There is anxiety that new systems driven by urban necessity will diminish the opportunities for health care professionals to deliver this type of care in the future.

In order to adequately plan for the health of people in remote and rural (R&R) Scotland we need to address the following key issues.

- Transport infrastructures and systems that currently are not optimally configured to allow access to services for people in remote and rural Scotland
- Education and training structures and processes are currently not readily accessible, often have low levels of relevance to remote and rural practice and can result in lengthy amounts of time away from base.
- Quality assurance processes are not sensitive to small healthcare team capacity and frequently process dominant

- Definitions of remoteness and rurality are not used uniformly or robustly and do not support service planning.
- Deprivation is not transparent, consequently unmet needs are not addressed.
- Information systems and research programmes are not sufficiently developed to support service development and ensure safety.

Definitions

The essence of remote and rural health care is driven by 2 major factors: population density and travel time. Population groupings in remote and rural areas are small and widely dispersed. They are also often considerable distances from major centres of habitation and service provision. Remote and rural populations can therefore be defined by their time to travel to major centres of population using Scottish Household Survey criteria or by Arbutnott definitions of percentage of population living in centres of 1000 or less.

The effect of widely spread populations distant from services is clearly seen on healthcare teams. The numbers in a given population sufficient to make a service viable and the need for economic sustainability lead to teams with the following characteristics.

“A small team of professionals working generically across a broad knowledge base; this team at times being required to extend its skill into specialist fields according to patient need or choice”

This definition holds as true for management and support services that work in remote and rural areas as it does for clinical staff.

The initial Arbutnott Report of 1997 detailed an objective and needs based method for allocating NHS Scotland resources aiming to promote equitable access to healthcare and included measurement of excess costs attached to delivering remote and rural healthcare. Further work based on “cost cube” approach matches resources even more closely to localities.

A robust measure which aims to clearly define the locations where all these parameters are operational in Scotland is in development. This introduces the concept of “clinical peripherality” as a measure of rurality of healthcare provision (Swan *et al*, 2004).

In planning for the future it is clearly important for the health service to reach agreement on definitions of rurality and remoteness to aid service planning and resource allocation. In addition the challenge of servicing sparse populations underpinned by the need for economic and workforce sustainability must be met.

Deprivation

Deprivation is more difficult to identify in the remote and rural setting than in the urban setting (Barnett *et al*, 2001). Only recently have attempts been made to capture rural deprivation systematically (Scottish Index of Multiple Deprivation). When this is done clear pockets of significant deprivation can be defined. There remains however considerable individual deprivation that is hidden within the diversity of remote and rural communities.

The effect of this hidden deprivation is to mask unmet need (Stark *et al*, 2004) and present remote and rural areas as areas of personal contentment. This is in contrast to the reality faced by some members of the community when faced with personal health or social problems. Many of the health care issues faced by people in this situation are related to access and the disproportionate cost of travelling to services. Similar challenges are faced by service providers when maintaining peripatetic services.

In addition to the health care realities there are many other factors that compound the difficulties of living in rural areas (Bailey *et al*, 2004). These include the availability and quality of housing (Farmer *et al*, 2004) availability of employment and the need for many part time jobs (Kinsella *et al*, 2000), income deprivation and access to private cars (Shucksmith, 1996). These factors are compounded by difficulties in accessing education and skills training (Scottish Indices of Deprivation) resulting in depopulation of rural areas, particularly of younger people. All these issues combine and form a significant but hidden deprivation load in rural areas. Add to this the general lack of informed public groups to act as voices for change and the needs of people in these areas go unrecognized.

Information availability

Information on health care in remote and rural areas is often collated in manual form and not readily available for analysis but however, is improving. At other times the data are collated within larger areas and not easily disaggregated. To date there have been few serious attempts to draw all this together in a concise picture of the remote and rural healthcare sector. Where this has happened many of the myths surrounding remote and rural health care have been challenged.

The information on the health and treatment outcomes of remote and rural populations is by definition based on fewer numbers than urban areas. This can reduce the statistical robustness of quantitative analysis. With care however it does not preclude the use of such data. Qualitative evidence, based on the experience of rural patients, also provides important information and can be used to significantly inform models of care on a national basis.

Access

This section again includes two key areas of discussion: Speed of local service availability and physical accessibility of services.

In almost all remote and rural areas the speed with which patients can gain access to locally available services compares very favourably to the urban setting (Farmer *et al*, 2004). 48 hr access to primary care is rarely a problem, access to locally available out patient and inpatient services are uniformly better than urban areas. (National Waiting times database). The driver for change active on service provision in R&R areas is perceived as maintenance of clinical safety. This is only valid if clinical safety is addressed in a non-centralist way recognizing the skills of local teams. The Configuring Hospitals Evidence file (2004) contains a comprehensive collation of evidence of safely delivered services as near the patient as possible.

Physical access is however a greater problem and can lead to failure to access services and inequitable service provision such as demonstrated in the study on stroke rehabilitation service provision in northern Scotland (O'Neill *et al*, 2003). Providing services locally can increase service uptake and aid demand management cost effectively. This was demonstrated in the Highlands and Islands Aortic Aneurysm Screening programme (Duncan *et al*, 2004). Lack of robust coordinated public transport systems lead to significant challenges for patients and staff in travelling to and delivering services (Scottish Executive Annual Rural Report 2004). The lack of coordination of ferry, air travel and appointment time can mean extended stays in hospital or bed and breakfast that are not clinically necessary. This is often driven by lack of understanding of such problems by centrally based units. Staff are also faced with difficulties education and training where large amounts of time can be wasted simply getting to courses. In addition, these courses are often not tailored to the remote and rural working environment. These problems are particularly visible in island communities, but are not exclusive to them.

Where patients have to access care in major centres away from their homes there are also significant effects for the families who may have to put their "lives on hold" to support their relatives. Personal economic issues can arise in this situation where transport and accommodation costs remain the responsibility of the families. Patient's care can also be affected as they may choose not to access care that is very distant from their home area.

Education and training

Education and training needs are driven by clinical diversity and peripherality coupled with difficulties of physical and technical access. For remote and rural healthcare and other private and public workers there are identified generic training needs (Swan *et al*, 2004; Skills for Health 2004). These include management skills (both personal and organizational), IT training, life balance skills, and networking skills. Currently this form of training for health care workers is *ad hoc* and often inaccessible, despite the existence of quality rural education networks such as those provided by Universities and Further Education colleges across Scotland.

Within the remote and rural healthcare sector there are no coordinated systems and structures that are designed to meet the needs of employees. Individual programmes

for professionals or small groups, such as those constructed by deaneries and colleges, still sit on the periphery of mainstream healthcare education. International experience shows clear benefit from coordinated and targeted programmes of training and education (Rourke *et al*, 2003; Wise *et al*, 1994). The concept of a “rural track” in mainstream education is a key theme from this experience. Developing this would expose those working in urban areas to the quality experience of remote and rural healthcare.

Training and professional development for R&R working also needs a clearer understanding of skills decay (Douglas *et al*, 2004). Much of the evidence for retention of skills is large centre based and drawn from specialist working environments. It is not developed in settings where broad based generic skills are used daily. This has resulted in quantitative assumptions on skills maintenance.

Workforce Planning

Developing systems that maintain and enhance the workforce in rural Scotland is key to sustaining and developing services in rural Scotland. The attraction of working as part of a supported team with a wide range of skills in a rural community is insufficiently promoted. The current service relies on the contribution of dedicated professionals many of whom are reaching the latter stages of their working lives and have contributed long periods of on-call in addition to their daytime role. Replacing this workforce with younger healthcare professionals who, in the wider NHS, are more used to working in extended teams will be a major challenge. These extended teams protect them from the frequent on-call rotas and clinical diversity that is the bread and butter of remote and rural healthcare.

New pay modernisation initiatives, working time legislation and employment practice directives such as New Deal for Junior Hospital Doctors will have significant implications for workforce planning and continuing professional development. Compliance with these directives can impact on larger teams and in remote and rural areas there is an insufficient workload to support them as services are currently configured (Solutions Group, 2004). New concepts on “judgment safe” medical practitioners contained in the report “Securing Future Practice” will also have significant effects in rural areas, where the maintenance of rural training programmes is only economically viable with the appropriately supervised use of training grade staff in front line service provision. Compliance with directives and new training structures could have the effect of making the development of the rural training environment unfeasible. In addition, clinical governance drivers are leading towards increasing professional specialism.

Opportunities are available in the new contract for General Practitioners (GMS) Facing the Future, and other policy initiatives to expand multi disciplinary working and role development for all staff groups. This will be of advantage to remote and rural areas. Working for Health (SEHD 2004) identifies the mechanisms for workforce development at local and regional levels, describing the responsibilities of workforce officers and ensuring a national focus for remote and rural workforce development.

Quality assurance

There is a national commitment to ensure that regardless of where people live they should be provided with an acceptable quality of service. This service must demonstrate effectiveness, accessibility and continuous improvement. The diversity of R&R populations present challenges in designing responsive health services.

Standards need to be measurable and therefore quality assurance systems tend to focus on processes, creating tensions for small R&R teams with wider remits than their urban colleagues. Currently quality assurance systems do not take sufficient account of R&R issues masking the evidence base in this environment. Whilst it is appreciated that standards development need to have an element of aspiration, they and the review process need to have an understanding of the practicalities and existing evidence base for good practice in remote and rural areas. Quality improvement activities, such as guideline development, clinical audit and best practice statements need to take greater account of R&R dimension.

Patient experience of service provision is very positive and quality assurance systems need to capture and weight this more visibly if the value of R&R healthcare is to be appreciated and learned from by the service as a whole.

Remote and rural areas often feel the effects of change sooner than urban areas. This arises from the fragility of services and the closeness of the public to those service providers (Skills for Health, 2004). Remote and rural areas can act as a “litmus test” for the health service as whole. Addressing the drivers acting in remote and rural Scotland on a whole systems basis will be of benefit to the whole service and not just remote and rural areas. Many potential solutions will be the same and will include transport arrangements, service access, professional standards and accountabilities, multidisciplinary team working and education and training structures. It is however unrealistic and unsustainable to expect the same configuration of care throughout Scotland. Developing a model or models that balance equitable access with sustainability is the challenge for the whole service in Scotland. Remote and rural areas are at the forefront of these developments.

1.1 Clinical Peripherality

The work of the rural access action team encompasses issues such as: maximising services provided locally; unscheduled care; the role of remote and rural general hospitals; the skilled and competent workforce; and sustainable transport. In addressing these issues, it is important to establish a definition of rurality and remoteness that is relevant to healthcare provision and to the development and maintenance of the rural health workforce. The bulk of rural health delivery occurs in primary care, but access to secondary and tertiary care facilities are also critically important for rural people, and can be the source of considerable individual and community concern.

Defining rurality and remoteness is a complex issue, and the definition chosen may vary according to the perspective of the observer (Farmer *et al*, 2001). Previous work has focussed on drive time to major population centres, settlement size, or some measure of population density to define rural and remote communities. The Scottish Executive has recently adopted a six-fold classification of settlements, adapted from

the earlier Scottish Household Survey classification, for much of its work on rural policy (SEHD 2004). It is generally recognised that composite measures may be more valuable than a single index to reflect the characteristics of a community.

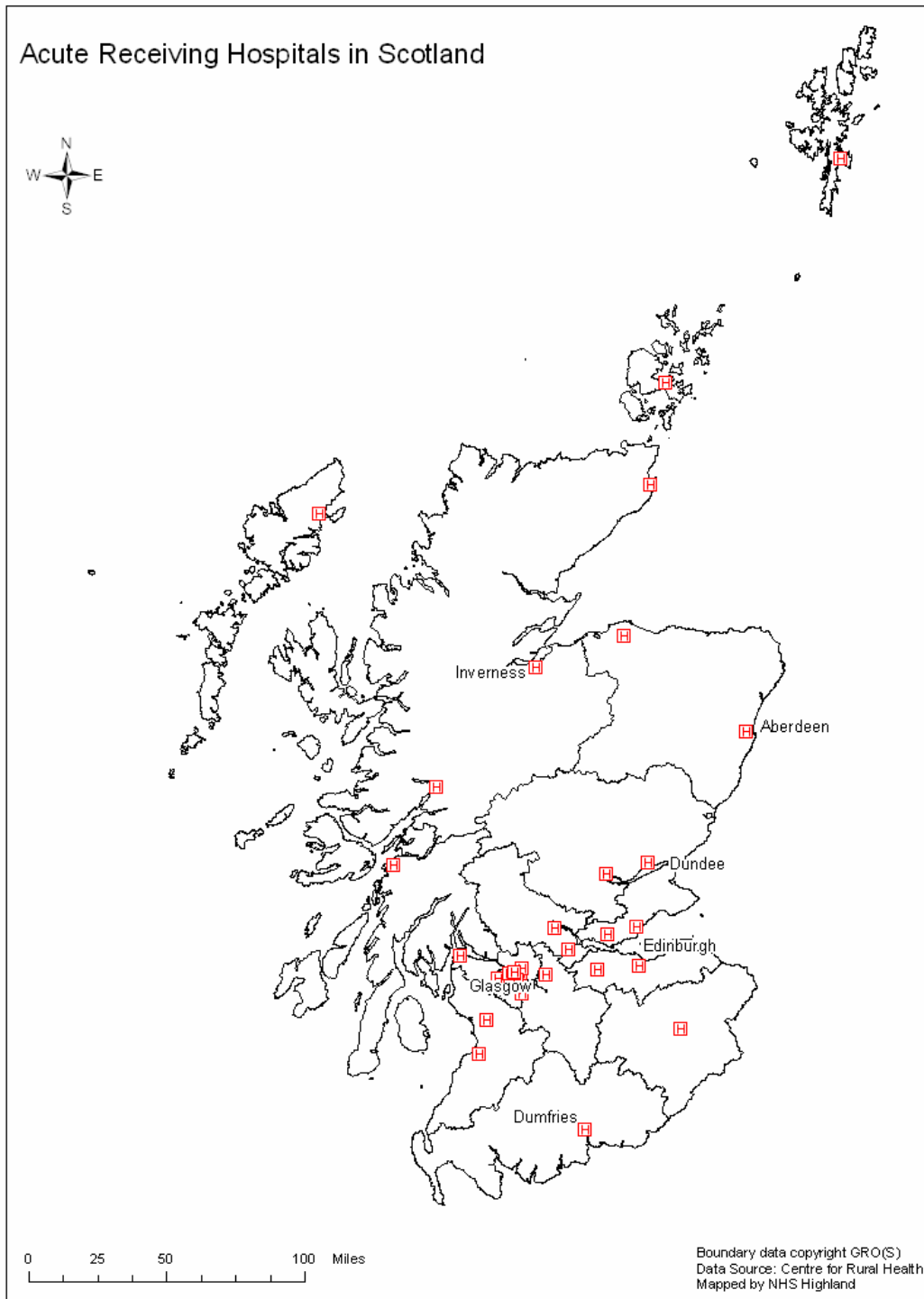
In considering a framework that would be of relevance to the rural access action team, an index of “Clinical Peripherality” has been developed which reflects characteristics of rural and remote general practices and the communities they serve, including their access to secondary care facilities and to centres of decision-making and professional education and support. We have demonstrated, in a study in West Highland, that this index correlates well with the range of demands on rural health care providers (Swan *et al*, 2004). A brief summary of the development of the index follows, together with a map showing the distribution of clinical peripherality in rural Scotland.

In the previous study conducted in West Highland by Swan *et al* (2004), multiple demographic and geographic characteristics of all 59 general practice communities in three rural local health care cooperatives were studied. We concluded that there were four main factors directly contributing to the peripherality of a practice. These were: practice list size; population density at the practice ward area level; travel time from the practice to the nearest acute receiving hospital (i.e. a hospital providing consultant led services); and travel time to regional health board headquarters (reflecting a centre of decision-making and professional support). Travel times took account of single-track roads and ferry services, where appropriate. Using factor analysis, the four factors were combined to generate a clinical peripherality index, which was found to strongly correlate with the spectrum of roles undertaken by health practitioners (Swan *et al*, 2004).

To describe clinical peripherality scores for the rest of Scotland, values for the four key variables used in West Highland study were derived from public domain and NHS information sources. Practice codes were matched to the Scottish Household Survey (ShoS) <http://www.scotland.gov.uk/library5/rural/asrs-23.asp>, 8-fold classification of settlement size defined from the postcodes of patients listed with these practices, and derived from a dataset created for the Platform project (www.gla.ac.uk/projects/platform). All practices with SHoS classifications 3-8 were included (n=371). Branch surgeries were not included. Practices whose patients were drawn predominantly from SHoS classification 1 or 2 were termed ‘urban’ and were not included: examples of the latter were found in all the major cities and in larger small towns, such as Fort William. The four candidate variables were subjected to factor analysis and a clinical peripherality score for each practice was determined, higher scores reflecting greater peripherality. The factor score was rescaled to an index of 0-100. Scores for each practice were then mapped using a GIS map application programme.

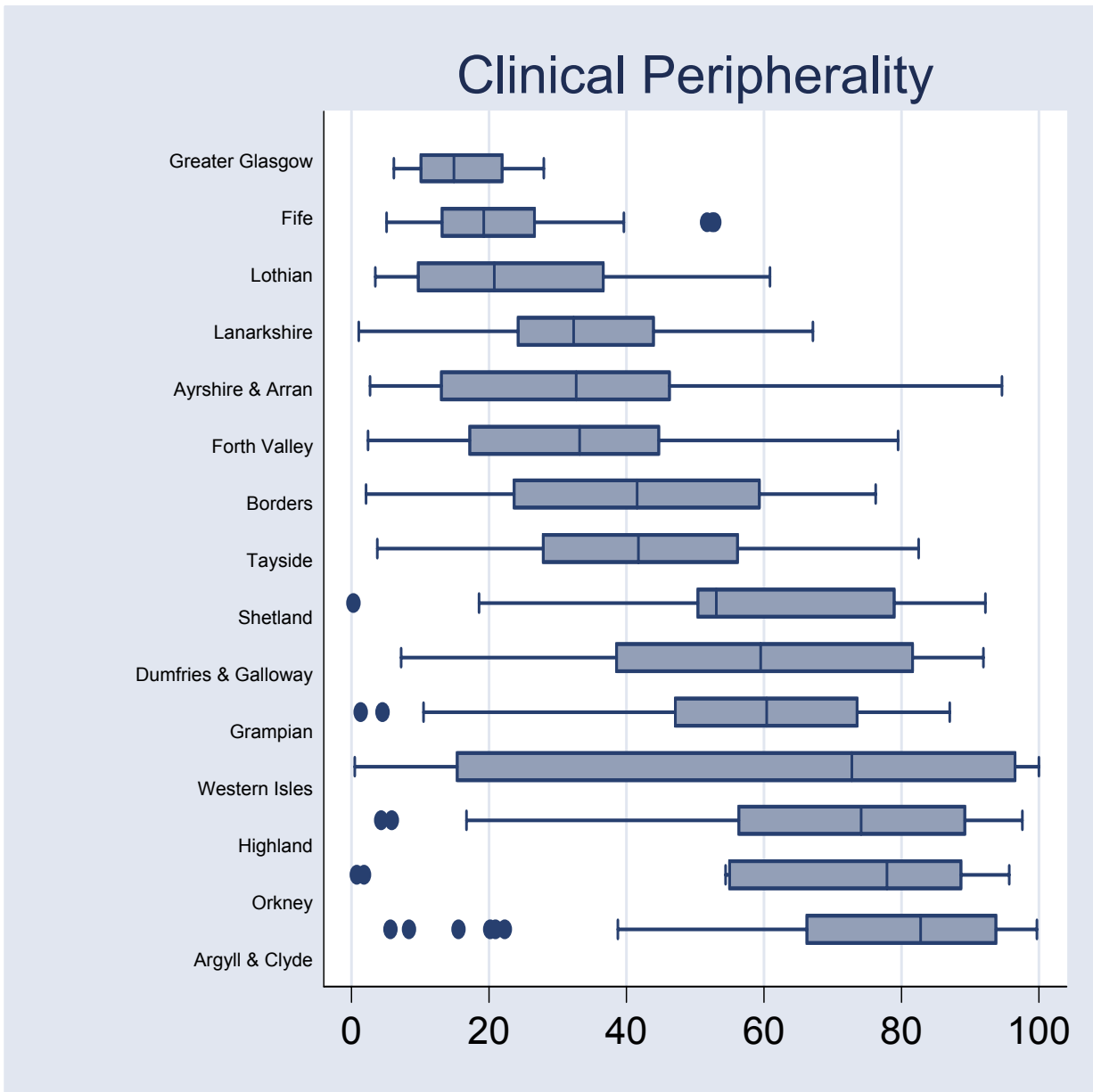
The analysis included 15 regional Health Boards and a total of 30 acute receiving hospitals nominated from the list of A&E hospitals provided by ISD, and providing consultant led acute receiving facilities, shown in Map 1.

Map 1. Locations of acute receiving hospitals in Scotland



A summary plot of clinical peripherality scores for non-urban practices in each NHS Board area is shown in figure 1. Boards serving the more rural and remote areas of Scotland show greater median values and a greater scatter of clinical peripherality values for their practices.

Figure 1. Clinical Peripherality scores by NHS Board area

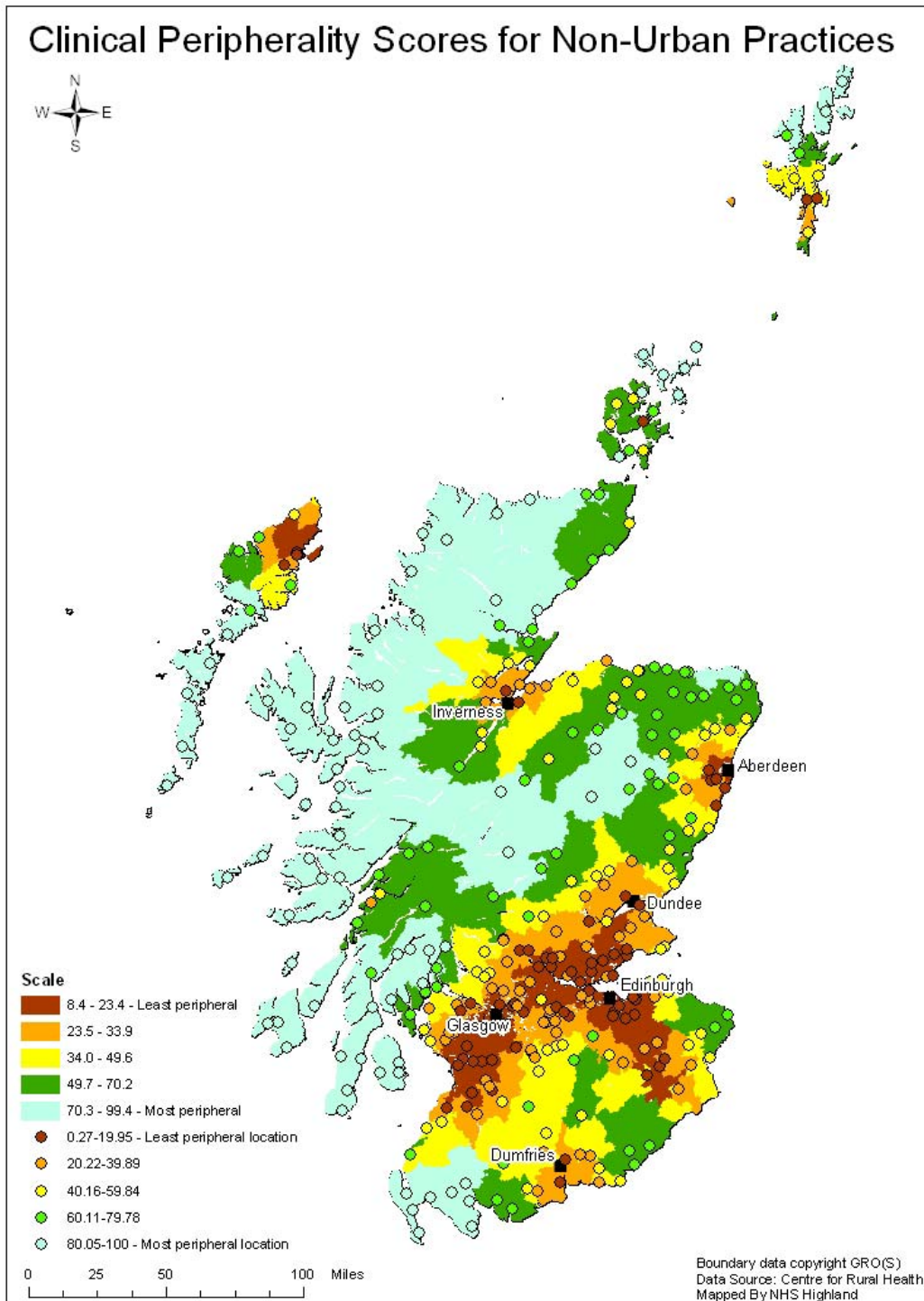


The box plot shows median values and interquartile range of scores for each NHS board area. Higher values represent greater clinical peripherality.

It is important to recognise that although the median data by health board area provide some insights into the scale of peripherality issues faced by boards, they conceal individual areas of more extreme peripherality within boards, e.g. several island communities, and the western portion of Dumfries and Galloway.

A more comprehensive picture of clinical peripherality is provided by mapping scores from individual practices. Extension of the technique using mapping software reveals bands of colour that represent the clinical peripherality of areas. Map 2 overlays the area scores with the individual practice scores allowing the viewer to see many individual practice scores within larger geographical areas of shared characteristics. However, it is also possible to see smaller areas where anomalies occur such as Oban.

Map 2. Clinical Peripherality Score for Non Urban Practices



What is the significance of clinical peripherality for health service planning?

Underlying the clinical peripherality of practice communities is a concept of insularity. Islands, remote from their nearest receiving hospital and Board, are inevitably peripheral. However, even on the mainland, communities located at the end of poor road communications e.g. single track roads, are effectively insular. This has great relevance when configuring rural transport services and emergency retrieval systems. Map 2 shows that such practices exist even within the geographical centre of the country.

Clearly, any change in the location of acute receiving hospital facilities or decision-making centres such as NHS Board headquarters could profoundly affect the peripherality of individual practice communities. Thus the range of services provided by rural general hospitals and their location, discussed elsewhere in this report, becomes a key determinant of peripherality.

Finally, from the study in West Highland, and from other work examining the nature of rural practice it is clear that remote health practitioners (GPs, nurses and others) are required to offer a broader range of services than their urban counterparts (Boerma *et al*, 1998). This has specific implications for education and training, and is mirrored in the training requirements for rural hospital practitioners.

The Rural Access Action Team would wish to recommend

1. The particular geography of Scotland, with large remote and rural regions with unique characteristics and challenges concerning access to services and their sustainability, requires the National Framework for Service Change to ensure that all aspects of its work addresses the needs of these areas and that the issues specific to remote and rural areas are addressed.
2. A definition of clinical peripherality has been applied that identifies the majority of NHS Boards with significant remote and rural areas. NHS Argyll and Clyde, Highland, the Island Boards, Grampian, and Dumfries and Galloway show the greatest clinical peripherality followed by Tayside and Borders. Given these Boards are spread throughout Scotland and across the three Regional Planning Groups consideration needs to be given to formal regional planning in order for there to be a national approach to the development and sustainability of remote and rural services.
3. Remote and rural communities should expect the highest standards of health care. The national approach to setting and assessing quality, through NHS QIS, often applies blanket standards across all services and does not reflect the different nature of service delivery in remote and rural areas. NHS QIS should ensure that a remote and rural perspective is built into both the setting of standards and the way in which they are measured.

2. Creating the Vision for Remote and Rural Healthcare

In order to create this model the rural access action team has identified 5 areas that are fundamental to the delivery of healthcare in remote and rural communities.

- The provision of Out of Hours Care
- Maximising Services Provided Locally
- The Role of Remote and Rural General Hospitals
- The Skilled and Competent Workforce
- Creating an Integrated Transport System

2.1 Maximising services provided locally

Public satisfaction with health care services in remote and rural Scotland is high. This has been confirmed by the University of Aberdeen, in collaboration with the Scottish Centre for Social Research (SCSR), who published a report revealing the opinions of over 1500 Scots on access to health services in rural and urban Scotland (Farmer *et al*, 2004a). The work funded by the NHS Scotland Remote and Rural Areas Resource Initiative, “RARARI”, shows that those living in the remote areas were more satisfied with the range of health services than their urban neighbours. This is an important piece of research that helps understand the priorities of rural residents.

The aim of many rural practitioners of all disciplines is to extend their generalist skills to support their patients within their own communities. As health care becomes more complex, delivering care locally presents an ever-increasing challenge. The need to keep up to date in many spheres of medicine requires access to continuous professional development and good networking with specialist colleagues.

As well as maximising care that can be delivered locally in rural areas we need to ensure that rural patients are not disadvantaged by their distance to specialist centres. This is made clear in the recent Royal College of General Practitioners (RCGP) statement on rural general practice (Mungall *et al*, 2004).

“..... rural patients have greater access difficulties for health care. It is a safe assumption that poor access will adversely affect outcomes.”

*This centralisation further threatens to make rural patients have greater access difficulties for health care. It is a safe assumption that poor access will adversely affect outcomes. There is clear evidence that cancer survival is related to distance from a cancer centre (Campbell *et al*, 2000). Screening uptake is poorer in rural areas (Haiart *et al*, 1990). Diabetic retinopathy is commoner in rural populations who have poorer access to ophthalmic opticians (Leese *et al*, 1993). Mortality from road accidents is higher in rural areas and while it is a reasonable assumption that this is due to delays in care provision this does not appear to be the whole story and it may*

be due to different patterns of injury(Jones&Bentham,1995, Miles-Doan&Kelly, 1995). *Just as importantly those providing the care are often at greater risk during emergency transfers* (Weiss et al, 2001; Baird&Gilles, 1995).

Solutions have included better pre-hospital care or better access to good community hospitals (Silverston, 1985; Daly&Thomas, 1992; Baird et al, 1996; Mullins et al, 2002).

The challenge is to design a service which overcomes some of these difficulties in accessing services. This will involve a multi-factorial approach including better training for rural practitioners, developing the role of Community and Rural General Hospitals, Rapid Emergency Retrieval service, improved transport infrastructure, more use of tele-health services, mobile diagnostics and the continuing development of Managed Clinical Networks, ensuring that they include the rural dimension to service provision. Our aim is to design a service that is able to overcome these disadvantages in access.

Extended role of General Practitioners

Rural GPs value their generalist skills and in small remote practices GPs have developed extended skills to allow them to manage the early stages of severe sudden illness and trauma. The uptake of Advanced Training Life Support (ATLS) and British Association for Immediate Care (BASICS) courses is high amongst both rural GPs and community nurses, who recognise Immediate Care as an important part of their role in the community. We need to ensure access to this type of continuous professional development for new and existing rural practitioners.

In rural localities serving larger populations there is scope to develop GPs with a special interest (GPwSi) in specialties such as dermatology, ENT, ophthalmology and musculoskeletal medicine as have developed in England (DoH 2002). These practitioners could work closely with and support the visiting consultant service that is often provided within these localities. The future of visiting clinics may be threatened with inclusion of travel time within contracted hours under the new consultant contract. Health Boards need to be supportive of maintaining the links between specialists and rural communities; this does overcome the reluctance of especially the frail and elderly to travel for specialist services. Maximising the efficiency of these clinics with GPwSi's will allow the consultant to concentrate on the most complex cases and provide support and education to the local clinicians. The GPwSi will act as a resource within the locality to accept referrals and to provide advice and support to his colleagues. Practices across the area should be encouraged to work collaboratively to provide the widest range of services to the whole community. The Centre for Change and Innovation in Scotland is currently supporting a number of pilot projects amongst Health Boards under the Community Outpatients Project and in the longer term this would be a NHS Education for Scotland (NES) area of expertise and activity.

Developing enhanced roles for GPs in emergency medicine, minor surgery, palliative care and care of the elderly will be more appropriate for some localities.

Minor Surgery

As a result of redesign work in Grampian around four years ago several GPs were trained and accredited to a higher level than General Medical services (GMS) surgery by the Director of Day Surgery. They were able to do more complex skin lesions, vasectomies etc.

Each LHCC took things forward in a slightly different way. In North Aberdeenshire two GP surgeons were appointed – one with a background in general surgery and one with a long history of providing GMS surgery at practice level.

These GPs

- Operate at four community hospitals, providing rapid local access to treatment.
- Have time dedicated to supporting the network of GPs providing minor surgery within their own practices.
- Have performance related pay based on waiting times, quality outcomes and demonstration of support for GMS surgeons.
- At one community hospital the local general surgery clinic waiting time fell from 22 weeks to 8 Weeks.

These “referral” surgeons have now been organised into a network of surgeons together with the practices providing the enhanced service in minor surgery.

As well as their continuing generalist role, the GPwSI would be responsible for leading service development and ensuring that all clinicians in the locality are providing safe, effective and high quality services in their specified area. They would work closely with nurses and AHPs who are also developing enhanced roles in many of these areas and who can often undertake this lead role themselves.

It is important to emphasise the importance of the generalist skills that rural GPs will continue to require, this is especially true as the out of hours component of their work may require expertise in the management of a wide range of conditions including traumatic, cardiac, obstetric and psychiatric emergencies. The development of GPwSIs should be complementary to the support given to rural doctors to develop their extended generalist skills.

Expanding Roles of Nurses and AHPs

Nurses, midwives and AHPs are increasingly at the forefront of healthcare developments, and expansion of existing roles for these professionals has had demonstrable benefits for patient care.

In Scotland nurses already provide 80% of direct patient care. Attendances at nurse led out patient clinics rose from 106,499 in March 2004 to 112,484 in September 2004, a total of 5,985 (RCN Scotland, 2004). This has been evidenced in terms of reducing waiting times, reducing hospital admission rates and increasing patient/client capacity for self-management. All of these are central to delivering effective health services, which are locally accessible and relevant to communities in remote and rural areas. Whatever the role, there are three core functions of nurses and AHPs across the range of services (Liberating the Talents, DoH 2002).

1. First contact care- assessment, treatment, care, referral, discharge
2. Chronic Disease Management, continuing care and rehabilitation; and
3. Public health, health promotion to improve health, reduce inequality.

Further development and piloting of the integration of the Family Health Nurse role within primary care will embed the role of the skilled generalist. This model encompasses a broad range of duties where appropriate, dealing as the first point of contact with any issues that present themselves, referring on to specialists where a greater degree of expertise is required. The impact of this role has been reported through the findings from the initial phase of the World Health Organisation (WHO) Europe pilot (Family Health Nursing in Scotland, NHS Scotland 2003).

In addition to the need for the broad based generalist role there is scope to develop specialist nursing and AHP roles in remote and rural areas. These roles will support and complement the services delivered through a generalist model, providing supervision to isolated practitioners.

An ICM survey showed that 6 out of 10 patients wanted to be seen by a nurse with a specialist knowledge of their condition.

The Framework for Developing Nursing Roles (Scottish Executive 2004) will mean that in future traditional nursing roles can be expanded and developed in a way which meets the needs of patients and ensures effective regional planning. Career development patterns that reflect flexibility and transferability, with practitioners moving sideways as well as vertically into new roles within clinical areas will benefit individuals and organisations (Facing the Future 2002).

Development of these specialist roles in remote and rural areas includes development of practitioners with special interests (PwSI), where, in addition to an existing generalist role, nurses and AHPs can deliver a more specialist service e.g. musculoskeletal disorders, palliative care, neuro muscular degenerative disease, diabetes etc.

The roles of Clinical Nurse/AHP Specialist and Nurse /AHP Consultants in remote and rural areas can deliver enormous benefits to patient care, both in terms of a direct clinical role and in supporting the local delivery of care.

Expansion of these roles will include diagnosis, treatment, direct referral to medical consultant services (including direct referral for surgery, where appropriate, e.g. joint replacement, cataract removal). These practitioners will also be involved in the pre elective episode of care, providing continuity throughout the patient journey by coordinating pre admission and aftercare. Integral to role expansion will be robust arrangements for competence assessment, supervision, education and continuing professional development.

Building the knowledge and expertise of Community Practitioners around the public health agenda is an essential role development in remote and rural areas. Increasing local capacity is necessary to address key health issues such as poverty, alcohol, smoking, sexual and mental health.

Intermediate Care

Intermediate Care is a term used to describe the expansion of primary and social care services to bridge the interface with secondary care, the term Integrated Care is used in a similar context; the definition of Intermediate Care that most closely fits with the Scottish situation is that from the Temple Report "*Future Practice*" (2004).

We define this as lying at the interface of Primary and Secondary Care, it will have a key role in delivering the service of the future. It is important to explain and secure the support of the public for this new approach to service delivery. Its hallmarks are:

- *New relationships between Primary and Secondary Care Practitioners that ensure that the skills of both are applied to each patient's care in the most effective way;*
- *Specific roles for General Practitioner/Community Hospitals providing care more locally and relieving pressure on the secondary sector;*
- *Closer working with Social Care to develop the hospital at home, supporting timely discharge, and prevention of re-admission schemes;*
- *An extended role for General Practitioners and an increase in the capacity of Primary Care and*
- *Improved access from Primary Care to investigations e.g. imaging perhaps through Ambulatory Care Centres*

One of the urgent recommendations of 'Future Practice' was that a clear position on intermediate care should be formed and some Health Boards are exploring this concept. We should not underestimate the workforce and education issues that need to be addressed to adopt this model of care and this should be supported at a national level. "Securing Future Practice" (2004), the second Temple Report, recommended that extending the time for General Practice training and developing programmes of training in intermediate care and the other skills that rural practitioners require would address this need for rural Scotland. The establishment of training practices across rural Scotland that could be involved in this education would be a positive step.

Community Hospitals

There are 71 Community Hospitals in Scotland most but not all situated in rural areas. Community Hospitals are varied in the services they provide but have a core of General Practitioner and GP acute inpatient beds.

One definition of a community hospital is: "A local hospital, unit or centre providing an appropriate range and format of accessible health care facilities and resources. These will include inpatient and may include outpatient, diagnostic, day care, primary care and outreach services for patients provided by multidisciplinary teams. Medical care is normally led by general practitioners in liaison with consultant, nursing and EHP"

colleagues, as necessary. Consultant long stay beds, primary care nurse-led and midwife services may also be incorporated."

The Scottish Executive Health Department (SEHD) is conducting a national review of the current and future roles of Scottish community hospitals in order to develop a strategy to fulfil the terms of the commitment made in A partnership for a Better Scotland(2003) which states: "*We will develop the important role of community hospitals and develop a strategy for sustaining small, rural and community hospitals where they are safe and effective, including the provision of minor surgery and to act as a resource to GPs.*"

The results of this review should be available in late Spring 2005.

There is a significant variation in the funding and utilisation of Community Hospitals which make it difficult to generalise. The emphasis should be on the extent to which the Community Hospital can be used as focal point for the integration of services and provide a sufficient element of acute care that avoids rural patients having to travel out with their local area for many conditions. Furthermore, Community Hospitals should be the first port of call for the majority of care in remote and rural areas.

This emphasis on intermediate care in remote areas can in the most active Community Hospitals lead to a significant reduction in admissions to consultant led units. Rural Community Hospitals provide an important Accident and Emergency service which is often staffed by Emergency Nurse Practitioners who are able to see and treat many patients supported by local GPs. Myocardial infarctions, COPD and asthma exacerbations, strokes etc. are initially managed within Rural Community Hospitals and would be transferred for CT scanning or coronary angiography where indicated. Major trauma can often be taken to the Community Hospital for stabilisation while awaiting transfer to a larger centre. The piloting in NHS Argyll and Clyde of an Emergency Medical Retrieval Service staffed by A&E and Anaesthetic consultants from the Royal Alexandra Hospital and Southern General, who are willing to come out to rural areas by SAS or military helicopter to stabilise and transfer very ill patients is an important aspect of improving access to emergency care that many rural residents in the SCRC survey gave as their gravest concern.

Access to diagnostics such as a radiography service is essential if Rural Community Hospitals are to provide emergency care but the need to provide 24/7 radiography cover puts pressure on small groups of staff such as the radiographers to be available for excessive hours of on call and can act as a barrier to recruitment. Near Patient Testing (NPT) technology is improving and many CHs should have access to Haemoglobin, electrolytes, blood gases and Troponin testing equipment. Mobile diagnostics such as diabetic retinopathy screening and mammography provide important local access to care this could be extended to other areas.

Many Rural Community Hospitals include a maternity unit which is Midwife led and provides an important local service for low risk births to take place. This model is supported in the Expert Group on Acute Maternity Services (EGAMS) report. Ante-natal, post-natal care and special needs in pregnancy services are also being developed by midwives. As GPs have less obstetric experience the training requirements for midwives have increased. The role of the GP is mainly in the areas of

maternal and neonatal resuscitation. Supportive links to larger consultant led units are essential for the development of rural maternity services.

Following acute illness it is often recovery and rehabilitation that takes the longest time and some of this can cause lengthy stays in distant acute hospitals unless there is an adequate team of therapists such as Occupational Therapists (OTs) and physiotherapists who can provide this service locally, this is especially important to promote independence for older people. Close working with local social services to provide support and appropriate placement back in the community is essential. There are often few choices of supported accommodation in rural areas and agencies need to work closely together to develop this provision.

Other areas where the Community hospital has a role are;

- Palliative care,
- Out patient functions including day case surgery,
- Specialist clinics,
- Telemedicine including tele-radiology
- Rehabilitation
- Alcohol Detoxification if inpatient care needed
- Convalescence Centre after discharge from DGH

Community Hospitals provide an important role in rural communities, their function is dependant on the skills of many health professionals and investment in the technology that will help prevent transfer to Acute Hospitals. There needs to be improved Information Technology in Community Hospitals to allow the regular audit of outcomes of care.

Managed Clinical networks should develop safe and effective pathways of care for patients treated in Community Hospitals which would provide the opportunity to develop the secondary care interface. The networks could also facilitate multi disciplinary and multi agency working that would promote the role and function of the community hospital.

Health Boards need to invest in the range of services within a Rural Community Hospital to provide safe and effective care and to maximise care that can be delivered locally.

In Moray a virtual medical ward has been developed between the community hospitals and the local District General Hospital. This aims to maximise the ability of specialist clinicians normally based at an acute facility to utilise the beds in community hospitals. This specialist input would be combined with the enhanced expertise of local teams ensuring that patients can be cared for closer to home.

The rural access action team would wish to make the following recommendations:

1. Primary Care Practitioners (GPs, Nurses, AHPs, Technicians) should be supported to develop areas of special interest in order to enhance local screening, assessment, diagnostic and treatment services. These should be developed within a coordinated strategy, the planning for which should be at Community Health Partnership level and supported by network links to specialist services.
2. Each Board should develop a strategy for Intermediate Care including the most effective use of Community Hospitals within the context of the current SEHD review of Community Hospitals. These should be part of an operational clinical network at Board level and any wider aspect of sustainability or collaborative working addressed at Regional level.

2.2 Remote and Rural Unscheduled Care. The Principles.

Good unscheduled care in remote in rural area is underpinned by four key elements

1. Community resilience
2. Networking of resources
3. Time to definitive diagnosis
4. Time to definitive care

This section will explore these elements and demonstrate how they come together to provide safe and appropriate care for the remotest communities.

Remote and Rural communities working in partnership with Local Health Boards need to retain some responsibility for their own care. To do this they deserve to have good access to supported self help, a system of rapid response from the health service provided local first responder schemes backed up with trained medical/healthcare expertise, and speedy onwards transmission to a place where appropriate definitive care can be provided. The pathways involved in these processes need to be linked through a professional network of urgent and emergency care providers.

Within this system of care R&R communities need enhanced diagnostic capability to support an early definitive diagnosis and reduce inappropriate travelling and inappropriate retention in local areas.

The national unscheduled care group has developed a tiered model of care that requires some additional focus on remote and rural issues.

Community resilience

Much can be done to ensure that local communities are as capable as possible in dealing with health issues within their own communities. A resilient community would have good internal support systems with services configured in such a way that the maximum support is available locally within clinical safety parameters. This is what is meant by the term community resilience. Provision of this support would take many forms including physical presence, telephone support, internet and telemedicine access.

Self care

Clearly many of the presentations of illness that occur out of hours can be very adequately dealt within the local community. NHS 24 aims to provide appropriate home care advice for 40% of these presentations and there may be scope for increasing this in coming years.

Emergency care

The main area of concern for R&R communities is the retention of appropriate systems to cope with the 5% of out of hours (OOH) activity that is genuinely emergency. Traditionally there has been a reliance on the local GP to bridge both the time and care gap. These GP's provide emergency/trauma care services in addition to primary care and often augment the local ambulance response.

This aspect of service could be configured to cope with a future situation that is likely to be health care professional "light" not just doctor light.

A resilient community would have the following in place:

- Immediate access, perhaps through satellite link, to an emergency triage and dispatch organisation. This organisation would assess the level of emergency need and either dispatch appropriate response or arrange for further assessment.
- First responders; people drawn from the local community who were trained and supervised by the local health systems. Some areas have used locally employed professionals to act as first responders and public health practitioners (Berner, 1992). These people could already be retained by the fire-service or coastguard and utilised more fully. They would form a rota of experienced responders who were available on a pager, similar to the retained fire services at present. Examples of first responder initiatives are described in annex 5.
- Professional emergency response that was graded to the need. This would include nursing, paramedic and medical personnel. Health care outcome improvements have been linked to the delivery of medical expertise to the site (Brampton, 2001)

- Access to diagnostic facilities where diagnosis cannot be made at the incident site. Patients would be transmitted to the nearest diagnostic centre capable of defining the condition and stabilising the patient. This may be a Rural general Hospital or an enhanced rural community hospital.
- All of these expertise needs would be available in agreed response times that are achievable and sustainable for the individual community.

Details of this system of care are given in appendix 3.

1.3 Travel times

In considering any emergency scheme the difficulties of travel across R&R Scotland must be dealt with. Whilst road transport will remain the mainstay for most of R&R Scotland this will need to be underpinned by a high quality air transport systems. To be efficient this will rely on a mix of helicopter and fixed wing aircraft. In rural remote areas Helicopter Emergency Services (HEMS) systems offers a greater means of medical assistance with a significantly larger action range (Lackner&Stolpe, 1998). Research suggests that patients transferred by helicopter received medical attention 25 minutes earlier but arrived in hospital 10-20 minutes later (Sheridan, 1996). Helicopters have a role in providing emergency cover over large and remote geographical areas and situations inaccessible to land ambulances. However, planning of this model of response and investment in infrastructure will be necessary if this is to provide a robust and sustainable response.

A robust analysis of the benefits of Helicopter transport is given in the study done for Northern Ireland in 2003. (Booze, Hamilton *et al*, 2003).In essence this report says

“Effective HEMS (in any response role) requires an integrated (as opposed to fragmented) pre-hospital emergency care system and the development of a significant amount of (usually new) ‘institutional’ mechanisms including a system of clinical coordination, and implementation of an effective operational and clinical audit regime.”

Whilst it is tempting to think that rapid transportation of patients would solve many of the emergency problems in R&R areas this is not borne out by the literature. International evidence shows that there is a clear need for the integrated system of care proposed in this chapter. Airway management at the scene has been identified as the crucial factor in survival to hospital (Nicholl, 1997).More and more, in use of air transport, the emphasis is on primary transport of patients already stabilised by ground rescue squads (Christian *et al*, 1998).

As distance and time increases with rurality and remoteness so there is a greater need for an integrated pre-hospital emergency care system. This system can be evidence based and work within robust clinical governance structures.

Urgent care

The same system that coordinates and delivers emergency care can be configured to deliver urgent care. This system is detailed in appendix 4. Here the local R&R community has access to quality assessment and triage that supports home care and

activates face-to-face care where appropriate. Central to this part of the system is a fully functional out of hours (OOH) hub which co-ordinates local activity working with local knowledge. There is a key question to be addressed here. Should these hubs remain under the control of territorial boards or should they be absorbed into a national triage structure under the governance and management of a single Board?

The combination of quality assessment and triage with good local service co-ordination would provide a service that was sustainable.

Accessibility of the system is paramount. Patient journeys in R&R areas are already longer than urban areas. All elements of the care delivery system must work in real-time for them to be acceptable to patients and providers alike.

Education and training

If this system of care is to work well then it must be underpinned by a structure that ensures ongoing training for all involved. Training in the R&R environment must be delivered as near to the local area as possible.

R&R communities benefiting from this scheme could be linked to senior clinical leaders who ensure provision of appropriate skills updates. Four or five such communities would have a significant pool of first responders, several nurses and paramedics and a few doctors involved in the care provision. Geographically appropriate groupings could be formed that participated in peer review and update programmes led by clinical trainers.

Innovative schemes for skills and training update could evolve that make best use of all media including Internet and web-based schemes.

Enhanced Local Diagnostic Capability

When such a networked system of response is in place the question arises as to where such cases should be taken for further care. The answer for each case is dependent on the ability to make a definitive diagnosis in the first instance. Without a clear diagnosis it is extremely difficult to make judgments on the appropriate place of treatment. Indeed many would say that this is the real art of remote and rural medicine, with experience necessary to make such judgments based on limited information. Marrying the patient's wishes to these decisions is the sign of quality care, as opposed to over investigative/defensive care. That being said frequently patients are transported further away from their homes simply to access diagnostic tests. Once diagnosis has been made the treatments are often available nearer the patients home.

In order to reduce unnecessary travel or indeed the converse of inappropriate retention in the home locality emergency diagnostic capability needs to be enhanced in remote and rural areas.

Conclusion

There is good international evidence that pre-hospital emergency care is most beneficial when it is integrated across the service. Too much of the response in remote and rural Scotland is fragmented at present and there is scope and the ability to draw together a national remote and rural pre-hospital emergency care system.

The rural access action team would wish to make the following recommendations:

1. The interdependence of local NHS Boards, NHS 24 and the Scottish Ambulance Service in providing effective unscheduled care services in remote and rural areas needs to be recognised. An integrated unscheduled care service should be planned at regional level building on the approach outlined in this paper, and delivered locally.
2. The SAS should be asked to lead a review of current first responder schemes, involving local NHS Boards and local communities, with a view to establishing a national system of first response in remote and rural areas with appropriate accreditation, support and governance.
3. Local first responder schemes should be linked into a system of training and education under the supervision of area clinical trainers.
4. Expertise should be developed in OOH Hubs in coordination of service provision in remote and rural areas.
5. The governance and management of OOH Hubs should be reviewed, undertaking a feasibility study on development of a single national system of triage and service coordination that links local knowledge to triage and dispatch activities.
6. The role of HEMS in remote and rural Scotland should be reviewed, focussing on accessibility and response times.
7. The location of helipads across Scotland should be reviewed; ensuring key sites such as Rural General Hospitals have helicopter access.

2.3 The Role of Remote and Rural General Hospitals

Provision of locally based health services underpin the Scottish Executive's theme that services should be as local as possible; patient numbers and locally available resources govern how specialised these services should be. Times, distances, weather and modes of transport determine whether it is possible or convenient to travel to larger centres for healthcare. Patterns of patient referral have been established over the years with mandatory links for those hospitals forming part of a large health board (Wick, Fort William and Oban) and looser, but no less important, links for the island health boards (Shetland, Orkney and the Western Isles).

Locally based community and rural general hospitals must become integrated into the totality of health services including the ambulance service, providing emergency and acute care to ensure optimum outcome for common life threatening emergencies. But if rural general hospitals are to have a wider remit than community hospitals, they must provide alternative packages of planned care, intermediate care, diagnostics and investigative services, outpatient and integrated day-case work. Identification and definition of a core of locally available healthcare which patients can reasonably expect from their rural general hospital is required for the population's peace of mind and for NHS planning, training and education. Local services will be determined by this core provision and other locally relevant needs, an example of which are the enhanced trauma services needed in Fort William to manage injuries occurring to walkers and climbers.

Staffing of rural general hospitals must be planned and rational. This will require locally, regionally, nationally, UK and maybe internationally directed recruitment of individuals with the skills needed to provide the core service; as a team the additional skills they bring with them can be harnessed to meet locally determined specialist needs. The educational opportunities in rural general hospitals must not be overlooked; trainees will make worthwhile contributions to the service as part of their learning experience. Innovative development of expanded roles for nurses and allied health professionals (as specialists, practitioners and consultants) must be actively pursued. The opportunities for development of cross boundary (primary and secondary care) is essential to the success of this model.

The Rural General Hospital

Definition

A hospital sited in an area distant from urban conurbations which, because of compromised patient travel times, provides a locally based consultant-led service to meet the healthcare needs of a population not large enough to require a district general hospital.

Raison d'être for Rural General Hospitals

- Emergency medical care: triage, diagnosis, resuscitation/stabilisation and treat where possible, transfer when necessary;
- Locally based elective care: diagnosis, treatment or transfer and follow up;
- Care for chronic illness: care of the elderly, stroke and diabetic care and renal dialysis.

Siting

Within the areas of Scotland that have travel times greater than 2 hours from a population centre of more than 30,000 people there are eight towns which have populations of over 3000. Six of them are served by five Rural General Hospitals; the Gilbert Bain Hospital in Lerwick, Shetland, the Caithness General Hospital serving

Wick and Thurso, the Belford Hospital in Fort William, the Lorne and Islands Hospital in Oban and the Western Isles Hospital in Stornoway, Western Isles. Despite having some hospital consultants the Balfour Hospital in the seventh town, Kirkwall, Orkney is designated a community hospital (it should consider redesignation as a rural general hospital). The eighth town, Campbeltown, has a Community Hospital without a locally based consultant service. Over the last few years a number of the smaller remote and rural hospitals have lost their locally based consultant services (Golspie, Skye, Stranraer, Daliburgh). With the exception of Campbeltown isolated populations have reasonable access to rural general hospitals.

Workforce

Medical

Consultants

A radical rethink is needed to develop suitable doctors capable of providing the skills and expertise required to treat patients in remote communities. For too long remote and rural hospital services have tried to design patient care around a hierarchical medical workforce structure designed for large urban hospitals and not for the hospitals found in remote areas.

The workload of rural general hospitals is different to the larger urban hospitals and the Healthcare Team must be broad based and vari-skilled if they are to deal with the variety of patients who will need care. The numbers of patients with particular conditions are of necessity low because of the small population base. Skills will deteriorate or fail to develop if doctors only rarely has the opportunity to put his expertise to good use. This is especially true in making diagnoses, clinical management decision taking and practical skills. For these reasons the skills and knowledge required for rural doctors must be identified. Many of these skills are general and relevant to the management of many conditions, but some would be specialist either for the particular population of the rural general hospital or as part of the overall requirement for specialist service provision.

Almost certainly three particular types of specialist will be required to provide the core services and these will closely equate to general physicians, general surgeons and anaesthetists, but all will possess core skills in triage, resuscitation and stabilisation of patients of any age with any condition. Within their own particular areas of medicine, surgery or anaesthesia, skills and knowledge that cross existing speciality and subspecialty boundaries will be required. Such specialists will not be the 'generalists' of the past who were able to 'turn their hand to anything', but will be individuals specially trained to have the skills and knowledge necessary to deliver a safe, high quality, modern service in a remote general hospital. Such training will be of the highest standard and equate with that found for any other area of medical practice. For this to happen the core services to be delivered in remote general hospitals must be defined and career pathways generated to allow planned tailored training.

Rural specialists who do not provide a full round the clock service will be required. They do not necessarily need to be based in only one Rural General Hospital and can be seen as the local champion for a service and will have a normal working hour

commitment to their particular specialty. Examples of such specialists would be psychiatrists, community paediatricians, gynaecologists and obstetricians. Such appointments could be at a Regional level, but could also cross the usual administrative boundaries.

The development of this new breed of Rural General Hospital Specialist will take time but unless it is started it will never come to fruition and staffing of rural general Hospitals will remain as haphazard as it is at present. In the interim period consultants already trained in the 'old' system could be encouraged to retrain for periods to enable them to be seconded for periods of at least three years to a Rural General Hospital, returning to their 'mainstream' hospital at the end of their secondment. If more consultant posts are appointed at a regional level this kind of movement of consultants could be more feasible, this would require the firm attachment of the rural general hospital to a regional framework in a fashion implied in Professor Temple's Securing Future Practice (2004).

Medical Trainees

Medical, surgical and general practice trainees will benefit from the educational experience available in rural general hospitals in three ways:

- Learning about remote and rural healthcare
- Closer consultant supervision
- The general, non-specialised nature of the patients

Foundation year 1 posts have been developed and will commence in August 2005. Foundation year 2 posts are being developed. A number of basic specialty programmes basic surgical and general practice vocational training scheme rotations have posts in rural general hospitals. There are a few accredited stand-alone posts.

Sufficient (the Modernisation Agency has calculated between 7 and 9) trainees must be in post to allow a New Deal compliant out of hours rota to be organised. One junior doctor supported by clinical support nurses for the wards, emergency nurse practitioners for the accident and emergency department, operating theatre assistants and consultants should form a hospital at night team to cover the rural general hospital out of normal working hours.

Nursing

Nursing staff must be provided in sufficient numbers to meet national norms of nurse patient ratios. Active efforts are needed to ensure bespoke professional development opportunities and innovative initiatives to maximise recruitment and retention. Secondment to larger units for periods of refreshment and updating must be routine for permanent employees.

Nursing staff must be supported to under go further training and develop extended nursing roles. Much of the service in the future will depend on a more empowered nursing work force.

Nursing faculties should have a campus in each of the rural general hospitals to ensure neighbourhood recruitment and retention of local staff.

Allied Health Professionals

Active efforts to encourage local people to train and return to rural general hospitals are needed. National shortages will challenge recruitment efforts but incentives, good working conditions and enhanced lifestyle arrangements must be tried. In addition rotations with larger units for newly qualified AHPs will expose younger professionals to the benefits of rural practice and should improve recruitment. As with nursing staff development of extended roles will be needed for the rural general hospital of the future.

Administrative

Recruitment of local people to administrative positions with training and promotional opportunities is necessary to develop a stable and vibrant organisation. If packaged properly more senior administrative staff should see a period in a rural general hospital as an important part of a developing career portfolio and seek out jobs for limited periods of time. Stagnation in administration must be avoided and career opportunities at a regional level must be opened up.

Support staff

Wherever possible local staff must be employed for portering, stores, catering, engineering, domestic and unskilled posts. The rural general hospital owes much of its stability to it being a major employer in any remote and rural community.

Locums

Because of its size and the number of staff it employs the rural general hospital is fragile and has difficulty coping with absences of its employees. It is often necessary to employ a locum to cover annual, study, sickness or special leave. This is particularly true when one or two people provide a particular service. With new employment contracts and an increasing need to abide by the working time legislation the need for locums will increase.

Unlike hospitals based in larger towns and cities the rural general hospital has only limited access to locally based locum services. The ever-increasing cost of employing locums from a distance can place a severe financial burden on a health board. Limited availability and variable quality makes acquiring locums time consuming and unpredictable. The development of a centrally based locum agency to serve the particular needs of remote and rural areas could go some way to alleviating these difficulties.

Facilities

All rural general hospitals must be fit for purpose and should incorporate the following:

- Elective Care facilities
- Unscheduled Care facilities
- Investigation facilities including;

Radiology department with state of the art digital radiography, ultrasonography and CT scanning equipment. Images must be transmissible to a radiologist in a larger centre for reporting and interpretation.

Analytical laboratory capable of analysing blood and urine samples for a variety of haematological and biochemical variables.

Microbiological laboratory capable of culturing organisms and determining their antibiotic sensitivity.

Blood cross matching facility

Basic cardiological investigations – exercise testing, echo cardiography, 24 hour and 8 day monitoring

Gastrointestinal endoscopy, cystoscopy, colposcopy, arthroscopy

Allied Health Professions Care Assessment and Management areas include;

- Physiotherapy
- Dietetics
- Occupational Therapy
- Podiatry
- Speech and language

Transport of Patients to and from Rural General Hospitals

The lifeline for remote and rural populations is transport to healthcare facilities in an emergency. The land based ambulance service is essential for local transportation but problems of availability for people living in the more isolated areas are well documented and need addressing. This applies to both planned and unplanned (emergency) ambulance services. Air ambulances are required for transport to larger hospitals for routine care as well as emergencies. The Scottish Ambulance Service is involved in the consultation phase of a new procurement for air ambulances – special consideration will need to be given to particular areas but overall the speed and comfort of travel should improve. One unresolved issue is the return of locally based medical escorts (anaesthetists, nurses or junior doctors) to their base after delivering a patient to another hospital; this can deplete local staff to the point where services may put at risk. This problem needs addressing and a satisfactory solution found.

Core Function

Principles of working:

Defined limits to local services:

high-dependency beds but no Intensive Care Unit

degree of specialisation within each sub-specialism agreed between clinicians in Rural General Hospital & Specialist Centres as part of Managed Clinical Networks (MCNs)

Multi-disciplinary Team working between the Rural General Hospital and the Specialist Centre to agree patient management pathways and the appropriate degree of specialisation. Working as a Managed Clinical Network will ensure appropriate clinical governance within the rural general hospital.

Education and Continuing Professional Development (CPD) should be characterised by network exchange programmes to maintain capacity, skills and relationships.

An informed debate about levels of risk and risk management, based on evidence of clinical outcomes is needed. This should aid public understanding, the development of realistic expectations and should address the issue of local accessibility as a quality standard.

Conditions / services to be managed in Rural General Hospital

All rural general hospitals must have defined links with larger hospitals. These hospitals, in collaboration with the rural general hospital, have the responsibility for ensuring that the bulk of the remote community's healthcare needs in both emergency and planned care are met. Patients from the catchment area of the rural general hospital should be managed in the same way as those in the usual catchment area of the larger hospital. A list of conditions is detailed in annex 2.

The Future

Maximising the role of local professionals

For Rural General Hospitals to have a viable future changes in work patterns and service redesign are essential. Locally based health care professionals should provide the strength needed to meet the challenges of an ever-advancing health care service. For this to happen local professionals will need to consider:

Increased use of General Practitioners with a Special Interest (GPwSI)

Training of specific remote & rural consultants (currently happening in the North East)

Employment of more nurse and AHP practitioners and nurse and AHP Consultants

Remote and rural specialist training for other professional staff including Allied Health Professionals, nursing and midwifery staff, clinical support staff.

Developing specialist interests in addition to core services to:
Make sustainable workload;
Maintain competence;
Recruit & retain workforce;
Give local access to a wider range of services.

Sustainable Services

To ensure long-term stability, action must be taken to ensure the existence of:

Remote & rural component of national training schemes
Remote and rural specialists
Multi-disciplinary Team working across Rural General Hospital & Specialist Centre
with agreed patient management pathways
Target investment linking service delivery and recruitment and retention
Bonded training
Remote and rural job incentive packages
Marketing quality of life

Public sector joint working on:

recruitment,
training & professional development
infrastructure including IT, facilities

Rural general hospitals can provide some of the highest quality healthcare in NHS Scotland. When properly resourced, funded and staffed they deliver excellent consultant care locally in a familiar environment for many common ailments. Patients in the more isolated areas of Scotland must have confidence that their healthcare needs will be met locally or in a more specialised centre and that access to either will be reliable. The rural general hospitals are specific entities and not scaled down district general hospitals; they must be viewed as an integral part of the NHS Scotland and staff must be specifically trained to work in them.

Response to the Temple Report

The Temple Report suggested that many services may become unsustainable in Rural General Hospitals unless there was shared responsibility with larger centres to provide acute clinical care. The Report challenged the Remote and Rural Healthcare Communities to provide solutions that would ensure services were maintained. The Rural Access Action Team believe that this can be achieved by the acceptance and development of the role of generalist specialist, by accepting the unique contribution of the Rural General Hospital and maximising the potential of all Healthcare Professionals within the local community.

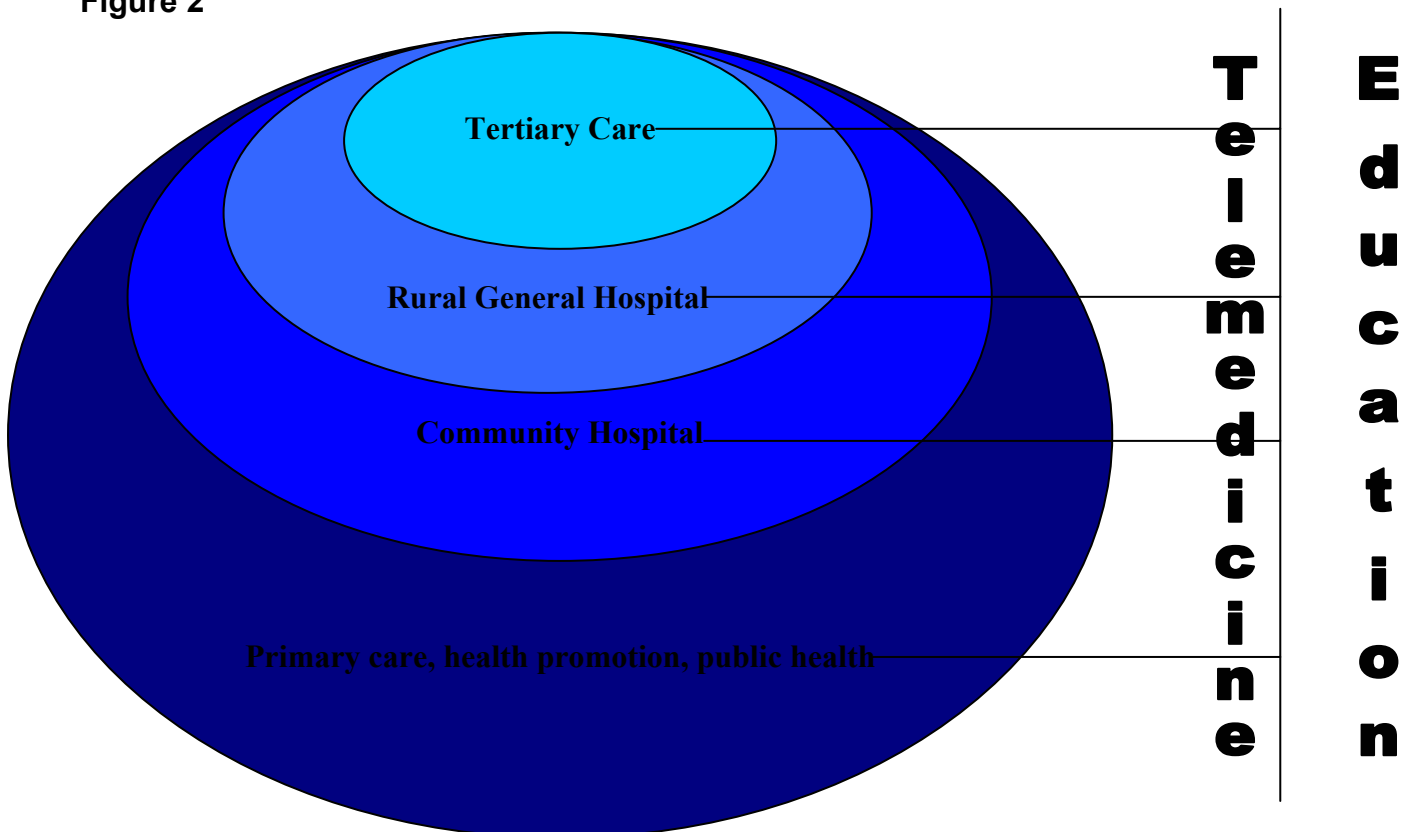
The Role of Information and Communication Technology

The importance of information and communication technology cannot be understated in the delivery of healthcare to remote and rural communities. There are advantages for patients, clinicians and Health Boards. Telemedicine provides a means to build and strengthen collegiate networks. Clinicians, no matter where they work, can consult each other for expert opinion. Rural clinicians can send electronic images to their colleagues for review in consultation via the telemedicine network. This is illustrated in figures 1&2.

Figure 1

Advantages for Patients and Carers	Advantages for Clinicians	Advantages for Health Boards
<ul style="list-style-type: none"> ▪ Earlier and improved access to specialist opinion ▪ Increased Choice ▪ Improved discharge planning and reduced readmissions 	<ul style="list-style-type: none"> ▪ Provides collegiate network ▪ Supports and trains in Remote and Rural areas ▪ Reduces travel time and associated costs 	<ul style="list-style-type: none"> ▪ Reduced inappropriate transfers ▪ Savings in travel costs ▪ Improved effectiveness in healthcare ▪ Increased viability of providing services locally ▪ Increased support for collegiate networking and recruitment and retention

Figure 2



The Rural Access Action Team would wish to make the following recommendations

1. The outlined core definition, core functions and raison d'être of a Rural General Hospital should be adopted by NHS Scotland as a formal category of hospital provision, noting the necessary local variations between hospitals.
2. NHS Scotland should recognise the key place of the Rural General Hospitals at Lerwick, Kirkwall, Stornaway, Wick, Fort William and Oban in the delivery of both scheduled and unscheduled care as part of this National Framework.
3. The North of Scotland Regional Planning Group, in collaboration with the West Group, should be charged with establishing a strategic network to oversee the development of the Rural General Hospitals as outlined in the document, including the development of formal links with specialist centres.
4. That there is a Remote and Rural component in National undergraduate Training schemes and the development of post graduate training schemes to support the development of remote and rural practitioners

2.4 The Skilled and Competent Workforce

Within an overall vision for appropriate remote and rural healthcare this section will look at how we develop, train and support a skilled and competent workforce. Other sections have considered the individual roles, including extended roles for medical staff and other professionals.

Four sections were identified to be addressed:

1. Responsive education and training programmes
2. The use of technology in delivering training and education programmes
3. Role of Royal Colleges
4. Role of NES

During discussions two other areas were identified as necessary: the issue of the safe, competent practitioner and the need for integrated workforce planning to achieve this.

The safe, competent practitioner

What is a competent worker? Whiddett & Hollyforde (2003) define competency as:

“...behaviours that individuals demonstrate when undertaking job-relevant tasks effectively within a given organisational context”

Competency is about tasks, about behaviours and about being fit for purpose – i.e. appropriate to the setting. It is also about capability – being able to demonstrate the competency through learned experience.

There is much written on competencies. Skills for Health, funded by RARARI, have defined a range of competencies for remote and rural healthcare, with an emphasis on primary care and clearly identify many of the areas to be addressed.

This suggests that any programmes designed to develop skilled and competent workers in remote and rural settings will need to be underpinned by flexibility, accepting that there are different models in different areas and one size does not and will not fit all. The Skills for Health guideline and indeed other evidence suggests that in remote and rural areas the level of skill and competence needs to be different, with a wider base of skills, to meet the health requirements. Since 'one size does not fit all' there may be a need to identify the skill mix required to sustain a safe service at each remote site.

Career Pathways

Sustainable remote and rural services will depend on career pathways that support practitioners within remote and rural environments. This should include access to ongoing education, mentorship, research and attachments within larger units. NHS Scotland should ensure that a culture of positive value is developed for remote and rural practice. Within remote and rural areas career management should be underpinned by:

Development of career pathways within the remote and rural environment;
Joint appointments/attachments with larger centres for 'hard to fill' posts;
Succession planning, in collaboration with partners;
Professional networks with larger centres and between remote and rural practitioners;
Links with Higher and Further Education sector, including access to research/study facilities and time.

Responsive Education & Training

In remote and rural areas training and education must be provided as locally as possible and should as far as possible be multi-professional. Remote and rural practitioners, supported by those skilled in educational design, should undertake programme design. Programme design should be based on the health need of the population but may need a "pick and mix" approach. Equally all programmes should be relevant to the rural environment. The emphasis of programmes should be on experiential learning, preferably locally but supported by theoretical concepts. Education should be supported through IT/networked electronically, connecting practitioners. Networked computers/video-links should be supported within local communities and linked to NES and other educational providers.

'Teachers' must be experienced remote & rural practitioners.

Responsive education must be supported appropriately through appropriate administrative support and backfill, as necessary, of educators.

Educators need to retain clinical practice but not all practitioners need be educators.

The remote and rural environment as good learning environment.

Remote and rural healthcare should be a formalised aspect of all higher and further education programmes/courses and undergraduate doctors, nurses, AHP and other healthcare programmes should offer attachments within a remote and rural environment.

The use of technology in delivering Training and education programmes

Must be supported by an all Scotland approach. Technology needs to be common and link the main centres e.g. Glasgow/Edinburgh. It is recognised that there are financial issues around investment but it must be recognised that networked IT is key to retention and delivery of safe practice in remote and rural areas and to continued education and development of staff. This must include learning the lessons of past failures and being alert to the fact that existing IT links have not always worked and will need improved. Enhanced partnerships with local authorities/educational providers should be investigated to minimise duplication of investment. Training programmes must include how to use equipment and how to deliver education using this media.

All media should be exploited to support remote access including telephone, email, e-library and websites to support.

NHS Scotland should further investigate how other organisations, e.g. Open University, support remote students.

Role of Royal Colleges

The Medical Royal Colleges exist to define and maintain standards; they award higher qualifications, approve training, support practice and develop guidance for the profession. The support of these organisations will be crucial in the sustainability of remote and rural practice.

The Royal Colleges must be encouraged to:

Recognise need/requirement for remote and rural practitioners;

Establish an Intercollegiate group focussed on remote and rural practice, similar to that for children's services.

Value remote and rural practice and encourage the development of remote and rural medicine, for both primary, secondary and intermediate care practitioners;

Facilitate international collaboration.

Ensure that Inspections of remote and rural training involves experienced remote and rural practitioners.

Approve training programmes specifically for remote and rural practitioners.

Consider "lay membership" to ensure responsiveness to public demands.

To date one meeting has been held with the Royal College of Physicians and Surgeons of Glasgow concerning Remote and Rural Healthcare and focussing on training and education of Doctors. The need to have a good understanding of the required skills and competencies was acknowledged and it was felt that these could be drawn from existing service planning work and that of the Rural Access Action Team. It was felt that there should also be agreement on what functions and services should

take place in the Rural General Hospital and that this should be viewed in the context of an integrated rural healthcare system that include CHP developments. There was recognition that the more generic skills required of remote and rural doctors was increasingly applicable to doctors working in district general and specialist hospitals as new wider cover arrangements are established to meet with regulations. There would therefore be value in using Remote and Rural environments for part of the training for all doctors. Training pathways were discussed which appeared to be clearer for physicians as the breadth of training required for Remote and Rural surgery did not sit comfortably under the current curriculum. The opportunities for closer working between Remote and Rural consultants and general practitioners was highlighted, likewise the need for ongoing work to be in collaboration with the Royal College of General Practitioners. It was agreed that the way forward would be to establish a group that could sub divide to focus on medicine and surgery/anaesthetics. This would be led by the Royal Colleges in conjunction with the service and NHS Education for Scotland. The Scottish Executive Health Department would be required to provide support for this initiative.

Role of NHS Education for Scotland (NES)

The role of NHS Education for Scotland is to ensure that there are a range of appropriate training programmes for all NHS staff, which will lead to the development of well educated, skilled and competent workers. Specifically NES should support this agenda through:

Designing, in collaboration with remote and rural practitioners appropriate educational and ongoing training programmes

Driving educationally remote and rural focussed programmes

Ensuring that programmes are flexible, user-friendly and locally delivered and tailored to remote and rural practice

Developing and expanding the 'Roadshow' approach which has been so successful with the BASICS programme

Supporting the continuation of BASICS and working with the BASICS staff to develop the emergency care programme, currently being developed

Developing educational supervision and mentoring models, linking staff across areas

Supporting development of educational /needs assessment training

Focussing investment

Community Health Partnerships (CHP)

Community Health Partnerships (CHPs) have a key role to play in ensuring that their workforce is skilled and competent now and in the future. CHPs should:

Develop service design plans, including workforce plans for all staff.

Focus investment based on health need/service need rather than historical practice.

Develop Education plan to achieve skilled/competent worker, in collaboration with NES.

The Rural Access Action Team would wish to recommend

The Establishment of Rural General Surgeons and Physicians should be recognised by NHS Scotland and the Royal Colleges as specialisms in their own right and appropriate training and career pathways developed.

2.5 Sustainable Transport in support of Remote & Rural Healthcare

A fundamental element of access to healthcare is the availability of adequate and sustainable transport systems, managed in a fully integrated manner across all local agencies.

Present Situation

At present, many rural communities have a range of transport services available to them, some provided by statutory agencies, others by charities or volunteers. There is a need to put a step change in place to provide systems which will allow an integrated transport solution in Scotland, which would allow all providers to support rural patients gain access to healthcare.

Examples of the range of transport used or potentially available for use in Scotland include:

- Ambulance Service Patient Transport Vehicles (Mini Bus and Cars)
- Ambulance Car Service (Voluntary Car Service)
- Accident & Emergency Ambulances where patient requires increased level of care, or no other resource is available
- Scheduled Air Transport
- Scheduled Ferry Transport
- Scottish Air Ambulance Service
- Community Transport Schemes
- Partnerships with Voluntary Aid Societies
- Local Authority Transport
- Hospital Taxi Contracts
- Reimbursement of travel costs through Health Board Travel Schemes

Transport and its role in healthcare

With the move towards providing services within managed clinical networks, it is vitally important that there is active co-ordination of transport for patients, planned as a key component of networked services, in order that those distant from provider centres have transport that is:

- Easily accessed
- Patient focused, by having the flexibility to meet the changing needs of the patient
- Sustainable
- Shares a common “duty of care” and has the flexibility to amend training etc to meet a common standard for all providers
- Lends itself to becoming part of an integrated transport network

Current Developments influencing transport provision

With the roll out of the General Medical Services Contract (GMS) and the establishment of Out of Hours Centres, Health Boards are beginning to provide transport in the more remote and rural areas, either by employing drivers, or by negotiating new taxi contracts.

The Scottish Ambulance Service are consulting on the re-procurement of Air Ambulance Services. This may change the type of aircraft used in some island communities, and impact on the availability of existing fixed wing provision.

The Scottish Ambulance Service are progressing with their Non Emergency Service Development Plan. This will provide a response based on the clinical priority of the patient, making the service more patient focussed.

Organisations such as the British Red Cross are providing both transport and accommodation services to patients on behalf of some Health Boards.

The Scottish Ambulance Service are developing Treat & Refer and Treat & Transport policies, along with Community Paramedic roles which will allow patients to be supported at home, rather than be transported to hospital.

With the roll out of Out of Hours Centres, the availability of telemetric links in the community is increasing.

The establishment of Regional strategic transport systems with responsibility to develop statutory regional transport strategies taking account of all users, including health.

The Way Forward

The following are suggestions of areas which we should examine to ensure that rural communities have appropriate and equitable access to healthcare.

Recommendations:

This will:

Improve patient-focus

Consider provision of rural transport arrangements as central to accessing health and welfare services

Help to meet the access requirements of patients in remote & rural areas, and encourage Community Planning approach to transport

Promote the view that appropriate provision of transport is an integral part of the healthcare package, ensuring that adequate transport provision is the responsibility of the

Improve patient-focus and reflect the requirements of rural patients and their carers / families

healthcare provider.

Scheduled healthcare appointments must be explicitly organised so that they are consistent with the availability of integrated transport, thus assuring that patients access to healthcare is as appropriate and convenient as possible.

This places the responsibility for effective co-ordination of appointments and available transport on the healthcare provider.

Review use of Hospital Travel Schemes in geographic areas and consider reallocating funds to support introduction of a scheduled transport service

Improve patient-focus and make available a community based vehicle, scheduled to tie in with geographic zoning of Patient appointments

Consider the use of Nursing and Paramedic staff in the communities to reduce the need for patients to travel to hospital.

With the professional development of staff, due to OOH initiatives and the Ambulance Service 2010 Vision, there may be scope for deploying staff in the communities, rather than patient being transported to hospital

Consider how the use of telemetry could improve rural access to healthcare

There may be scope to utilise rural based telemetric links to reduce patient travel, and speed access to consultation.

Review current use of scheduled air transport and consider contracting air transport to meet the specific needs of the rural patient and Health Board

Allow Consultants to visit rural areas on a planned basis, and patients to be transported at a time to meet appointments made by the hospitals. Providing a controlled and integrated model of air transport.

The Scottish Executive should ensure that all future funding for transport related initiatives, includes a clause that the project should demonstrate that it has the potential to integrate with other providers, if its aim is to supply vehicles or drivers

This would “pump prime” the Health and Community Care Act requirement for joint working, and ensure that best value is gained from the investment and that the patients needs are met by a range of transport options.

The Scottish Executive consider the formation of a Working Group to review the various types of software in use in NHS Scotland, and how a fully integrated appointment and transport planning & scheduling system can be developed

Allow a common platform for booking appointments, transport and visits. It would assist in the allocation of short notice appointments, and assist in the management of waiting lists.

Using a system such as the Scottish Ambulance Service Non Emergency Service Planning & Scheduling System all resources, including NHS, Local Authority and Voluntary could have their work planned in an integrated manner.

Community Planning

The provision of adequate transport systems giving local communities access to healthcare should be identified as a key priority for community planning partnerships.

Identify opportunities to improve efficiency, access to transport in an integrated manner, and scope for alternatives to transporting patients to hospital, often travelling long distances for short appointments. There is evidence that there are considerable transport resources available within communities which, if co-ordinated in a planned and pro-active manner, could significantly improve patients ease of access to healthcare. For example, the better use of voluntary providers, as partners in a local approach to accessing healthcare, taken along with a comprehensive look at current public agencies transport resource might provide better solutions without increasing actual resources.

Review funding & best practice

Promote the pooling of budgets from both Health and Social Services to ensure that a more responsive and integrated service is provided to the remote and rural communities

Facilitate a more community centred approach to transport rather than each service operating separately, and will provide more sustainable services which will meet remote and rural needs in an integrated manner

Ensure that the duty of care is common across all providers, and that consistent quality standards are in place

Allow generic standards for training and development of staff involved in the transportation of patients to be developed and introduced

There can be no doubt that transport plays a key factor in access to healthcare in rural Scotland. By using a Community Planning approach, better co-ordination and further involvement of the voluntary sector, access to healthcare can be significantly improved in remote and rural communities.

There is scope for sharing good practice, and modifying training, to allow the most efficient use of vehicles and manpower in the communities. Transport services are often seen as vital to the survival of rural communities, and it is therefore important

that Community Health Partnerships work to ensure the best use of these valuable resources, and review their operation periodically.

As new models of working emerge, such as Out of Hours Services, we should ensure that new skills available in the communities are harnessed in the day time, to reduce the number of patient journeys, and instead, support patients at home. For those who need to travel for their healthcare, we must provide a safe, effective, patient-focused and integrated model, which provides fair and equitable access to healthcare.

The Rural Access Action Team would wish to recommend:

1. Community Health Partnerships have responsibility for the planning and coordination of transport systems to meet the healthcare needs of the community
2. There is further development of Air Transport systems
3. That SAS are asked to develop clinical triaging of patients for air transport
4. Protocols are developed in partnership with SAS and Health Boards for staff who undertake escort duties, including accommodation where appropriate

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Annex 1

NATIONAL FRAMEWORK FOR SERVICE CHANGE IN THE NHS IN SCOTLAND COMMISSIONING DOCUMENT: REMOTE AND RURAL ACCESS

Overall Purpose

This work will;

- Describe the complexities of delivering Remote, Rural and Remote and Rural Healthcare
- Determine how services can be planned to reflect the needs of Remote and Rural communities and the implications for patients who have to travel to distant sites
- Scope the shape of multidisciplinary teams within Remote and Rural areas
- Determine how training should be designed to meet actual needs and ensure sustainability of Remote and Rural Healthcare
- Identify the scale and scope of activity during the day and at night in the 6 smaller Remote and Rural hospitals* This will;
 - Provide clarity and define the core service of the 6 hospitals
 - Describe the skill set and the model of staffing that is required to support this service an both the medium and long term
 - Determine the training and education requires to support and sustain both staffing and service
- Describe how transport impacts on the patients' episode of care
- Have regard to the impact of NHS QIS Standards on Remote and Rural Healthcare
- Inform the work of other work streams relating to Remote and Rural issues
- Take account of public concern in relation to the implication for local services

Background

Issues around access to health services in rural communities are at the forefront of local agendas and are increasingly prominent in a national political context. The Scottish Executive's report (2002) on the availability of services in rural Scotland identifies poor access to public services as one of the main causes of social exclusion for rural areas. The loss of local health services can have a significant knock-on effect to the sustainability of fragile local communities. Recruiting and retaining healthcare professionals has been highlighted nationally and internationally and the new general practitioner contract presents new challenges. It has been suggested that initiatives such as NHS 24, enhancing the skills of nurses, AHP's and paramedics and more widespread use of telemedicine will enhance rural population's access to health services (SEHD 2003).

The demographics of rural Scotland are predicted to change. Populations will tend to decrease but within that we will see substantial increases in the number of older people in many communities.

Objectives

The National Framework should report on the following;

- Identify services which can be developed locally in Remote and Rural settings and made sustainable in particular through education and training
- The future role of Health Care Practitioners in Remote and Rural settings
- How technology can be deployed to enhance services in remote and rural areas in identifying, assessing, diagnosing and treating patients and how it can provide training to support this.
- A model for an integrated, responsive patient Transport System that will enable effective delivery of Healthcare to Remote and Rural Areas.
- How to facilitate a patient centred approach for those patients who have to travel to distant sites for treatment

Milestones

1. Short-life working group identified by end July.
2. Steering Group to agree Commissioning Document.
3. Interim Report by end November (and report to Steering Group)
4. Final Report by end December

* Western Isles, Orkney, Shetland, Wick, Oban, Fort William

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Annex 2

The following sections list conditions which could be managed in a rural general hospital. What is described could be considered to be the 'top end' of the spectrum as it is unlikely that all Rural General Hospitals will deliver this level of care. A description of the skills required by the Medical workforce in Rural General Hospitals is also provided.

Emergency Care: life-threatening

Maternity	Caesarian Sections Instrumental delivery Neonatal resuscitation
Medical:	Myocardial infarction, severe cardiac arrhythmias Diabetic keto-acidosis Acute heart failure Pulmonary embolus Poisoning Respiratory failure/asthma
Paediatric:	Meningitis
Surgical:	Acute abdomen including perforation, gangrenous/ ischaemic small bowel Trauma – severe multiple trauma, ruptured spleen, penetrating thoracic and abdominal injuries Haemorrhage – traumatic, gastrointestinal or other

Immediate care and resuscitation including neonatal resuscitation

Emergency Care: non life-threatening

Maternity:	Interventional obstetrics including ventouse extractions
Medical:	Stroke Acute respiratory problems including pneumonia, pneumothorax Hepatitis Ulcerative colitis and Crohn's disease
Paediatrics:	
Psychiatry:	Acute mental illness - psychosis
Surgical:	Gastro-intestinal haemorrhage Acute abdomen Head injuries Trauma including threatened vascular compromise Abscess

Wherever possible local staff should be capable of managing the conditions above, with, whenever possible, consultation from the larger unit.

Planned care

Outpatients, day-case and in-patient services will be provided by a combination of locally based and visiting doctors, nurses and allied health professionals.

Maternity:

In 2003 the Highlands and Islands had higher general fertility rates than the Scottish Average, (Scotland 49.4 births per 1000 women of child bearing age, Shetland 61.4, Western Isles 57.3, Highland 54.1, Orkney 49.5) Sensitivities are such that locally relevant maternity services must be carefully designed. A potential model based on midwife run units supported by a locally based consultant obstetrician working normal hours, general surgeons with obstetric operative skills, general practitioners with special interests in obstetric care and a robust neonatal resuscitation service (midwife run, but paediatrician overseen) is being explored in Shetland and Western Isles. The aim should be to provide a level of intrapartum care between EGAMS categories Id and IIb.

Surgical:

Core general: including diagnostic laparoscopy, laparoscopic and open cholecystectomy, hernia and hydrocoele surgery, bowel resection and anastomosis, breast surgery for uncomplicated conditions requiring non reconstructive surgery, uncomplicated anorectal surgery, varicose veins, non-specialised paediatric surgery (herniotomy, circumcision and straightforward orchidopexy), excision of 'skin' lesions and skin grafting, upper gastrointestinal endoscopy, colonoscopy, cystoscopy, basic minor orthopaedic surgery (carpal tunnel syndrome, ganglion and bursa excision, trigger finger release, toe nail surgery and simple extensor tendon repairs), ovarian cystectomy

Specialist Care

Cancer Care in particular colorectal and breast including chemotherapy and colorectal surgery, Orthopaedics, Urology Gynaecology

Locally based surgeons will be specifically trained to manage common general surgical, urological and orthopaedic conditions. They will have generic operative skills that will permit them to manage conditions at low levels of activity. They will require gastrointestinal endoscopic, cystoscopic and arthroscopic skills for diagnosis and some therapeutic procedures.

Medical

Core general care: this will involve care of the conditions commonly admitted as emergencies as listed above. In hospital facilities to manage inflammatory bowel

disease, cardiac conditions (DC conversion), stroke patients and patients with

Specialisms including;

Diabetes, Cardiology, Gastroenterology/hepatology, Rheumatology, Renal Medicine
Endocrine, Care of the Elderly, Rehabilitation and disability medicine, Neurology and
Dermatology.

Locally based physicians will be generally trained but must be trained to a limited extent in one or two of the specialist areas. Particular attention must be paid to care of the elderly. At least one of the consultant physicians should have skills in either gastrointestinal endoscopy, cardiac investigation or diabetic care. Whether the locally based physician should have skills in paediatric care will be determined by local arrangements.

Intermediate care

Multi-disciplinary team case management (as happens now in cancer care) is an essential part of a rural general hospital's remit. Providing facilities for management of chronic disease close to a patient's home fundamentally changes their life and permits regular contact with friends and relatives.

Chronic disease management:

Renal dialysis, Stroke Unit, Diabetes Care, Rehabilitation, Dementia

Which patients should not be cared for in Rural General Hospitals?

Any patient whose optimum care would be better delivered in another centre should whenever possible be transferred. Care relates to the whole package and not just that which relates to an individual member of a team – thus if a surgeon believes he has the skills to do a particular operation he must ensure that the anaesthetists, the nursing staff, the junior doctors and the allied health professionals have the skills to care for the non-operative aspects of the patient's care.

Circumstances when patients should not be cared for in remote communities include those:

When patients may or do require intensive care – seriously ill medical or surgical patients e.g. ruptured aortic aneurysm, elective surgery in patients with severe concomitant disease

When patients have a condition which is uncommon and the skill is not available for safe management e.g. thyroid surgery, anastomotic rectal surgery

Where evidence exists that management is better in a specialised centre e.g. surgery for peripheral vascular disease, pancreatic, complex biliary and oesophageal surgery

Where resources are not available to manage the patient e.g. non-standard joint replacement surgery, complex pregnancies

When there is insufficient local staff to care for patients – seriously ill patients are labour intensive and can easily take up available staff making them not available for other sick patients.

The threshold for transfer of patients to larger units should be set at a sensible level and it is likely that this threshold will decrease in the future.

Circumstances exist when a patient by their own choice will opt for local care even though they recognise that better care may be available elsewhere. An example of this is the elderly person who facing the possibility that they may die in hospital would rather this occurred near to friends and relatives than in an unfamiliar environment away from loved ones. Local staff must be sensitive to such issues and clinical governance must recognise this can represent a high level of patient care.

The Rural General Hospital Specialist Physician, Surgeon and Anaesthetist will:

Have high level diagnostic skills (for which fully equipped and staffed diagnostic facilities must be available) and have undergone training, which permits recognition of conditions that cannot be accurately diagnosed locally and will require resources available in larger centres.

Be skilled in use of electronic means of communication – this will include electronic transfer of diagnostic information, videoconferencing and telemedicine.

Possess core skills in triage, resuscitation and stabilisation of patients of any age with any condition.

Be aware that professional isolation, working without middle grade support, an onerous on call workload and delivery of a holistic service are the norm in a rural general hospital.

Be able to work in a hospital that does not have local access to specialist medical services, does not have an intensive care unit and can, albeit for short periods, be isolated by adverse weather conditions from hospitals that may possess these amenities.

Be trained teachers and trainers fully conversant with modern educational systems and methods.

The Rural General Hospital Specialist Physicians will require:

Wide general skills in cardiology, respiratory medicine, gastroenterology (skills in diagnostic and therapeutic gastrointestinal endoscopy will be desirable), endocrinology, infectious disease and care of the elderly.

Training in the essentials of primary care general medicine, which incorporates an understanding of disease prevention, wellness, substance abuse, mental health, and effective treatment of common medical problems of the eyes, ears, skin, nervous system, and reproductive organs.

A less in depth knowledge of more specialised areas such as dermatology, rheumatology and rehabilitation, renal disease, neurology and oncology as these services will be provided by outreach services from larger centres.

Skills in acute paediatrics for some Rural General Hospital Specialist Physicians.

Rural General Hospital Specialist Surgeons will require:

Non-specialist diagnostic, management and operative skills in trauma (this will include emergency thoracotomy and possibly Burr holes) and elective and emergency upper GI, biliary, coloproctological, breast, urological and 'general' surgery (varicose veins, hernias etc.)

Non-operative skills for the management of patients with surgical diseases of the endocrine and arterial systems and for those patients whose operative procedure has been performed in a larger centre.

General (non-specialised) laparoscopic surgical skills.

Skills in diagnostic and therapeutic gastrointestinal endoscopy, diagnostic cystoscopy and manipulation of simple fractures and dislocations.

Skills for the management of common surgical problems of the eyes, ears, skin and reproductive organs.

Skills in acute obstetric surgery – mainly Caesarian section will be required by some Rural General Hospital Specialist Surgeons.

Rural General Hospital Anaesthetists will require:

General anaesthetic skills to anaesthetise the patients being operated on by the Rural General Hospital Specialist Surgeon.

To be able to undertake preoperative evaluation to decide whether a particular patient is fit to be anaesthetised in a Rural General Hospital.

Skills in managing the seriously ill patient with cardiovascular and respiratory support until he or she can be transferred to a larger hospital with an intensive care unit.

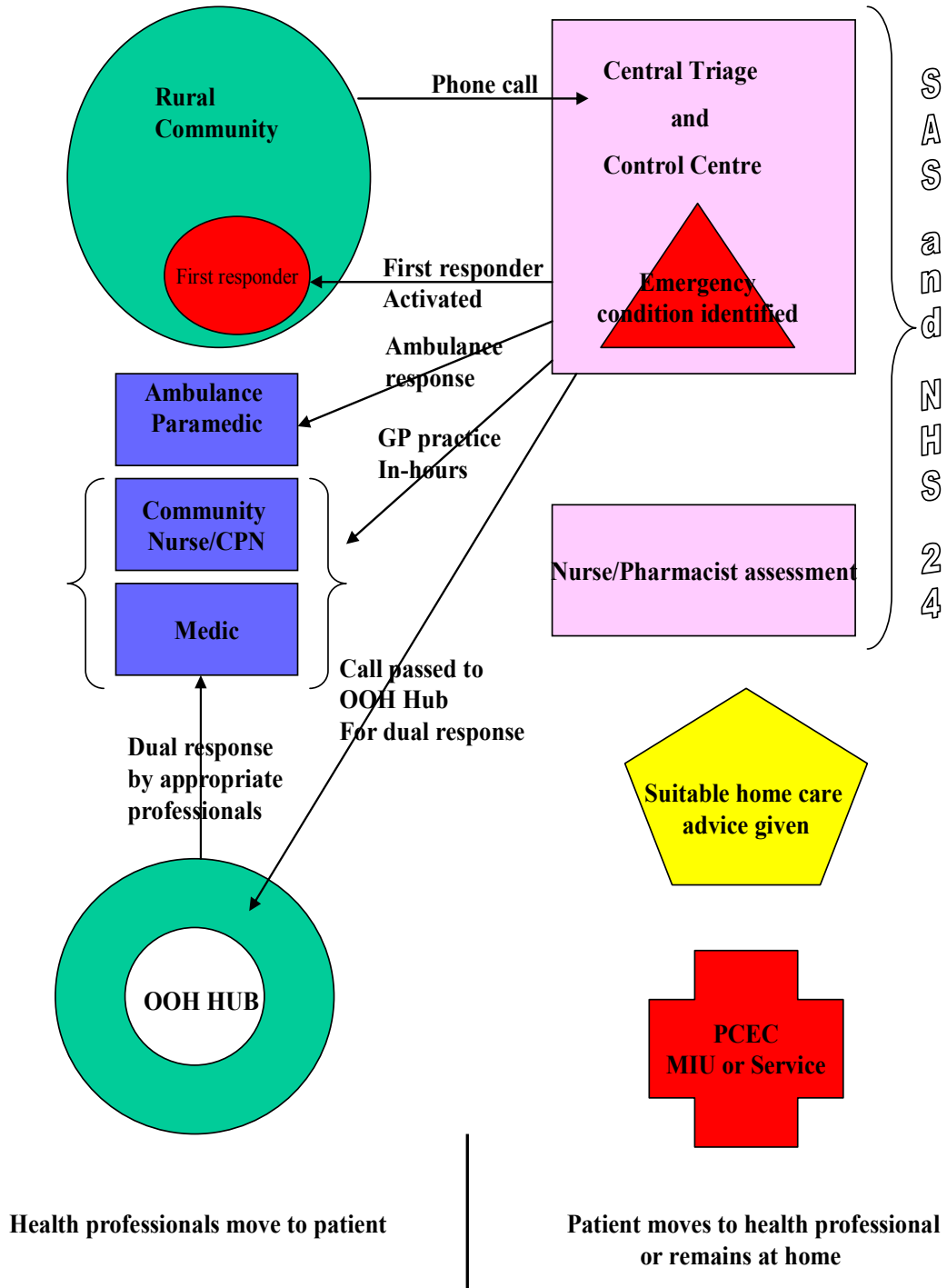
To be fully conversant with transportation by land or air of seriously ill patients.

To provide an acute pain service (including obstetric epidurals) and where appropriate a chronic pain service.

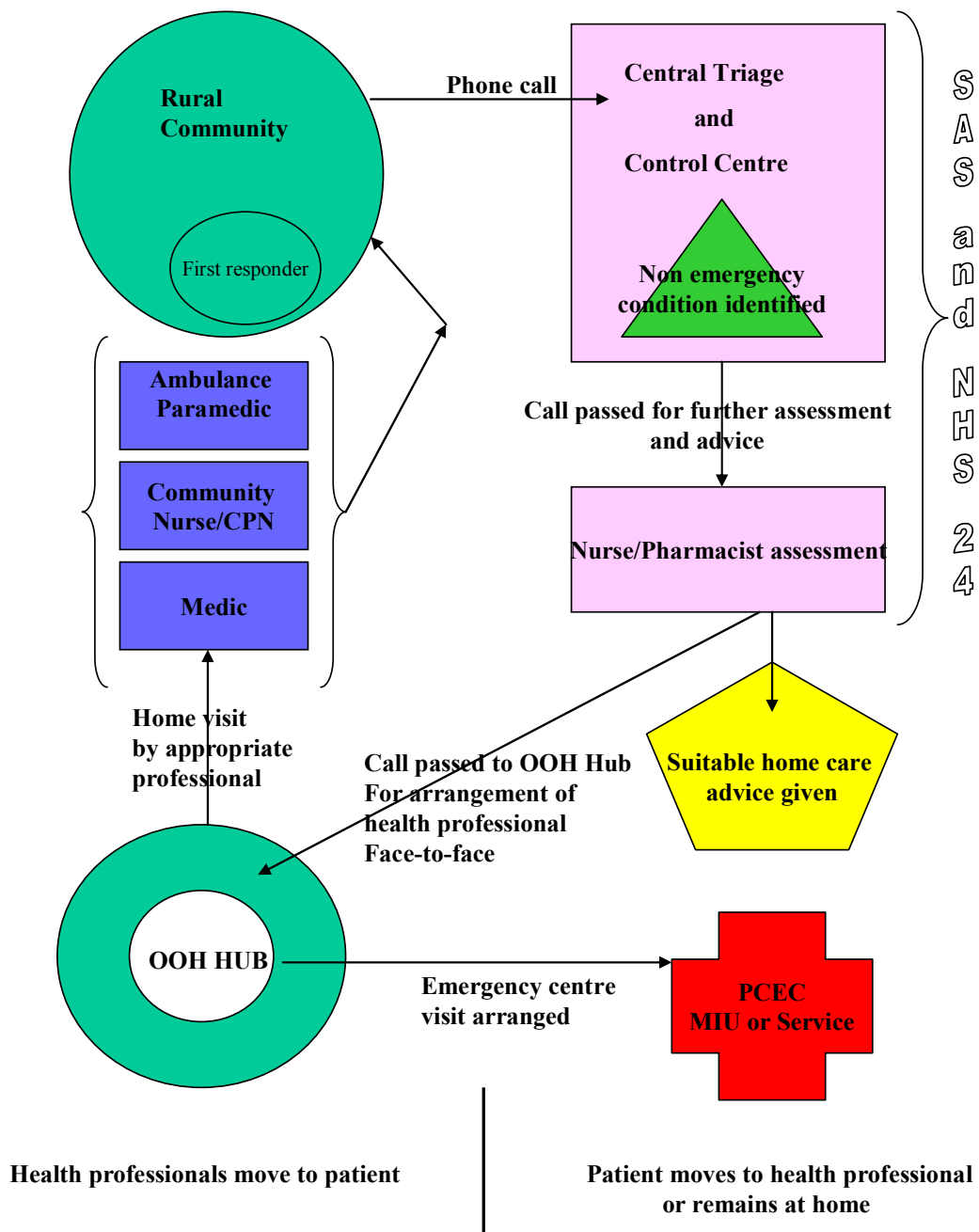
To have a major role in both organising and delivering a resuscitation service for all patients irrespective of age.

Annex 3

Remote and Rural Emergency response



Remote and Rural Non-emergency response



Examples of First Responders

Community First Responders ~ North & West Division



There are 11 Community First Responder schemes throughout the highlands & Western Isles, eight mainland and three island schemes, within the North & West Division. All these schemes are trained to basic level FPOS skills standard and are regularly updated and assessed by IHCD accredited trainers.

Fort William First Responders and the neighbouring Spean & Roy Bridge scheme have recently enhanced their skills by receiving Oro-pharyngeal and oxygen therapy training. The Fort William First Responders have 6 volunteers and operate with an equipped van fitted with an Ambulance Service radio and AVLS (automatic vehicle location system). The Spean & Roy Bridge scheme have 15 volunteers and have now been in operation for a year, and in that time have attended 33 emergency calls in and around their village Community.

The First Responders within the North & West Division had received a Scottish Health Service award last October, which was presented by Andy Kerr, Health Minister and his deputy Health Minister Rhona Rankin (above) for their achievement within their Communities, and recording a video production for “innovation and change” for the Scottish Executive, but not forgetting the successful outcome with resuscitating a cardiac arrest patient using a defibrillator shock box at Ness.

Leuchars Community First Responders



The Leuchars First Response Team has been running for almost 2 years. The Team consists of 34 members although there are some on other postings at the moment reducing the numbers, 13 are emergency driver trained. We have 2 Renault Scenic First Response Vehicles which are manned every evening and weekend. We have

attended over 600 '999' calls for the Scottish Ambulance Service. 16 of which have been cardiac arrests, with 2 successful saves. The rest of the shouts have included RTA's, overdoses, assaults, chest pains and many more. The training is facilitated by the Scottish Ambulance Service and is to the recognised IHCD FPOS Training syllabus.

The Scottish Ambulance Service is now launching their community first responder scheme because of the success of the Leuchars First Response Team. We are soon hoping to run another driver training course and a medic training course later in the year.

North Arran First Responder Association (NAFRA)

Following the launch of the Scottish Ambulance Service initiative at the end of March 2003, to introduce Community First Responder Schemes in areas where it would be difficult for an Emergency Ambulance to arrive within 8 minutes to a life threatening 999 call (category "A"). A number of rural locations applied to join this initiative. One of the first villages to apply was Lochranza on the Isle of Arran, which is approximately 30 minutes from the island's ambulance based at Lamlash.

The Ambulance Team Leader, based on Arran, took responsibility to help this group to set up and train to the required standard of First Person on Scene (Basic), which is a nationally recognised qualification set by EDXCELL.

The Lochranza scheme is made up of volunteers who undertook the 16 hours of training and assessments. They are from the following backgrounds:- 3 Qualified Nurses, 3 Volunteer Fire Fighters, 1 Coast Guard member, 1 Retired Policeman, and 3 other members of the Lochranza and Pirnmill community. The training they undertook covered Resuscitation, use of an Automated External Defibrillator, care of the unconscious patient, dealing with Diabetics, Asthmatics and epileptics until an Ambulance arrives. An Ambulance is always dispatched first and then the First Responders. Their role is to deal with a life threatening emergency until an Ambulance can arrive, not to replace it. The group had their first AGM in May 2004 and named their scheme NAFRA. They have provided 24/7 cover since that date, and on average attend 1 category "A" call per month in support of their local community of Lochranza and Pirnmill and the Ambulance Service. They all attend refresher training once every 6 months to maintain their skills. This is carried out by an Ambulance Service Instructor. They are a very committed group who have raised all the funding to provide their equipment and mobile phones. This group is a vital part of the Island's Emergency Response.

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