NHS SCOTLAND

REMOTE AND RURAL STEERING GROUP

DELIVERING FOR REMOTE AND RURAL HEALTHCARE

THE FINAL REPORT OF THE REMOTE AND RURAL WORKSTREAM

30th November 2007

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SCOTTISH GOVERNMENT

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ACKNOWLEDGEMENTS

The project team would like to thank everyone across all remote and rural healthcare areas (and there were many) and those from other parts of the NHS in Scotland who have contributed their time, thoughts and energies into developing the emerging model for healthcare delivery for Remote and Rural Scotland.

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There are a number of detailed annexes to this Report which are published on the web at www.tayside.scot.nhs.uk/nospg **and follow link to Remote and Rural.**

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This full Report and all of the Technical Annexes can be viewed at Remote and Rural Portal of the e-Library at www.elib.scot.nhs.uk

The full Report of the Remote and Rural Training Pathways Group, which is a partner Report to this Report, is also available within e-Library.

Foreword

This Report presents to the Scottish Government our vision for the development of a sustainable health system for remote and rural Scotland. It provides a framework for rural health services to continue to develop and enhance their roles in the continuum of healthcare across Scotland. The framework is intended to help services orientate themselves towards the changing needs of communities and make best use of available resources to deliver further improvements in the health of people living in remote and rural areas.

Access to healthcare should be as local as possible, for the whole population of Scotland, no matter where they live. The remote and rural steering group were tasked to develop a policy for sustainable remote and rural healthcare services and this report summarises their response to the agreed objectives for the first phase of the project. These were intended to:

1. Deliver a strategy for sustainable healthcare in remote and rural Scotland, through a number of sub-groups, by acting as Programme Board for Projects, ensuring linkages between relevant projects and identifying synergies, cross cutting issues and gaps to be addressed;
2. Define the role and function of a Rural General Hospital;
3. Develop a framework of generic principles of service delivery for primary care in remote settings;
4. Develop a rural education strategy, in support of the national agenda, including development of a proposal to establish a virtual School of rural healthcare;
5. Review the role of the Helicopter Emergency Medical Retrieval Services to determine the appropriateness of this service in supporting unscheduled care in remote and rural areas;
6. Develop a workforce planning arrangements to support the remote and rural agenda.

This framework has been developed through engagement and consultation with those who deliver healthcare in remote and rural areas, with other agencies and some public representatives. Common to all of these groups is their passion for the provision of first class locally delivered services. The challenge has been to identify common elements within the diverse aspirations.

Roger Gibbins
Chair
Remote and Rural Steering Group

Remote and Rural Healthcare - The Vision

This project was established to develop a framework for sustainable healthcare within remote and rural Scotland. The changing nature of care and the increasing complexity of needs are just some of the challenges that must be met to ensure accessible healthcare in remote and rural Scotland. This Report recognises the interdependence of individual services and focuses on the integration between different aspects across what is described as the 'continuum of care'. This is defined as self care and preventative care within the local community through the different levels of supported care up to that which requires the resources provided by a tertiary centre. Figure 1 below summarises the integrated network model that is proposed.

Figure 1: Model of remote and Rural Healthcare
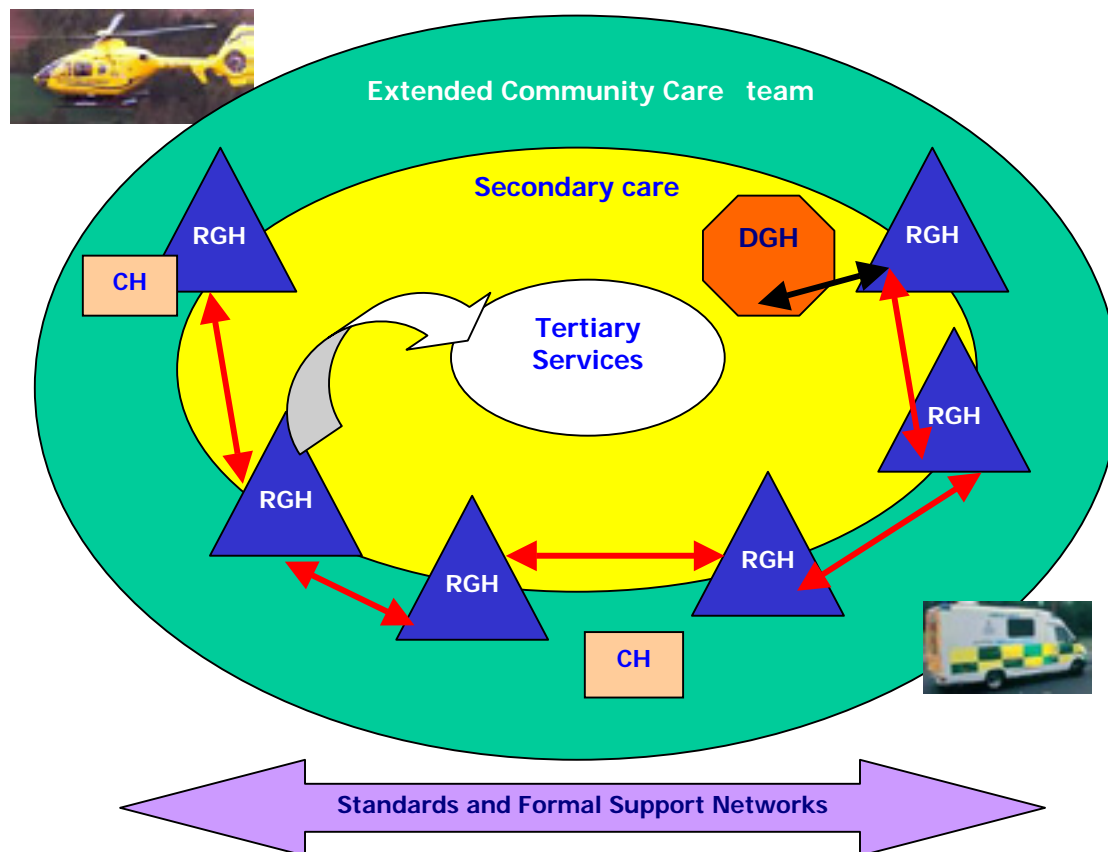
This model describes how much of clinical care can be provided within local communities, with only a minority of cases requiring further referral outwith that community.

Within the remote and rural communities of Scotland, there are a limited number of health and social care professionals, whose skills and expertise need to be shared if communities are to have local access to the widest possible spectrum of care. The development of Extended

Community Care Teams (ECCT) will ensure that a robust system of locally available services is both available and sustainable.

All remote and rural areas will also have access to intermediate care services, some within a Community Hospital (CH) and others delivered through augmented care within a patient's home. Whilst some communities have access to a Community Hospital, others may have a Rural General Hospital (RGH), which may fulfil the Community Hospital function or these may be separate.

Services must be well planned and co-ordinated with a greater focus on more collective and collaborative responses within and across communities. This will include the formalisation of networks to ensure that larger centres are obligated to support and sustain healthcare services in remote and rural areas.

Remote and Rural Staffing model

Healthcare is currently delivered by a range of professionals, some working in isolation and others working in teams. Future models for healthcare delivery are based on integrated teams, demonstrating a range of competencies, defined by patient need. These competencies can overlap, between traditional professional roles, to the benefit of holistic care and utilises resources to better effect. Most of the team will be based within the remote and rural community, in primary or community care, within the hospital service or in combination, some team members will be based in the larger centre, with responsibility for supporting local delivery and providing a visiting service, where appropriate.

Staffing Model

The following models shown in Figures 2 and 3, describe a stratified workforce, highlighting those roles and competencies that should be within the remote and rural community team and those in other agencies or levels of healthcare. The variation in local services will determine the level of competence required within a particular area.

Figure 2: Remote & Rural Staffing Model

Level 4

Specialist Consultants
Consultant Nurses
Consultant AHPs
General Nurses
AHPs

Level 3

Some Specialist Consultants
Mostly Consultants with Special Interest
Nurses & AHPs – some with special Interest
BMS

Physician, Anaesthetist, Surgeon,
Specialists in R&R/GPwiSI/Joint roles
Generalist R&R Nurses and those with
Special Interest, Specialist Nurses,
Advanced Nurse Practitioner,
Generalist AHPs – some Specialists
and others with Special Interest
Extended practitioner Radiographers
Extended role BMS
Intermediate Care – Social Workers,
Support Workers and Community
Nurses

Level 2

GPs
Rural-relevant GPwiSI
Community Health Nurses , CPNs, Midwives &
AHPs, Care Managers, Home Care Support
Workers, Paramedics, 1st responders and
Voluntary Sector

Level 1

Self care
Nursing &
AHP support

3°

DGH

RGH

Visiting/Networking

Visiting/Networking

Regional Posts:

Clinical Leaders –
speciality specific
Consultant Nurses
Consultant AHP

Community Hospital

Extended Community
Care team

Specialist
Nurses
e.g. Macmillan
Midwives
CPNs

Figure 3

Clinical/Risk assessment
Resuscitation
Stabilisation
Diagnosis
Clinical management
- Surgical intervention
- Medication/fluids
- Decision to transfer
- Intra-partum care
Care planning, including pre & postnatal care
Recognition of deterioration
Promotion of Independence
Discharge Planning
Follow-up Assessment
Child Protection

e-health skills

Clinical/Risk assessment
Primary Diagnosis
Anticipatory care & crisis prevention
Chronic disease management
Clinical Management
Care Planning
Recognition of deterioration
Referral management
Follow-up assessment
Counselling
Family Carer support
Child protection
Inter agency collaboration

Supported self care
Health promotion
Health education
Counselling
Family Carer support
Inter agency collaboration

Level 4

Level 3

Level 2

Level 1

Self care
Nursing &
AHP support

3°

DGH

RGH

Community Hospital
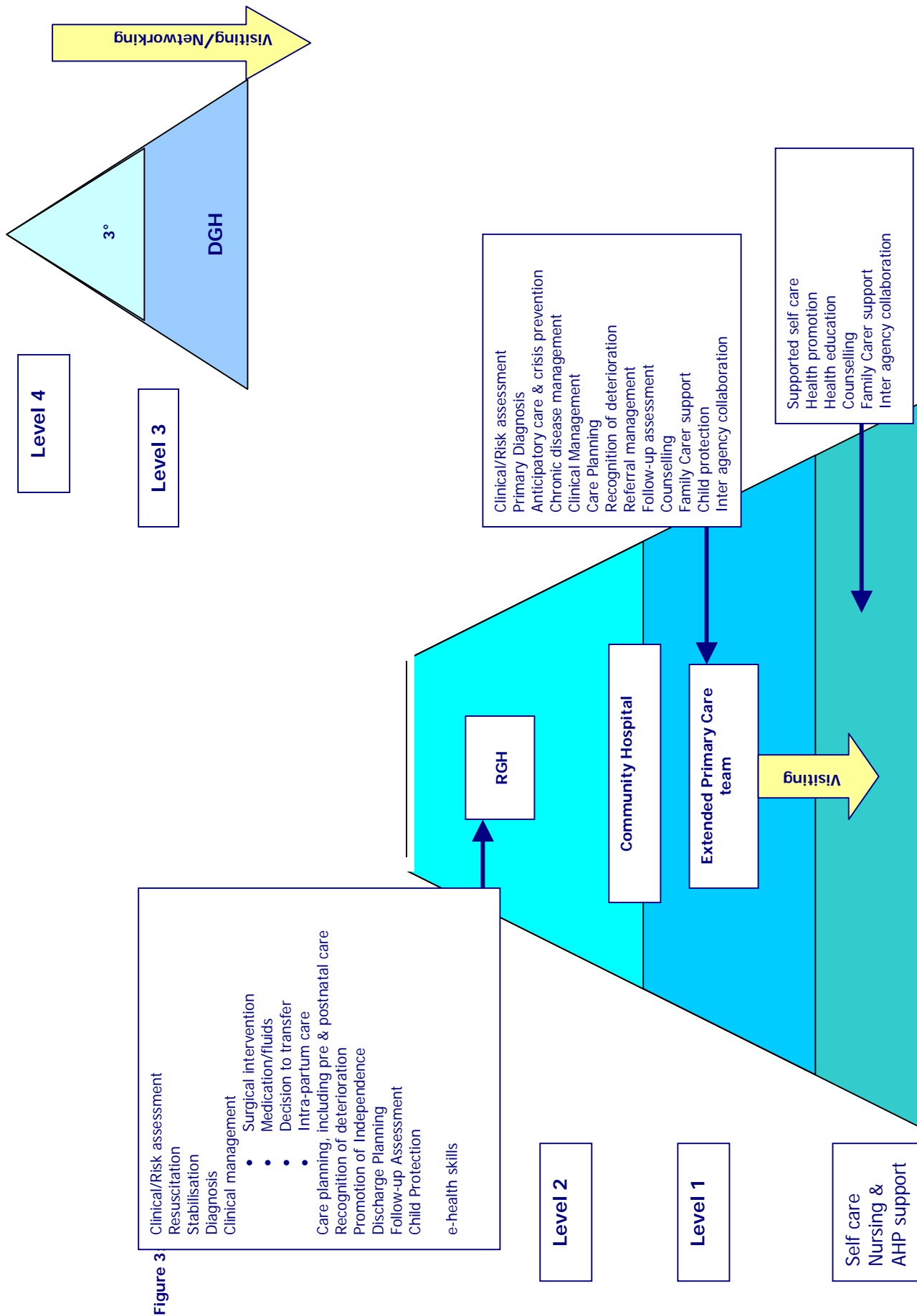
Extended Primary Care team

Visiting

Visiting/Networking

In order to sustain the competent workforce, appropriate training and education is required. This workforce must be supported in a variety of ways including formal networks and mentoring arrangements with larger centres, up to date equipment, modern Information Technology (IT) and technological links and robust transport systems.

These are discussed in greater detail in the relevant chapters.

Commitment

This model of care for remote and rural communities, incorporating formal working links between remote and rural areas and those in larger centres, should be introduced.

Improving the Patient Experience of Remote Primary Care

Definition: What is Remote Primary Care?

The Centre for Rural Health defined remote primary care through the development of a Clinical Peripherality Index that takes into account a number of factors including, population density, practice size and time to reach secondary care[2]. This Clinical Peripherality map (figure 4 below) demonstrates the scale of remote and rural practice across all areas of Scotland.
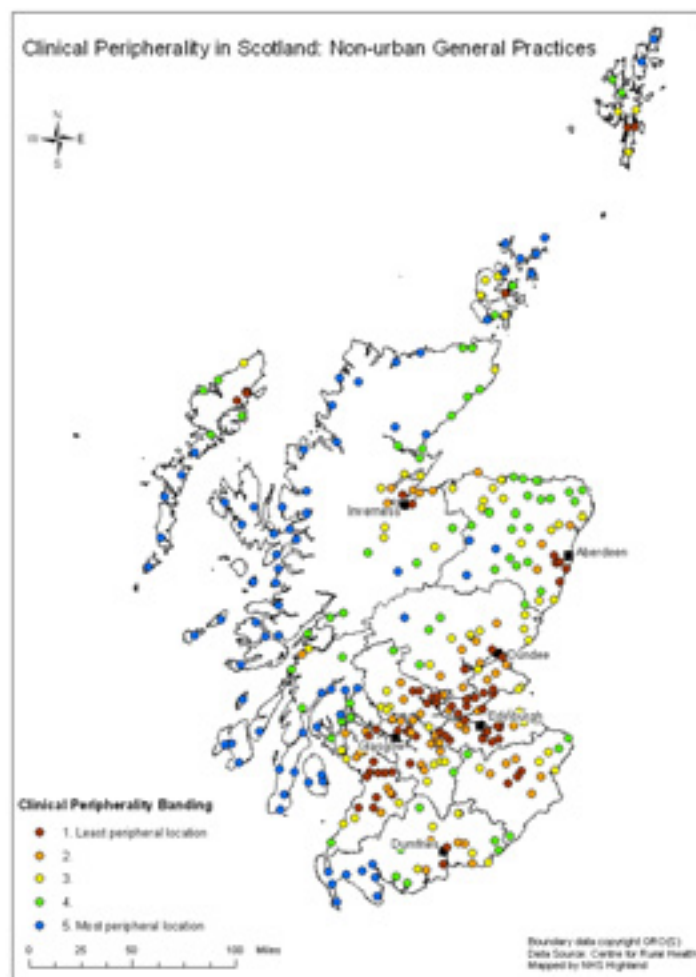

Figure 4: Clinical Peripherality Map of Scotland

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[2] (2005) "Clinical Peripherality Index" August 2004, Centre for Rural Health

The map, whilst not defining boundaries to remote Scotland, provides a visual image of the extent to which most NHS boards have remote and rural areas and highlights (in blue) those deemed to be most remote.

Remote Primary Care must sit within the context of an integrated Community Health Partnership (CHP) model, incorporating the Community Hospital (CH), where there is one, and/or what is currently known as the Rural General Hospital (RGH).

Is there anything different about Remote and Rural areas?

The collective term 'Remote and Rural' is used, but this masks large variations between areas, especially in terms of mainland and island. This report proposes an overarching framework that is relevant and fits all remote and rural (and non-urban) areas but is sufficiently flexible to permit application to particular local circumstances.

Rural patients' experience of care differs from that of urban patients in that they often have to travel large distances to receive care[3]. Although the pattern of disease is similar in urban and rural areas, differences do exist:

- Higher suicide rates[4];
- Higher incidence of alcohol related disease;
- There are a higher number of accidents in rural areas: on roads, through climbing, farming, diving and fishing;
- Palliative Care workload is proportionally higher than might be seen in urban areas, as patients from remote areas often prefer to or are enabled to die at home, rather than in a distant centre[5];
- Seasonal fluctuation in population

These scenarios can present challenges in response times for traditional emergency services and emphasise the requirement for immediate care skills for remote practitioners.

The demographic picture of Scotland over the next 20-30 years is changing[6]. It is projected that there will be increasing numbers of older people and diminishing numbers of working age adults. This is significant not only for the health patterns we can expect to see in Scotland, but for the

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[3] (2000) " Treating Patients with Colorectal Cancer in rural and urban areas: a qualitative study of the patients' perspective" 2000, Family Practice
[4] Paykel ES et al (2000) "Urban-rural Mental Health Differences in Great Britain: Findings from the National Morbidity Survey" Psychological Medicine 30; 2 269-280.
[5] (2003) "Organisation of Cancer Services in Wigtownshire, South West Scotland: Threat or Opportunity", 2003 RARARI Project 124, Baird, Dr AG, Donnelly, DR CM, Wemyss, HD

development of the future health care workforce and the available pool of unpaid carers to support individuals at home. This demographic picture will have significant impact in rural areas where there are smaller numbers of workforce.

Recruitment and retention within remote and rural healthcare is more challenging.[7] Changes in demography have a proportionately greater impact in rural areas where the workforce is smaller. Succession planning is a major challenge as the workforce within rural areas is aging.[8] Maintenance of skills also poses challenges, whilst there is a requirement for a wide breadth of expertise; but skills will decay, where practice exposure is low[9].

Building Blocks of the Extended Community Care Model

Community Resilience

The term 'Community resilience' has evolved, and is key to sustaining local healthcare in remote communities. It is defined as a collective and collaborative response within communities to promote independence. Communities are facilitated to look after themselves, utilising all resources available to them, encouraging self care and using volunteers and informal carers within the local community. The Scottish Ambulance Service (SAS) 1st Responder Scheme is an example of communities supporting themselves[10]. NHS 24 has a key role to play in the promotion of community resilience through working in partnership with NHS Boards, Community Care Teams and patients and carers. This role includes the utilisation of NHS 24's services directly to a patient's own home, the provision of important health information and their role in promoting self care and supporting long term condition management through their telephony and web based structures.

Strong leadership and management will be required to facilitate the building of community resilience.

Self Care

Extended Community Care Teams (ECCTs) must promote, encourage and support individuals to self-manage their own care (where appropriate and with support), working together in partnership with voluntary agencies such as self help support groups and informal carers to

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[6] (2005) "Delivering for Health" October 2005, Scottish Executive Health Department
[7] (2005) "The National Workload Planning Framework" 2005 Scottish Executive Health Department
[8] (2005) "Workforce Challenges" 2005 Data Presented at Stakeholder Event by the Northern Territories Group
[9] (2006) "Portfolio of Evidence for the Virtual School of Rural Health" 2006 Swann, G obo NES
[10] (2002) "Priority Based Dispatch: Full Business Case" Scottish Ambulance Service Publication

support the development of self care[11].   An example is the use of the fit elderly 'good neighbouring schemes' which check on the frail and vulnerable within the community. Education of the public in self care, should begin at an early age and focus upon health promotion and patient empowerment through information provision.

Anticipatory Care

Evidence has shown that the most frequent reasons for admission of patients to community hospitals are: rehabilitation, as a result of a fall, or chronic obstructive airways disease[12]. An analysis undertaken by the NHS Information and Statistics Division (ISD) shows a rise in multiple admissions for over 65 year olds because of a failure of the out of hours care system to provide preventative and anticipatory care for older people[13]. The ECCT would place more emphasis on prevention of disease crises, with systems that anticipate problems, as opposed to reacting to those crises, when they arise[14]. This will involve the Community Nurses and the Practice Nurse (crucial to the monitoring of long-term conditions) and the wider team. Technicians from the Scottish Ambulance Service can undertake planned home visits to patients who are at a high risk of emergency admission. These practitioners will carry out risk assessments for issues such as falls, ensuring that patients are managing to feed themselves and take their medication, and liaise with the most appropriate professional where they judge that further action is required. Increased use of e-health solutions to access information and to monitor patients will be required.

Long Term Condition Management

It is suggested, that 'of the eleven leading causes of hospital bed use in the UK, eight are due to conditions which if we strengthen community care could lead to a reduction in admissions'[15]. Better management of long-term conditions in the community would have beneficial outcomes for individuals and carers and reduce hospital admissions. This is a significant issue in particular for older people, many of whom, lose functional independence following admission to hospital.

The range of long term condition management activity will be determined by the skills and competencies within the multi-disciplinary team and the resources available for appropriate patient care. This will include routine monitoring of common conditions that do not require specialist input and adjustment of clinical management with the aim of avoiding clinical crisis. For

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[11] (2006) "The Review of Nursing in the Community in Scotland" November 2006 Scottish Executive Health Department
[12] (2005) "A Snapshot Audit of Admissions to Community Hospitals in Argyll and Bute" 2005 Champion, Tim (Unpublished)
[13] (2006) "The system of unscheduled care in Scotland: Variation in the level of admission by GP Practice" Delivering for Health Information Programme Dec 2006 ISD
[14] (2003) "Increasing emergency admissions among older people in Scotland: a whole system account" 2003 3:69 Kendrick, M and Conway, M

example, paramedics could fulfil this role, reporting any adverse findings to the local General Practitioner (GP) to discuss the most appropriate clinical management path. Diseases which will require such monitoring are patients with coronary heart disease, diabetes, chronic respiratory problems and mental health illness.

Planned Care

The GP will continue to be the principal 'gatekeeper' to secondary care, although in many areas it may be appropriate for care to be provided by other practitioners. ECCTs must undertake the majority of care locally, where it is safe and appropriate to do so. The use of new technologies should be increased where this will maximise the amount of care that can be provided locally. An example of this would be NHS 24's initiative to develop cognitive behavioural therapy, currently being piloted with the Western Isles and Shetland.

Where there is a requirement for referral to secondary or tertiary care, this should be as part of a robust care pathway. ECCTs must aim to reduce multiple visits to secondary care wherever possible, and to return the patient to care within the community, as soon as is practicable, dependant upon the disease condition and the resources available locally. An example would be local follow up of those patients that would traditionally have been reviewed by the Consultant in an outpatient appointment at the District General Hospital.

Emergency Care

Facilities for immediate care of all patients presenting with acute illness or an emergency should be available in the community. Assessment as to whether further management will take place in the community or whether to transfer a patient to another hospital or appropriate facility, which may include a care home, should be made by the senior practitioner involved in the patient's care. Crucial to emergency care is the ability to transport the patient in a timely manner where it has been deemed clinically appropriate to do so. This aspect is covered in the Transport chapter of this report.

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[15] (2004) "Better Health in Old Age" November 2004, Department of Health

Out of Hours

Out of Hours Care must be provided as locally as is possible to remote and rural patients by the Extended Community Care Team (ECCT), working in partnership with NHS 24. NHS 24's advanced Knowledge Management System (KMS), which makes the provision of advice to patients in remote and rural areas much more effective, is a welcome development.

The responsibility for the out of hours service lies with NHS Boards who should ensure that sufficient capacity and capability is built within the ECCT to deliver a high quality service. The benefits gained from the new GMS contract in terms of work/life balance for GPs, however, must be maintained. This will require changes in practice in a large number of remote areas, particularly islands where the arrangements for out of hours cover remains with single-handed or small GP practices. A team approach to out of hours involving different members of the team would ensure that the burden of call could be shared. There are examples of this under trial in remote and rural areas e.g. SAS first responder pilots[16], and Unscheduled Care Nurse Practitioners in Highland. Focus Groups undertaken as part of the remote and rural project consistently reported difficulty in managing patients with mental health crisis (particularly out of hours); so it is crucial that mental health services are extended and that practitioners in remote areas have the skills necessary to manage mental health crisis 24/7.

A diagrammatic representation of the model for remote primary care is detailed in Figure 5.
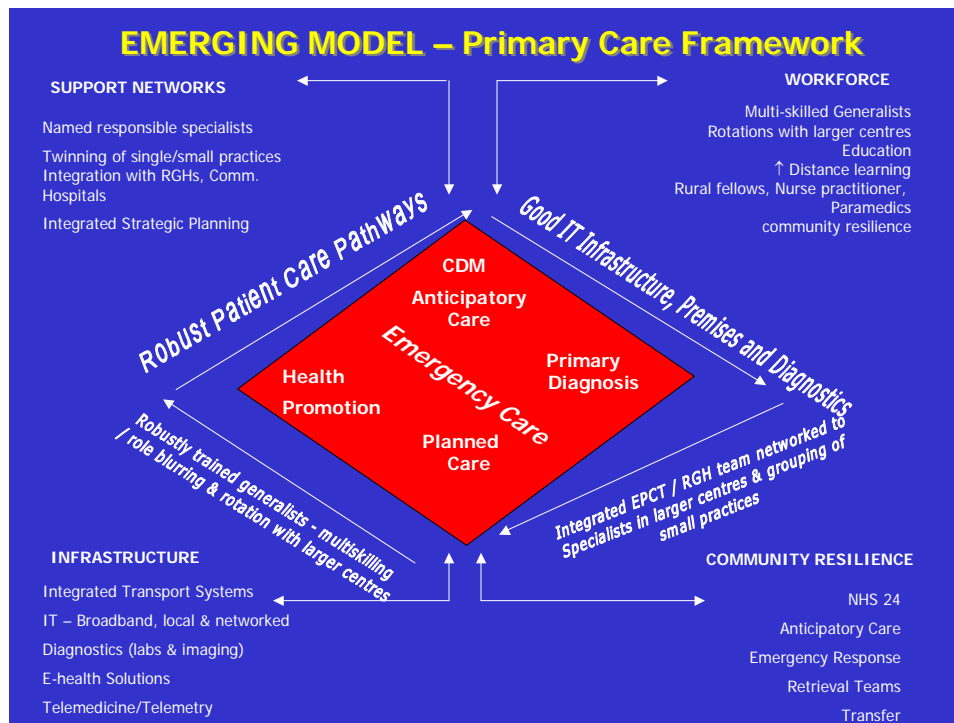

Figure 5: Remote Primary Care Model

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[16] (2005) 'Pathfinder Project' 2005, Scottish Ambulance Service Publication

Primary care is the centre of healthcare within a community, supporting or providing the majority of care locally, including Health Promotion, Self Care, Anticipatory Care, Chronic Disease Management, Primary Diagnosis, Planned Care and Emergency Care.   The community is encouraged to support itself through use of all resources available locally.   Where professional care is required, this care should ideally be provided from purpose built premises, and must be supported by good infrastructure and diagnostics, integrated with the Community Hospital (CH) and/or Rural General Hospital (RGH) where there is one. Where there is no such facility locally the Practitioner should have access to good local diagnostics and an intermediate care service to prevent unnecessary admission to hospital[17].

Intermediate care is defined as short stay assessment, management of exacerbation of long-term conditions, step-down from secondary care and palliative care.   Intermediate care may be provided within a community hospital, or a nursing home or a social care facility and a team who can rapidly respond to patients with intermediate care needs and provide augmented care at home.   This occurs in Lochcarron where the GPs use the Howard Doris Centre for intermediate care and in North West Sutherland, where intermediate care is provided in the patient's home.

In order to facilitate benchmarking, remote primary care should have common methods of data collection and data set.

Commitments

Patients should receive the same standards of care for common procedures irrespective of where they live.

The system of care within remote and rural communities should support self-care, anticipate health needs to avoid crises in chronic diseases and have the capability to respond to emergency situations. CHPs should ensure that:

- Teams are integrated and co-located including health and other relevant organisations;

- ECCTs support individuals to self-manage their own care;

- Priority is given to anticipatory care and the prevention of disease escalation;
- Action plans are developed for implementing long-term condition management;
- There is local access to an emergency care service and that there is collaboration with the SAS to develop robust community emergency response systems.

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[17] (2006) "The Road Less Travelled: providing home care in rural communities" Caring 2006 25(11), Brown, D

The system of care should build community resilience to ensure that local people can be cared for as close to home as possible.

Remote primary care should have common methods of data collection and data set.

Forward Issues

Explore the use of the wider healthcare team to develop resilience within the community, including the use of NHS 24 skills and technology and a pilot to test the role which Ambulance technicians and paramedics can play in anticipatory care and chronic disease management.

The Remote Community Hospital

The Scottish Government Health Department (SGHD) has identified Community Hospitals[18] as a key resource for the NHS in supporting the changing needs of local communities. It has also recognised that Community Hospitals currently perform a wide range of different roles and has proposed how, through redesign, might become more aligned. The role of the Community Hospital is particularly important in remote and rural communities, where these exist, but given the separate work to implement the Community Hospitals Strategy, we have confined ourselves to a brief outline of the services that a remote community should expect from its community hospital.

Services provided in remote community hospitals will vary according to local population density and health need, the physical facility available and the skills set of the workforce. It is important that, whatever model exists, that the hospital service is fully integrated across the spectrum of care. However, where the community hospital is the Community Resource Hub for the community, the following are the core services which should be provided:

- Hub for out of hours unscheduled care integrated with practitioner-led minor injury/minor illness units;
- First line resuscitation, triage, transfer or admission as appropriate to the risk assessment of the patient's condition and proximity to secondary care;
- Diagnostic Services;
- Outpatient clinics by visiting specialists;
- Role in pre-operative assessment;
- Intermediate care beds which are accessible by all practitioners (i.e. some nurse-led);
- Midwifery service;
- Palliative Care;
- Designated Place of Safety for Mental Health Crisis.

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[18] (2006) "Developing community Hospitals: a strategy for Scotland" Dec 2006 SEHD

Some community hospitals may also provide planned day case surgery. Evidence[19] suggests that if there is investment in local diagnostics this will allow more patients to be managed within their local communities.

It is evident that a sizeable Community, which is distant from either an RGH or a DGH, requires access to comprehensive, high quality intermediate healthcare, provided locally and therefore the level of service required within the Community Hospital (or one of the Community Hospitals) needs to be augmented to that extent. This facility should provide a first line response in an emergency, including assessment, management, admission, where appropriate; or stabilisation, prior to transfer. Current examples include Campbeltown, The Mid Argyll, Dunoon, Broadford and the New Galloway Hospital in Stranraer. The level of emergency department activity[20] is relatively similar to that seen within the RGH, although these hospitals do not provide an emergency surgery service, with those patients being transferred to another centre.

Commitments

CHPs should review their Community Hospitals to determine which, if any, should be enhanced and develop plans to implement this model.

Remote Community Hospitals, acting as Community Resource hubs, should provide an agreed range of services, including enhanced diagnostics. CHPs should be responsible for reviewing the services provided within their Community Hospital and that these include:

- Acting as a resource hub to the community, integrating and co-locating services provided by health and other related organisations;

- Provision of a first line emergency service and a minor illness/injury service including acting as the Place of Safety for mental health crisis;

- Provision of a range of diagnostic services, as described later;

- Undertaking a role in pre-operative assessment;

- Provision of a range of outpatient visiting services appropriate to the health needs of the local population;

- The provision of an intermediate care service that is accessible by all practitioners;

- The provision of a palliative care service.

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[19] [19] (2007) "Shifting the Balance of Care" Tierney F and Grant F, Unpublished Audit by Remote and Rural Project
[20] Details of this activity are contained within the Technical Annex of this document.

What are the Differences between the current model and this emerging model?

The table below provides a summary of current and emergent models for remote primary care.

Current Model of Care	Future Model of Care
• Self care infrequent • Reactive care • Variation in care pathways • Multiple visits to secondary care	• Self care encouraged • Anticipatory care • Robust negotiated care pathways • Shifting the balance of care to locally based care

Four key pillars support this model of care: Workforce, including Education, Networks, Infrastructure and Community Resilience. Professionals within this model must be robustly trained generalists, with educational packages specifically designed for Remote and Rural Practitioners, have good supporting networks from larger centres, and, be supported by technology, transport and retrieval systems.

Sustainable Secondary Care

Patients should expect to be able to access core secondary care services as close to home as possible and only travel for those more specialised services that cannot be provided locally. As part of the development of the model for the Rural General Hospital (RGH) the North of Scotland Public Health Network undertook a Needs Assessment. This comprised a rapid appraisal of the current use of hospital services by the catchment populations of rural general hospitals to determine the relevance of the emerging model of an RGH[21]. An additional analysis of the same data was used to produce surgical procedure profiles of each hospital. This work was conducted alongside an ongoing needs assessment in NHS Orkney. A review of the literature was conducted to seek information and evidence to inform work. The full RGH Needs Assessment Report is available as Annex 1 to this report. The main findings of the needs assessment were as follows.

RGH Needs Assessment

The literature review sought to answer the following questions:

- What is the evidence-base for cost-effective delivery of healthcare services in rural general hospital?
- How can quality and safety be assured in RGHs?
- What are the sustainability issues and how can they be addressed for RGHs?

Material was systematically retrieved from a wide range of both electronic databases and from the grey literature including specialist web sites. Analysis was by a qualitative, narrative method that consisted of a 3-stage process of identification, collation, thematic coding and critical analysis. The level of evidence was graded using the system adopted by SIGN[22].

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[21] (2007) "Rural General Hospital Needs Assessment" 2007 March, North of Scotland Public Health Network (Unpublished)
[22] Evidence is graded by SIGN on the basis of the quality of the evidence presented.

Main findings

Analysis identified six main themes that cut across service delivery areas in a remote and rural hospital: models of care delivery, quality of care, recruitment and retention, diagnostics, telehealth and sustainability. The main service areas that were commonly reported on were cancer care, chronic disease and care of the elderly, rural paediatrics, surgery, maternity services and mental health.

Implications

Review of the literature indicates that there could be diversity between RGHs – this arguably demonstrates they are meeting local needs appropriately. The concept of having a core of services with a variable range of additional services seems logical on that basis. Although the majority of findings were derived from level 3 evidence[23], the following five themes emerged:

- While there is great potential for surgical work, the decision that RGHs will not provide intensive care, limits appropriately, what can be done in them. (Level N/A)

- Intrapartum care should be provided only for low risk women with no identified risk markers at the time of birth and who have normal weight babies. (Level 2-)

- RGHs should have a defined level of diagnostic capability. (Level 3)

- Better outcomes for many of the cancers are associated with specialised care and if cancer care is to be delivered locally, it should involve shared care with outreach clinics and deliver the same outcomes. (Level 2+)

- Recruitment should take account of both nature and nurture factors i.e. rural backgrounds not necessarily Scottish-based and involvement in training programmes designed to promote rural healthcare. Although multiple barriers to retention exist, access to flexible continuous medical education including maintenance of advanced procedural skills is an important requirement. (Levels 2++ to 3)

RGH Rapid Appraisal

Rationale

Early work to develop the model for the RGH was described within the context of non-standardised hospital-based activity. This did not allow for consideration of the degree to which local populations health needs are currently being met. However, hospital activity can be analysed to give standardised rates, which allows for structure as well as size differences in

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[23] 2++ High quality systematic reviews of case control/cohort studies or high quality case or cohort studies with very low risk of confounding, bias or chance; 2+ Well conducted case control or cohort studies with low risk of confounding, bias

populations. On this basis, total hospital utilisation by catchment populations around RGHs can be compared with the national average without such bias (rural populations tend to be more elderly). In addition, the degree to which the overall hospital utilisation rates of local populations are being met by the uptake of the local RGH services can be assessed.

The main findings of the assessment are based on 3 years of hospital data SMR01 (2002/03-2005/06 inclusive) and are as follows:

- Based on all interventions, in all hospitals in Scotland (emergency medical, elective medical, emergency surgical and elective surgical), there was a wide variation in the intervention rates[24] of the catchment populations of each RGH which this study does not explain and requires further investigation.
- The proportion of the total intervention rate[25] of the catchment population that was taken up at the local RGH, also varied widely between the catchment populations. This reflects the wide spectrum in the type of activity undertaken within the individual RGHs.
- There were no systematic differences in the types of total intervention rates. For example, some catchment populations experienced high emergency and high elective intervention rates. Conversely, for some populations, both elective and emergency interventions were relatively low when considered against the Scottish average. In yet others, only the elective intervention rates were high.
- For total intervention rates and with only one exception, the surgical day case activity was significantly higher than the national average. Again with one exception, medical day case activity was significantly lower.
- The total intervention rates of all of the catchment populations included significantly higher elective surgical rates for cancer patients than expected on a national basis. For 4 out of 6 catchment populations, this activity was predominantly taken up locally.

The implications of these findings apply locally to the populations around individual RGHs and potentially, generically to those around all RGHs.

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or chance; 2- Case control or cohort studies with high risk of confounding, bias or chance; 3 Non-analytic studies e.g. case reports, case series

[24] The definition of total intervention rate is: the sum of hospital activity taken up by a catchment population in any hospital within Scotland.

[25] Ibid

Local Implications

The reason for some of the variations found is thought to arise due to differences in patient pathways, suggesting that there may be an opportunity to align patient pathways. For example, low medical day case rates but high elective medical in-patient rates for the island populations, where travel times are such that an overnight admission is more feasible than a procedure on a day case basis.

Another example is the relatively high elective surgical in-patient rates for patients with cancer, where local practices differ from the specialised centres in terms of not providing a one-stop service. Other variants possibly need more investigation such as the almost universally high surgical day case rates. These variations should be looked at to confirm or otherwise, the local understanding of the patient pathways and to understand the appropriateness of these variations. In addition, only medical activity pertaining to the acute specialities was analysed, ie it did not include admissions to GP care only. However the total elective medical rates for the catchment populations served by RGHs are, with the exclusion of one hospital, 1.3 to 3 times higher than expected on the basis of the national average. This range included a RGH which exclusively admitted medical patients to GP care only.

Generic Implications

The variations between individual RGHs in respect of the population intervention rates and ratios of local to out of areas uptake reinforces the need to standardise the service provision by adoption of a core model for the RGH. It is also important to understand why these variations exist, as this should provide evidence to support the services provided beyond the core requirements. If, for instance, some of the variations are as a result of lack of qualified, supported, competent clinicians, this suggests that an improved training pathway and recruitment of appropriately skilled staff is required to support the patient pathways. Effectiveness and clinical cost-effectiveness issues should also be taken into account and any changes to current patient pathways subject to clinical governance arrangements such as audit activity. These changes will not just impact on the RGH, but also on the District General Hospitals (DGH) and Regional Centres, particularly in terms of professional support, communication and effective network working. These variations have raised a number of questions and further work is recommended to investigate the variations in population intervention rates.

RGH Surgical Procedure profiles

Rationale

The rapid appraisal, which measured the relative total intervention rates of catchment populations and the proportion of total service uptake by these populations to the local RGH, revealed large variations both between RGHs and against the national average. Surgical day case activity tended to be higher and medical day case activity lower than the national average. Elective surgical rates in patients with cancer were higher than the national average for all populations around all RGHs. On the basis of these variations, it was requested that a comparison of profiles of surgical procedures should be carried out for each RGH.

The main findings are based on SMR01 data covering episodes over 3 years (FYE 2003 to 2006) for each of the six RGHs analysed using the OPCS4 procedure code[26], recorded in the primary diagnosis position, only for identifying the procedure. Four different profiles were compiled:

1. All episodes (day cases and inpatients), all diagnosis;
2. Day case episodes, all diagnosis;
3. All episodes, (day cases and inpatients), cancer diagnosis only (in primary coding position);
4. Day case episodes, cancer diagnosis only (in primary coding position).

The findings can be summarised as follows:

- Overall, 50% of total procedures were carried out as day cases for patients with any diagnosis;
- 58% of patients with a cancer diagnosis were treated as a surgical day case;
- For all diagnosis, Endoscopic upper GI examination was the most common procedure, with Chemotherapy either second or third depending on inpatient or day case admission;
- For cancer diagnosis, the top four procedures were similar for day case or inpatient admission and these were Chemotherapy, other infusions, excision of skin lesions and blood transfusions;

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[26] Nationally agreed coding methodology for all surgical procedures.

- Variations between hospitals were noted as:
  i. Relatively higher rates of gall bladder removal in two hospitals.
  ii. One hospital had a very high rate of mastectomies compared with the other RGHs, although the actual number was low.
  iii. Diagnostic endoscopic examination of the bladder was relatively high in one RGH and very low in another.
  iv. There was a relatively high rate of blood transfusions, mainly as day cases, in one RGH.
  v. Only three RGHs provided a locally delivered Cataract service.
  vi. Diagnostic fibreoptic examination of lower respiratory tract is carried out in only one centre.
  vii. There were a number (56) of procedures coded as 'unspecified other operations on unspecified organs' in one centre but none in other hospitals. This may be a coding issue.

Local and generic Implications

Some of the variations are possibly explained by variations in clinical coding e.g. unspecified operations. However, others are not and raise a question as to the degree to which hospitals are meeting the needs of local residents and should be investigated further. There is also the question of clinical safety associated with low volumes of some, particularly more complex, procedures e.g. total mastectomies. This should be an area for further investigation.

Commitments

NHS Boards should seek to maximise the provision of appropriate secondary care undertaken locally.

Through further analysis of the population-based activity, NHS Boards should identify the reasons for variations between RGHs, in terms of surgical profiles, patient pathways, practitioner or patient preferences and differences in patient management. NHS Boards should also use collaborative analysis of the key features of the local work to understand and develop a rationale to inform the detail of the service modelling.

The North of Scotland Public Health Network should support NHS Boards to further investigate the variations in population intervention rates, ensuring that further work is framed within wider contexts such as the impact on receiving hospitals, community hospitals, other small urban general hospitals and primary care.

Through a network of RGHs, common protocols and standards should be developed for appropriate local intervention.

The Rural General Hospital

This chapter outlines the framework for improving access to secondary care, detailing the model of the RGH, as an integrated part of the Extended Community Care system. Six Rural General Hospitals are identified in the NFSC and the full Rural Access Action Team report[27] and these are:

- Gilbert Bain Hospital, Lerwick;
- Balfour Hospital, Kirkwall;
- Western Isles Hospital, Stornoway;
- Caithness General Hospital, Wick;
- Belford Hospital, Fort William;
- Lorn and the Isles Hospital, Oban.

Definition: What is a Rural General Hospital?

A definition has been developed which seeks to describe the service that should be provided within an RGH:

> **"The RGH undertakes management of acute medical and surgical emergencies and is the emergency centre for the community, including the place of safety for mental health emergencies. It is characterised by more advanced levels of diagnostic services than a Community Hospital and will provide a range of outpatient, day-case, inpatient and rehabilitation services."**

Some of the facilities, currently defined as Community Hospitals, provide a similar range of services to those identified above in this definition, for example the New Galloway Community Hospital. Redefinition of these hospitals is beyond the remit of this project but NHS Boards will find this framework helpful in orienting such hospitals on the continuum of care.

The National Framework for Service Change (NFSC) have defined services in levels of care[28], from level 1 - community provided services, such as General Practitioners and NHS 24, to level 4 - nationally delivered, highly specialised services. Level 2 facilities will include assessment,

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[27] The full Action Team Report, supporting the NFSC "Rural Access Action Team: Final Report" can be accessed at (www.show.scot.nhs.uk/SEHD/NationalFramework)
[28] (2005) "The National Framework for Service Change in NHS Scotland" Vol.2, page 97-103, Scottish Executive, www.show.scot.nhs/sehd/nationalframework

diagnosis and treatment for routine conditions. Level 3 facilities are identified as the core admitting services, with locally available 24/7 receiving in general surgery, general medicine, and orthopaedics; with anaesthetic and radiology support. In addition, one or more of following specialities may support these on a receiving basis: paediatrics, obstetrics and gynaecology.

Although the RGH does not easily fit into any of the above categories, it is best regarded as a level 2+ facility. The model described will provide local assessment, diagnosis and treatment. It will be the emergency centre for the community and while much of the activity undertaken could be described as treatment of minor injuries and minor illness, the RGH will undertake first line management of all patients presenting with acute illness. Whilst a proportion of these patients may be transferred to a larger centre, the majority will be admitted to the RGH.

The Rural General Hospital is a key resource within the community providing local access to a range of emergency, diagnostic and planned treatment services. The RGH may provide some of the functions of a Community Hospital, but it will also provide a more advanced level of service, similar to some of those services accessed by other communities in their local District General Hospital (DGH), particularly some unscheduled surgical interventions. An RGH cannot, however, provide the broader range of services expected in a DGH. For example, an RGH will not have an Intensive Care Unit but will have the ability to provide high dependency care.

The RGH will exist in a network with larger centres. These may be District General Hospitals or Tertiary Centres. The RGH should have arrangements to refer patients appropriately to definitive care, based on robust care pathways that will sometimes by-pass the more local DGH. Formal arrangements will exist between the larger centre and the RGH to support local delivery of care, known as **obligate networks**. This should include formally agreed specialist clinical links, with an obligation to support local delivery of care and local decision making within the RGH. This will be available in a number of core specialities on a 24/7 basis. The current practice of visiting specialists should be reviewed and extended where appropriate.

The RGHs should also network with each other and with the larger centres to develop agreed, evidence-based protocols. This will ensure that the clinical standards are similar across Scotland. RGHs will also be part of local networks linking with the locally based extended community care team, with the principle that the RGH is retained to manage the more complicated conditions that cannot be cared for at home, or within a community hospital setting.

All RGHs must be supported by robust retrieval and transport systems to ensure that safe and effective patient transfer to other centres is available when needed.

Core Services within the Rural General Hospital

The definition above suggests that the RGH will initiate immediate emergency triage, resuscitation, and stabilisation; it will provide treatment, when appropriate, and transfer when necessary. There will be a range of appropriate diagnostic facilities, access to specialist opinion, including a range of visiting specialists and will provide certain services on the basis of networks with others. A number of underlying principles have been agreed as necessary to underpin all RGHs, as follows:

- A **CORE** range of services should be provided that are not different in different places;
- Standard protocols for procedures and transfers should be agreed;
- Formal links with other centres, developed through obligate multi-disciplinary networks should be established;
- Access to a standard range of diagnostics – some local, some distant;
- Practitioners who are competent to deliver the level of care required – not necessarily consultant led in every discipline;
- Appropriate training programmes;
- Skills update and mentoring should be supported by larger centres;
- Transfer from local services should be directly to definitive care, where it is possible to determine this.

As a minimum an RGH should support the following services:

Unscheduled	Planned
• Nurse led Urgent Care service managing minor injury and minor illness; • Ability to resuscitate patients; • Ability to manage acute surgical and medical admissions; • Initial fracture management and manipulation of joints; • Midwifery led maternity service; • Neonatal resuscitation; • Capability to diagnose and initially manage acutely ill or injured child; • Capability to manage patients requiring a higher dependency of care before transfer; • Clear and appropriate retrieval and transfer arrangements.	• Management of patients with stroke; • Rehabilitation and step-down; • Post-op step down, rehabilitation and follow-up; • Management of patients with long term conditions, including haemodialysis, and cancer care as part of a network; • Provide ambulatory care for children within the locality; • Routine elective surgery; • Visiting services.
Diagnostic	Support

• Diagnostic capability, including:
    Imaging: Digitised image capture, Ultrasound and CT scanning;
• Laboratories:
    Limited range of Biochemistry, Haematology and cross match blood.
• Endoscopy: Upper and lower GI, Cystoscopy;
• Surgical intervention: e.g. biopsy of lesion
• Cardiac Investigation including:
    Stress testing and Echocardiography.
	• Clinical decision support via e-health links to other centres;
	• Pharmacy support.

Details of current RGH activity by speciality are available in the Technical Annex of this report.

An **Emergency service** is required within the RGH. Nurses can manage the majority of the activity with appropriate skills in the management of minor injuries and minor illness, but they need to be supported by appropriate clinical decision support.

An **Anaesthetic service** within the RGH will be pivotal. There are two defined roles of anaesthetic practice within an RGH, as follows:

- Emergency care, including resuscitation and stabilisation and administration of anaesthesia for emergency surgery. This includes emergency airway management, however these skills are not unique to anaesthesia.
- Administration of anaesthesia for elective surgery, which will require a level of activity to maintain skills and retain professional interest.

This service will be required 24/7.

Medical activity is by far the largest proportion of RGH in-patient work, accounting for 60% of total in-patient admissions and there remains a clear role for acute medicine and secondary care support for the management of long-term conditions within the RGH, including a wide range of outpatient clinics. It is difficult to prescribe what should and should not be admitted to the RGH. Those patients transferred will depend on the competency of the team and clinical decision making of the doctor. An increase in the visiting medical services should be considered e.g. locally available non-interventional cardiology.

The future role and shape of **surgery** in the RGH is to provide elective outpatient, in-patient and day case services and a 24-hour emergency service, acting as part of a regional network of surgical services, within the following agreed boundaries.

24-hour surgical services should provide local assessment, triage, resuscitation stabilisation of emergency surgical and trauma patients followed by admission and surgical intervention, if appropriate, and transfer, when necessary, in collaboration with the relevant receiving hospital. In addition, due to the specific risk factors, island surgical services should provide an emergency Caesarean Section Service.

The key role of the surgical service in the RGH is the provision of planned surgery, primarily on a day case basis for the local community. Procedures which would be included within the core surgical workload of the RGH, both on an emergency and elective basis, are described in detail in Annexes 3a and 3b but are summarised in the table below:

Emergency Surgical Workload	Planned Surgery
• Appendicectomy; • Caesarean Section; • Endoscopy (including injection of varices); • Evacuation of retained products of conception; • Lacerations; • Initial fracture management and joint dislocations; • Repair of perforated ulcer; • Control of haemorrhage (including splenectomy); • Resection and anastomosis of bowel; • Ruptured ectopic pregnancy surgery; • Chest drain; • Drainage of pericardium injury (for cardiac tamponade) plus suturing of penetrating injury.	• Biopsy of lesions; • Cholecystectomy and/or exploration of common bile duct; • Circumcision; • Endoscopy; • Nail bed procedures; • Peri-anal procedures; • Resection and anastomosis of bowel; • Simple undescended testes repair; • Scrotal surgery including vasectomy; • Varicose veins surgery.

Where breast surgery is to be carried out within an RGH, it should be concentrated into the workload of one surgeon, and that surgeon should become part of a formal network with either a DGH or a tertiary centre.

Services that should be provided on a visiting basis include ophthalmology, Ear Nose and Throat, Urology, Gynaecology and Orthopaedics. Some surgeons within the RGH already have the necessary training and supporting team competencies to provide some of the visiting services listed (for example, orthopaedics and urology).

Surgical services that should not be core provision within the RGH, and therefore should not be provided unless explicitly agreed by the NHS Board, through appropriate clinical governance arrangements, include:

- Surgery on children under the age of 5 years (with the exception of suture of cuts, drainage of abscesses and foreign body removal where specialist expertise in that field exists and where there where there is competency and practised paediatric anaesthesia);
- Neurosurgery (such as emergency burr holes);
- Operations on the neck and chest (other than emergency tracheostomy);
- Stomach (excepting perforated and bleeding ulcer surgery) and rectum operations;
- Liver;

- Vascular surgery;
- Ovarian (with the exception of ovarian cysts or torsion or haemorrhage);
- Vaginal or penile operative procedures(with the exception of circumcision).

Where there is a proposal to provide such local surgery which is not included within the core service these need to be explicitly agreed though formal governance processes which would include the demonstration of local health need, team competences, outcomes expected (demonstrated to be at least as good as other centres) and approval by both the local NHS Board and the Regional Surgical Service Network. Links have been established with the national Volumes and Outcomes workstream in the preparation of the model of surgery that should be provided within the RGH.

The RGH surgeon should provide outreach day case surgery in Community Hospitals where such facilities exist.

Maternity

There are different models of maternity care within each of the RGHs but the number of births in each centre is low, ranging from less than 1 birth per week in Fort William to 4 per week in Caithness. Emergency caesarean sections are regularly performed in 4 RGHs, in two hospitals (Caithness and Western Isles) these are carried out by locally based consultant obstetricians, in others by a General Surgeon, however the frequency of this is also low.

Whilst the birth rate across Scotland has continued to rise from its lowest point in 2002, the birth rate across remote and rural Scotland is decreasing. As a minimum, therefore, a midwife led service is proposed as the most appropriate model in remote and rural areas. In light of this recommendation, the role and competencies of midwives working in remote and rural areas has been reviewed and is reported in Annex 2. NHS Boards should seek to maximise local deliveries.

Commitments

The RGH should be defined as a Level 2+ facility.

NHS Boards should review the service provided within their RGH to ensure that the services provided are consistent with the model described, specifically including:

- A nurse led urgent care service;
- The provision of a first-line emergency care service;
- The management of acute medical and surgical emergencies;
- A midwife led maternity service should be developed as a minimum, which should seek to maximise local deliveries;
- The management of patients with stroke, step-down, rehabilitation and follow-up of a range of patients conditions;
- The management of long term conditions;
- The provision of an ambulatory care service for children;
- Elective and emergency surgery as prescribed above;
- Visiting services appropriate to the health needs of the population;
- The provision of the prescribed range of diagnostics and clinical decision support;
- The provision of a pharmacy service.

Where additional services are provided, a clear governance framework should be developed.

Forward Issue

Obligatory Networks should developed and should determine the exact range of local and visiting services that should be provided on the basis of population need within the framework of the core services.

Other Core Services

Five key groups have been identified to support the core service within the Rural General Hospital. These were Child Health, Mental Health, Endoscopy, Imaging, and Laboratories. The emerging models for Mental Health and Child Health are summarised below, whilst the others are discussed in the chapter on Infrastructure.

Mental Health

The Mental Health Delivery Plan [29] set the policy context for the model of mental health services in Scotland between now and 2010. This report therefore will confine itself to the issues which have been raised as specifically challenging for remote and rural areas to deliver. A full report of the remote and rural sub-group can be seen at Annex 4 of this document.

During the process of producing this report a number of issues have arisen in the management of patients in remote and rural areas experiencing mental health crisis. These issues have been raised by generalist practitioners and hospital based clinicians and include the availability of a Place of Safety locally and access to specialist advice. Having identified these issues work is now being done with the Scottish Government and through the Remote and Rural Group to ensure that the standards set in relation to meeting the needs of those in crisis are met through existing resources or the development of new ways of working.

The focus of mental health services within remote and rural communities must be on the early detection of disease, with pro-active case finding targeted at difficult to reach people and those in need, the aim of which is to prevent disease escalation. One such example is Guided Self Help Workers in NHS Highland who identify people with depression at an early stage and focus upon the prevention of escalation of disease. There is also an opportunity for remote and rural areas to develop creative solutions in prevention of mental health crisis by utilising Choose Life Co-ordinators, and pulling on the work being done by the Mental Health Foundation, SAMH and the Mental Health Collaborative improvement programme on reducing hospital re-admissions and the development of an assessment/appraisal tool for Boards and partners to use to assess progress against delivering these standards.

Despite the focus upon early detection and prevention of disease escalation, there will inevitably be situations where individuals will experience a mental health crisis and these will require management, sometimes by generalist practitioners and sometimes by generally trained

physicians. There are well documented challenges for remote and rural areas in meeting the National Standards for Crisis Services[30] however, it is important that the needs of those in remote and rural areas are addressed, even if this means that the national standards need to be reviewed to ensure that they are achievable across Scotland.

CHPs must, therefore have contingencies in place which support practitioners in remote and rural areas to manage a mental health crisis and ensure that individuals receive a response which meets their needs in a timely and professional manner. This may include containment and stabilisation within a place of safety, which may be in a Community Hospital or an RGH where these exist, until onward transfer to a specialist centre. Mental Health services should be organised as part of a formal network, with a specialist centre and there should be appropriate retrieval arrangements to allow access to inpatient care. Locally available services should include a crisis service and assertive outreach to sustain, as far as possible, patients in their home environment. Contingencies which should be in place to support the management of mental health crisis in remote and rural areas would usually include:

- Specific arrangements for the management of mental health crisis in remote and rural areas to be included in NHS Boards' Psychiatric Emergency Plans (PEPs);

- The requirement to review the need for the extension of current mental health service provision to cover out of hours;

- The development of formal obligatory networks with specialist psychiatric centres, including communication across the system involving case management and critical incident reviews;

- Responsive retrieval systems for patients experiencing mental health crisis;

- The need to establish robust e-health links between remote and rural healthcare settings and psychiatric centres.

In order to ensure that practitioners in remote and rural areas have the necessary skills to appropriately manage an individual experiencing mental health crisis, there is an urgent need for the development of a pre-hospital psychiatric care course, delivered utilising a 'BASICS' type approach.

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[29] (2006) "Delivering for Mental Health" SEHD
[30] (2006) "Delivering for Mental Health National Crisis Standards" Nov 2006 SEHD

Child Health

Over recent years, various groups and initiatives have explored the most appropriate and sustainable healthcare provision for children and young people in remote and rural areas in Scotland. These include the Kerr Report, the Remote and Rural Areas Resource Initiative (RARARI) Paediatric Project, and recently, Delivering a Healthy Future: An Action Framework for Children and Young People's Services[31,32,33,34].

The common themes emerging from these reports include:

- Difficulties faced by local clinical staff in providing high quality care for children with significant acute or chronic illness given the small number involved and the lack of immediate specialist support.
- A perceived lack of understanding on the part of the clinicians working in dedicated paediatric units of the particular circumstances faced by staff in remote and rural settings.
- Variable quality of discharge planning after episodes of specialist care.

These reports are consistent in their recommendations in the types of models recommended for providing health services locally which are safe and appropriate for children. Paediatric models described within the reports above are based around the principles of a Managed Clinical Network and this report concurs that remote and rural child health services should be firmly embedded in a formal network with a larger paediatric centre, providing ambulatory and intermediate care, locally, with the majority being provided in the community.

In terms of the workforce required to deliver a local ambulatory and intermediate care service for children and young people, CHPs, including the RGH staff, should identify their paediatric teams and ensure that these staff have the necessary training and educational support necessary (and appropriate access to this) to develop and maintain the competences required to resuscitate, stabilise and initially manage an acutely ill or injured child and transfer when appropriate. All staff will also require access to the appropriate equipment locally and should have guaranteed access to clinical decision support from larger centres. A robust system of retrieval of children with high dependency or intensive care is essential.

A full report on the model for Remote and Rural Child Health can be seen in Annex 5.

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[31] (2005) "National Framework for Service Change" May 2005, Scottish Executive
[32] (2005) "Delivering for Health" November 2005, Scottish Executive
[33] (2006) "Remote and Rural Paediatric Project" December 2006 Scottish Executive

Commitments

The focus of mental health services in remote and rural communities must be upon early detection and prevention of disease escalation.

The extended community care team must have the ability to manage mental health crisis 24/7.

Formal support networks should be developed with psychiatric centres.

There must be responsive retrieval systems for patients experiencing mental health crisis.

The Remote and Rural Healthcare Educational Alliance (RRHEAL) should urgently address the training needs of remote and rural practitioners through the development of a Pre-hospital Psychiatric Emergency Care Course which should be delivered utilising a 'BASICS' type approach.

An ambulatory care service should be provided for children. This service should be part of a formalised network with a paediatric centre.

Paediatric teams within RGHs should be identified and CHPs should ensure that these teams have the skills required to manage the care of an acutely ill or injured child 24/7.

There must be responsive retrieval systems for the acutely ill or injured child or young person.

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[34] (2007) *"Delivering a Healthy Future: An Action Framework for Children and Young People's Health in Scotland"* April 2007, Scottish Executive

The Remote and Rural Workforce

Team working, integration and shared competencies are key to the future staffing of services within remote and rural healthcare. Many of the solutions to the development of sustainable and affordable health services will need to involve a range of doctors, nurses, midwives AHPs, and healthcare scientists and their support staff, working creatively to deliver new models of skill mix and interventions that are safe, effective and patient centred.

The current workforce is ageing and organised in a fragmented and reactive way. If care is to be sustained, then the future workforce must be organised differently and NHS Boards must ensure that adequate workforce planning mechanisms are in place to ensure the sustainability of services. The age profile of the remote and rural workforce is available in the Technical Annex of this report.

Primary Care

Current	Future
Primary Care Teams	**Extended Community Care Team**
• Fragmented • Different organisations • Duplication • Reactive care	• Integrated • Partnership working • Seamless care • Anticipatory care

Currently teams within the community are typically fragmented and disparate in terms of the care provided and the location of teams. The team in some areas may be limited to a single-handed GP practice. This can lead to duplication of effort and disjointed care. Professional skill levels and mix vary between geographical locations despite similar workloads. It is proposed that all professional resource within the community must be integrated, both in terms of teamwork and of location and that single-handed practices should be actively discouraged and, where possible linked to others. This has patient safety benefits as it addresses the challenges experienced by isolated practitioners. This new model will be known as The 'Extended Primary Care Team' (EPCT) and will encompass a partnership approach between agencies and multi-disciplinary teams.

The EPCT should incorporate the General Practitioner (GP) (although this may be a visiting service), and include all other health and social care professionals such as the Community Health Nurse, Midwife, Care Manager, Social Workers, Support Workers and education. Each practice should receive visiting services from Community Psychiatric Nurses, Allied Health Professionals (AHPs) and Specialists such as the Macmillan Nurse or Clinical Psychology. The core EPCT should be co-located where possible to enhance communication and team working. The wider team such as ambulance paramedics and technicians may also be based within the GP Practice and utilised to support the EPCT in undertaking anticipatory care within the community when they are not required for emergency response. The EPCT should work in partnership with other agencies. Where the wider professionals from Social Care, Housing, Education, NHS 24 and the Voluntary Sector are added to the EPCT team, this will be defined as the 'Extended Community Care Team' (ECCT). All available resource within the locality should be utilised to build 'Community Resilience'. An example of this would be the extension of the 1st responder schemes to incorporate the Coastguard, Fire Brigade and Forestry Commission.

In rural areas the EPCT will benefit when co-located with other services including those provided out of hours, such as NHS 24 hubs. This is likely to be either the GP Practice or may be the Community Hospital within the locality. The generic term of Community Resource Hub will be utilised to encompass GP Practices or Community Hospitals where staff and services are integrated. Where there are lone workers, NHS 24 should be utilised as important information, advice and peer support resource. There should be cross over of staff between hospital and community services, mainly led by General Practitioners with a Special Interest (GPwiSI), supported by the wider multi-disciplinary team. There is a view that the term GPwiSI does not adequately reflect the competence required and it has been suggested that the description: Specialist in Primary care medicine better describes the role. A wider range of local services must be provided and visiting specialist services increased.

> **Commitments**
>
> Health and social care within remote and rural areas should be organised as integrated teams, known as Extended Community Care Teams (ECCT). Current organisational barriers should not stand in the way of efficient service alignment.
>
> The ECCT should be co-located when possible with other services, both within normal working hours and out of hours.
>
> NHS Boards should consider opportunities to link single handed practices to reduce professional isolation and enhance the range of services available to the Community.

Community Nursing

Nurses are the largest professional group within any healthcare system. Nurses have a key role in supporting people within their home environment acting as the lead professional in the delivery of care. Nurses in remote and rural settings can be characterised as having a wide range of key skills, although these may be practiced only to a limited degree.

The role of nurses in remote and rural practice has been reviewed in the context of the current Review of Nursing in the Community in Scotland[35]. This report defines the role of nursing in the community as concerned with:

- "Improving health and well-being;
- Maximising individuals' and communities' self-care potential;
- Reducing inequalities;
- Delivering safe and effective services within a multi-disciplinary, multi-agency context as close to the patient's home as possible, particularly for those with long-term health conditions;

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[35] 2006 *Visible, Accessible and Integrated Care: A Review of Nursing in the Community in Scotland* Aug 2006 Scottish Executive Health Department

- Supporting social and health care services in protecting the public from harm;
- Contributing to reducing length of patient hospital stays by providing acute, short-term support to individuals on discharge from hospital."[36]

The new Framework for Nursing and AHPs in Scotland[37] underpins the core values around caring, enabling and proposes a rights and evidence based approach to practice, which places the emphasis on preventative health care and earlier intervention.

It is envisaged that the nursing workforce model should be based on the skills set required to support the patient through the continuum of care. All roles will require a level of competency in specific generalist skills. The graph below (Figure 6 describes the stages of the patient journey as they move from independence (self care) through dependence (acute care) gradually regaining independence (enabling care) and reaching full independence again, where possible (self care).
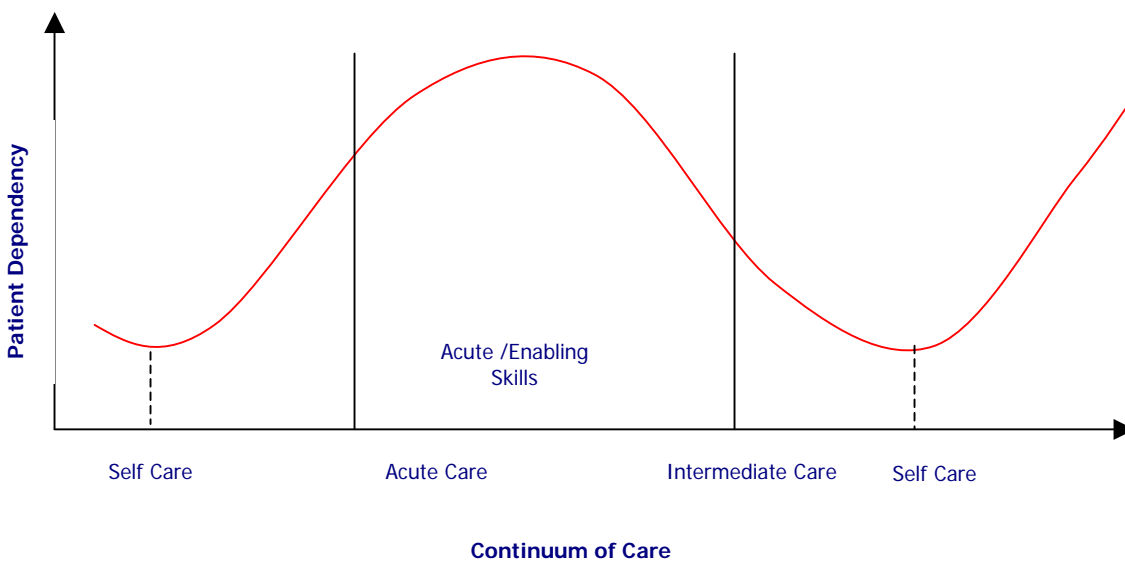
Figure 6: Community Nursing Along the Continuum of Care

Where the patient cannot regain total independence, perhaps through a long-term condition or because they are at the end of life, the dependency level will rise and the community nurse's role becomes crucial in the support of that patient and their family. Throughout the journey, where

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[36] Ibid

[37] 2006 *Framework for Nursing and AHPs in Scotland: Delivering Care, Enabling Health* Nov 2006, Scottish Executive Health Department

the balance of patient need shifts from nursing to social care, the lead role will change to the profession with the most appropriate skills ensuring that care provided is needs led. A wide range of skills will therefore be required with practitioners working in a flexible way as part of an, integrated and multi-disciplinary team.

Work is currently in progress to implement the recommendations of the Review of Nursing in the Community, with NHS Highland as one of the development sites.   The outcome of this work will influence the future model for nursing within the remote and rural community.

The Remote Community Resource Hub Staffing Model

The remote community resource hub will have a generalist team covering a wide range of competencies, based on the needs of the local populations. Teams should comprise of medical, nursing, AHP, social and voluntary care backgrounds, incorporating informal carers from the community as appropriate. Only the roles of the main professions have been outlined here to avoid duplication of the implementation of the Community Hospital Strategy.

Medical Staff

Medical staff will be responsible for leading the inpatient service and for supporting the nurse-led minor injury/illness service both within and out of hours. A combined medical staffing model with a skill mix of GPs, GPs with a special interest (GPwiSI) and/or Rural Practitioners dependant upon the agreed role of the hospital. For example, where hospitals deliver an enhanced service such as those in Stranraer, Mid-Argyll, Skye and Benbecula they will be staffed by GPs with a Specialist Interest (GPwiSI), or Rural Practitioners and in others, such as Hawick or Islay, will have GPs.

Nursing Staff

Nurses within community hospitals will lead the minor-injury/minor illness units. They will also have a role in acute emergency care, medical admissions and in rehabilitation within the community hospital. Community Nurses will be integral to the hospital team ensuring facilitation or early discharge and return to self-care.

Allied Health Professionals

Allied Health Professionals (AHPs) will work across the spectrum of care. Their role is described in further detail under the heading of RGH Staffing model below.

Community Pharmacists

Whilst many remote and rural areas don't currently have access to Community Pharmacists, the Pharmaceutical Care Services Plans being developed by NHS Boards, combined with contractual changes for Community pharmacists may provide an opportunity to strengthen support to remote and rural areas, particularly in support of people with a long term conditions. In many remote communities dispensing practices provide access to medicines in the absence of community pharmacies.

The RGH Staffing Model

The future RGH staffing model is also characterised by a team based competency approach and is described in Figures 2 and 3 above[38]. These are discussed below by discipline, as there are differing implications for different professions, particularly in relation to education and training.

Competence in the management of acute medical, surgical (including initial fracture management and manipulation of joints), delivery of anaesthesia and mental health emergencies are core skills/competencies required within the RGH. Other competencies include management of low risk births, neonatal resuscitation, endoscopy, rehabilitation and management of chronic conditions. These competencies must be available and sustained within the multi-disciplinary team.

Medical Staff Models

Anaesthetic Service

As noted above, within the RGH the anaesthesia service will be predominantly Consultant-led and delivered, 24/7. There is a role for GPs with appropriate training to support this model[39]. It will be for individual NHS Boards to determine their workforce numbers and skill mix dependant upon need, however it is envisaged that a team of three will be required to deliver this service.

Acute Medicine Service

Acute and Internal Medicine is the largest proportion of activity within the RGH and there is therefore a clear need to sustain and develop such services. The Needs Assessment undertaken by the NoSPHN showed that the different medical staffing models which currently exist within RGH medical services have evolved historically and there is a need for further analysis to understand whether different models result in different levels of service delivery, for example different transfer rates to other hospitals[40]. It is therefore proposed that an audit be commissioned to evaluate the effect on service delivery of a Consultant led medical service as compared to a GPwiSI led medical service as part of an obligate network.

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[38] (2007) Figure 2 "Remote and Rural Staffing Model" p 8

[39] This is defined by the RCGP as the level 3 Double Badged specialists. " Rural Training Pathways Report" 2007 Academy of Royal Colleges, unpublished

[40] (2007) "Rural General Hospital Needs Assessment: a Report by the North of Scotland Public Health Network" 2007 Oct North of Scotland Public Health Network, unpublished.

Across the remote and rural community, there are diverse views on the most appropriate medical staffing model for the delivery of acute medicine within the RGH. In 5 out of the 6 RGHs there is a consultant-led and consultant delivered acute medical service; in one RGH this is led by locally trained GPs with a special interest, in a networked arrangements with a larger centre. There are diverse views on the future model. Some areas prefer a consultant-led and consultant delivered service, delivered by either specialist in remote and rural healthcare or dual trained consultants (e.g. in general medicine and diabetes), whilst others support a mixed economy, with GPwiSIs leading local delivery, as part of an obligate network with specialists in a larger centre[41]. This might include. The Remote and Rural Training Pathways acute medicine sub group in collaboration with the General Practice sub group, has proposed that the model might include GPs who have undertaken training to Level 2 competency in acute medicine, and NHS Education in Scotland have identified funding to pilot this new potential model.

Clear pathways of care and robust clinical decision support will be required where the agreed model includes an element of General Practice and work has been undertaken as part of the remote and rural project in NHS Orkney, in collaboration with NHS Grampian, to develop protocols for the most common medical conditions. These can be seen in full in the Technical Annex of this Report.

The workforce model for the delivery of medical services in the RGH is not prescriptive and NHS Boards should have the local flexibility to determine the skill mix that best matches the health needs of their local population. Three team members will be required in any medical team to provide a 24/7 service.

General Surgical Service

A 24/7 surgical service, which delivers planned and emergency, in-patient, outpatient and day case services will require access to a team of three specialist general surgeons trained in remote and rural surgery as a minimum. The surgical team must be able to demonstrate the range of competencies required to support the agreed workload, however this must extend beyond the surgeon, to the whole team.

The surgical service must be arranged as part of a network with a larger centre. This might include the RGH surgeon visiting a larger centre to maintain skills and pursue a particular interest.

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[41](2007) " Rural Training Pathways Report" 2007 Academy of Royal Colleges, unpublished

Networked Medical Staff

A number of other specialists will be required to support the RGH at a distance through formalised obligate networks. These include radiologists, psychiatrists and specialists in laboratory medicine. There do however need to be clear arrangements for accessing specialist opinions. This will require a change in current working patterns and arrangements within those larger centres.

Visiting Services

Other services can be provided either by visiting specialists or by networks with larger centres. Where the medical input to a service is accessed at a larger centre distant from the RGH, that larger centre will need to alter their systems to ensure that an identified individual has responsibility for the provision of support to the RGH. This changing model will require an Emergency Retrieval System, at times staffed by doctors, in addition, to ambulance personnel.

Nursing Workforce

Nurses in an RGH are currently delivering patient care within a model of multi-skilled generalist nursing practice. This role is necessary due to small numbers of patients, low volumes depending on patient need and infrequent exposure to certain situations. Nurses within an RGH have therefore developed a wide and diverse range of skills. There is a need for future nursing models to focus their skills in order to ensure regular use and guarantee competence and confidence in an emergency and/or unpredictable situation, identifying where nursing roles are most appropriate, where supported nurse led services can be further developed and/or become

independently nurse led and agreeing where care needs would be better met by other professions or disciplines.

Acute and Intermediate Care

Within the general inpatient area, from a nursing perspective, certain patients can have similar core needs and consequently require similar broad nursing knowledge, competence and skill needs. Competences required for the delivery of this type of nursing care should be 'clustered' around specific patients' needs to ensure more frequent use and therefore maintenance of acute knowledge and skills. For example, nurses with acute care competences could care for patients

requiring acute and/or emergency or high dependency care. This clustering approach could be developed for other types of patient needs, for example, nurses with intermediate care skills would care for patients requiring rehabilitative care and enable them towards self and independent care.

The competencies described are skills that would be required of a registered nurse 24/7 and at this point are of a relatively generalist nature and not yet at an advanced practitioner level.

Specialist Care

There are groups of patients within the RGH the care of whom will require specific knowledge, skills and expertise, for example, patients with long-term conditions, paediatrics, diabetes or renal disease. For this reason, a sufficient number of nurses will require to develop specialist skills, in these particular areas, to ensure the level of expertise is consistently available to meet patient needs. This role is described as a practitioner with a special interest in a particular field of practice, and would require to meet defined levels of competence, with clear lines of accountability and supported by formal education standards.

Throughout the remote and rural process of engagement, nurses reinforced the need for a formal supporting structure. This opens up debate around whether there may be an opportunity for the development of a regional role of a Nurse Consultant in Remote and Rural Healthcare and this needs further exploration. The development of such a role would not, however preclude individual NHS Boards flexibility to develop local Nurse Consultant roles where there is a defined need, for example, in the case of a Nurse-led Service.

RGH Nursing Model

Development of the new nursing model, as described, would contribute to the enhancement of retention of current staff and make recruitment more attractive. Figure 7 below identifies the future roles.
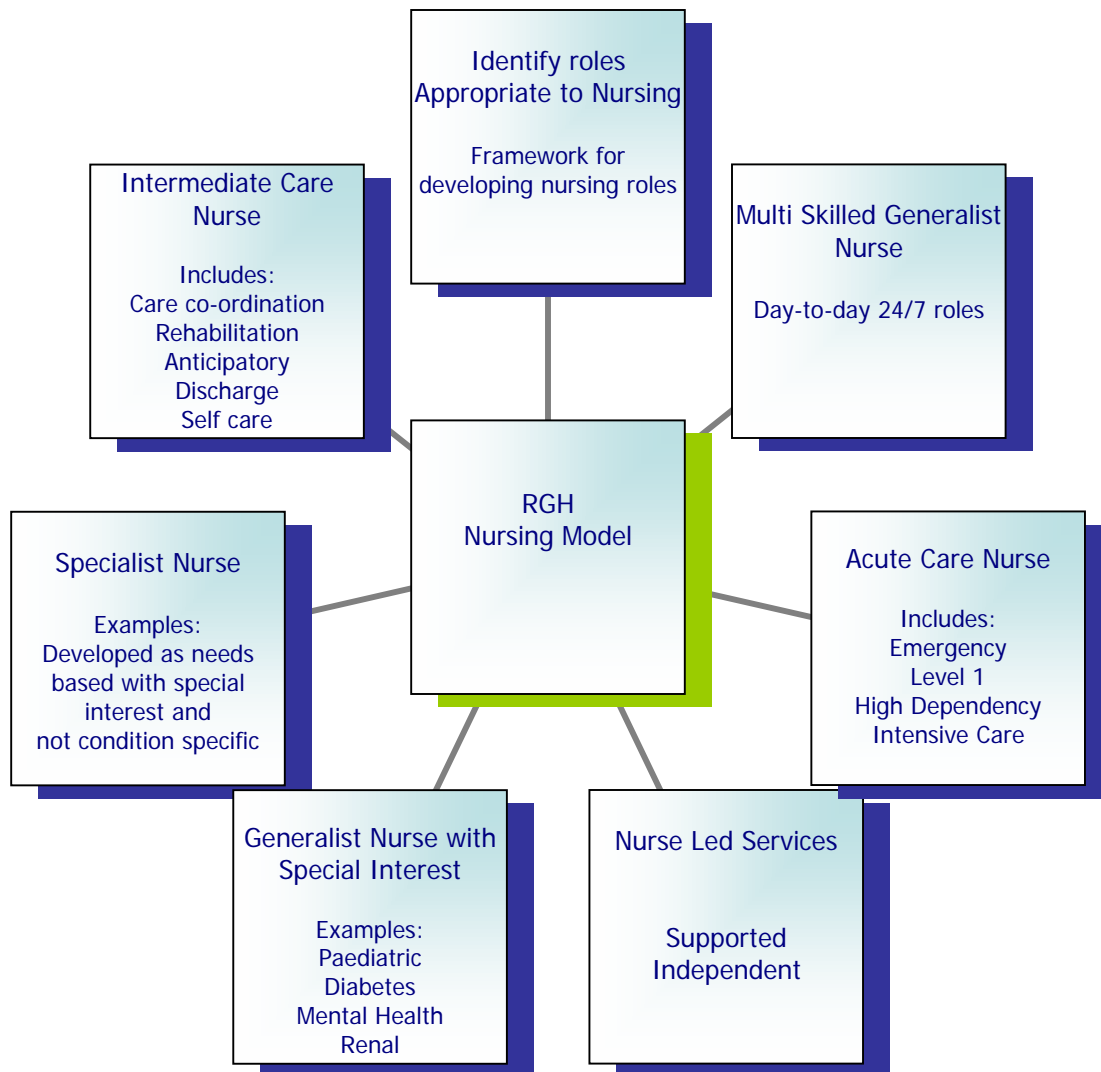
Figure 7: RGH Nursing Model

Development of the roles described within the model and the knowledge and skills required to deliver these, will need to be considered in the context of patient need, the subsequent demands on the whole clinical team and which role is most appropriate to meet those needs. In order to progress the model, the competences required of these roles have been mapped against the proposed Career Framework for Health[42] and Figure 8 (below) describes this in greater detail. The model should not necessarily be seen as a hierarchical, as they may be diagonal or lateral. The role of the ward sister/charge nurse is deliberately excluded, as there is a separate national piece of work ongoing which will report on this role and will required to be considered in light of the needs of remote and rural nursing.

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[42] (2006) "Career Framework for Health" Scottish Executive. www.skilsforhealth.org.uk

Further work will need to take cognisance of the Agenda for Change bands and the Knowledge and Skills Framework.

Potential Roles for Development	Descriptor	Higher level roles for development within Healthcare team
Nurse Led Services	Scope to expand/extend nurse led services and develop roles as requires within needs of clinical teams	Consultant supported nurse led services current senior roles Future independent nurse led services with nurses working at high/very high level of decision making and authority
Specialist Nurse	Project in progress with SEHD. When completed consider how this work influences and/or informs remote and rural practice	Senior role Link with current review of specialist roles at SEHD
Intermediate Care Nurse	Starting level of competent generalist nurse working to a level of responsibility and autonomy, developing additional knowledge and skills in a specific area based on patient need and within clinical team needs	Would require lead role at advanced practice level but team would include a range of levels of competent generalist nurses in this field of practice
Acute Care Nurse	Starting level of competent generalist nurse working to a level of responsibility and autonomy, developing additional knowledge and skills in a specific area based on patient need and within clinical team needs	Would require lead role at advanced practice level but team would include a range of levels of competent generalist nurses in this field of practice
Multi skilled Generalist Nurse with Special Interest	Starting level of competent generalist nurse working to a level of responsibility and autonomy, developing additional knowledge and skills in a specific area based on patient need and within clinical team needs	May be at advanced practice level but needs discussion as for example, paediatric knowledge may be a t level of paediatric generalist nurse
Multi skilled Generalist Nurse	Range from newly registered nurses consolidating experience, to those developing roles to higher level of practice	Role currently in place informally
Support workers	Mix of basic support to a higher level delivering care under supervision but without direct supervision	Appropriate roles to be identified within this model

Figure 8: RGH Nursing Roles

Essential to the successful development of this model are:

- Established formal networks;

- Planned programme of clinical and educational competences relevant to the area of practice;

- Post registration development for the Remote and Rural Generalist Nurse;

- Development of career structures for support workers and registered practitioners.

Further work would be required based on local need to determine skill mix.

Support Workers

The role of the support worker is an essential component of the emerging nursing model. It is envisaged that Generic Support Workers would work across the health and social care spectrum, with formal training and appropriate supervision.

The core function of the generic worker includes:

- Support of individuals with rehabilitation programmes ensuring that they can continue their rehab programme once at home;
- Supporting individuals with self care;
- Delivery of health promotion sessions to individuals and/or groups to support self care/anticipatory care;
- Supporting individuals to manage their chronic condition;
- Provision of a home based nursing/care service to support people at home for a short period of time to prevent unnecessary hospital admission in the cases of acute exacerbation of chronic conditions;
- Provide a scheme of early supported discharge from hospital;
- Be a worker with a broad range of knowledge and skills who could then sign post other services for people;
- Support of young families – domestic and parenting skills;
- Ability to address all the activities of daily living including undertaking basic observations/tests as required e.g. temperature, pulse, blood pressure, respirations, urine testing;
- Screening processes e.g. over 75 screening, falls risk assessment, home environment screening.

This role is being developed and evaluated currently by NHS Shetland for communities that have no health or social care provision at present.

Allied Health Professions (AHPs)

AHPs have an important contribution to make to the delivery of sustainable clinical teams in remote and rural settings. Their expertise allows them to work as first point of contact practitioners as well as 'lead' practitioners in a variety of settings. This has already been demonstrated in a number of key areas such as diagnostics, triage and treatment of musculoskeletal patients, rehabilitation and long-term condition management, amongst others.

Due to small numbers, AHPs work across the spectrum of healthcare in remote and rural areas. AHP services are diverse and the size and scope of the workforce varies considerably between the professional groups. During the scoping exercise, it has become clear that the following AHPs will have services based in remote and rural healthcare locations and some directly within the RGH. These will include:

- Physiotherapy
- Occupational Therapy
- Diagnostic Radiography[43]
- Dietetics
- Podiatry
- Speech and Language Therapy

The other professional groups are too small to provide a sustainable service located within the RGH, or the surrounding area, but would provide a visiting service, e.g. Orthoptics and Orthotics.

Some of the professions, because of the small number of funded posts, limitations on the scope of the service, or the dependence on equipment to deliver their service, are likely to remain located in larger conurbations, DGH or Teaching Hospitals and patients will have to travel to access the service. These are:

- Prosthetics;
- Art Therapy;
- Therapeutic Radiography.

Whilst the majority of AHPs will retain a broad generalist remit in remote and rural areas, there is the potential for specialisation within individual professions, or by individuals who have developed

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[43] The role of the diagnostic radiographer is discussed in greater detail below.

an interest. There will be different levels of specialism based on healthcare needs. These roles could be described as Specialist AHPs or AHPs with a Specialist Interest (AHPwiSI).

A specialist AHP could be defined as **an experienced practitioner with post registration training and experience in a defined speciality whose workload is focused almost entirely in that speciality.** For example, there are well-established roles for Specialist AHPs in Stroke, Respiratory, Diabetes and Paediatrics etc.

The opportunities to develop AHPwiSI are usually, but not exclusively, based in locations with larger communities or groupings of communities serving a population of greater than 50,000 or more in some cases. There is potential, however, to share such AHP posts between NHS Boards, although, there will always be a limit to the number of Consultant and Advanced roles for AHPs.

The AHPwiSI model provides an alternative or additional approach bridging the gap between specialists and generalists for more rural parts of Scotland. Further work is required to consider the need for generalists, specialists, advanced or consultant practitioners and AHPwiSI within the workforce model for remote and rural healthcare. The workforce solutions are likely to involve a range of grades and solutions and further work using the Career Framework for Health to determine the components of the AHP workforce is required. In parallel with other disciplines, a career structure for AHPs within remote and rural health care must be maintained from support worker through to clinical leader or Consultant Practitioner.

The Model of AHP Workforce in Remote and Rural Healthcare

The AHP workforce model for remote and rural health care will be composed of a range of practitioners, at different levels, within each professional group. The majority of the workforce will work in a generalist capacity providing a flexible locally accessible service; however a component of the workforce will hold specialist skills and work either as an AHPwiSI, Specialist AHP or Consultant AHP. Work is ongoing in NHS Scotland on defining advanced practice for AHPs but the following definitions provide some clarity on the emerging skill and role mix in the AHP workforce with relevance to remote and rural health care.

Consultant AHP	Clinical leader within a specialism, driving strategy through innovation, service and practice development, research and education. Will manage a caseload related to the specialism. Likely to work across professional and organisational boundaries. Examples include Consultant Radiographer in Emergency Care, Consultant Dietician in Diabetes, and Consultant OT in Stroke.
AHP Professional lead/Manager	Overall responsibility for planning and delivery of an AHP service within the organisation. Examples include AHP Manager, Professional Head of Service, and Service Manager.
Specialist AHP Practitioner	Experienced practitioner with post registration training and experience in a defined speciality. Caseload is focused almost entirely in the speciality. Some will work at advanced level. Examples include Specialist CAMHS OT, Specialist Musculoskeletal Podiatrist.
AHPwiSI	Experienced practitioner, specialist in general practice with education and competence in a specific specialist area providing a local/enhanced service to particular conditions or patient groups. Some will work at advanced level. Examples include Physiotherapist with special interest in injection therapy, Speech and Language Therapist in hearing impairment, Dietician with a special interest in obesity.
AHP advanced generalist Practitioner	Practitioner with extensive experience and education in general practice who leads and develops an element of a service, act as a team leader and as an expert resource in their field. Such practitioners may have extended their role to support flexible and locally delivered services.
AHP specialist generalist Practitioner	Experienced practitioner with developed skills in general practice working as part of an extended primary care team. Extended roles may form part of their role to support locally delivered services.
AHP Practitioner	A practitioner consolidating and developing their skills with support of more experienced staff. Will usually carry a mixed caseload.
AHP Assistant Practitioner	An experienced support worker who has undertaken accredited training to develop their skills, delivering patient care, delegated by a registered practitioner within a supervision framework.
AHP Support Worker	Support workers deliver patient care as delegated by a registered practitioner. May be generic (supporting a range of professions) or profession specific.

Clearly the AHP workforce requirements need to be developed locally within CHPs based on a clear assessment of the health care needs and priorities in each locality.

Diagnostic Radiographers

Due to their key role in the support of remote and rural service, one specific group of AHPs, diagnostic radiography, has been examined in more detail and a tiered approach considered. It is recognised that radiographers will need to work as part of a multi-disciplinary partnership network across NHS boundaries to sustain and support clinical pathways in the RGH.

The workforce model used in these locations needs to take into account the following factors:

- Skill mix
- Flexibility
- Education, training and CPD
- Governance

Extended role

Opportunities exist to ensure rapid reporting of film and scan results through role extension at advanced practitioner level. There are examples of this already working satisfactorily in some RGHs e.g. plain film reporting. Where extended roles are supported, benefits can be realised by embedding the Radiographers within the wider medical/surgical team to provide opportunity for case conference etc.

Inter-board working

Given the likely interdependency of the RGHs with other DGHs and Teaching Hospitals, opportunities exist to support innovation and inter-board working. For example, if there is insufficient volume for a particular type of investigation in one Island Board to ensure maintenance of skills in the technique inter-island services should be explored. It may be possible for an advanced radiographer with training and experience in barium studies to support 2 island services in a model of planned diagnostic provision where clinics can be booked in advance. The introduction of PACS also provides opportunities to consider emergency service provision through inter-board collaboration.

Future model of Workforce for Radiography

The emerging model for each hospital site is likely to be in line with the following:

Role	Level of Practice
1 x Radiography Consultant/Lead Clinician/Manager	Service Managers or Leads will carry overall responsibility for the planning and delivery of the radiography service and deliver an element of the clinical service. The Radiography Consultant will bring expert clinical skills and leadership and their role will focus on innovation, practice development, research and education.
Advanced generalist radiographers (WTE to be confirmed) covering a range of imaging modalities (with reporting capabilities and utilising other skills)	A radiographer with extensive experience and post graduate education with competence in a wide range of imaging techniques and with reporting abilities. Could hold team leadership role. Will define the scope of practice of others and develop radiography services to meet patient needs.
Generalist Practitioner Radiographer (WTE to be confirmed)	A radiographer with general imaging skills, working as an autonomous practitioner. May supervise assistant practitioners.
Assistant Practitioner (WTE to be confirmed)	An assistant practitioner performs non-complex, protocol-limited clinical tasks under the direction and supervision of a registered radiographer.
Radiographer support worker/generic support worker (based on workload assessment/requirements)	Radiography support workers undertake clinical or administrative duties as delegated by a radiographer. Generic support workers may cover more than one professional group.

The radiography consultant role could be shared between NHS Boards, particularly the strategic leadership functions.

It is anticipated the advanced generalist radiographer would hold the necessary qualifications and skills (through undergraduate or post graduate training) to provide plain film, CT and possibly ultrasound services. Many would also be trained to undertake some reporting, particularly of plain film skeletal images, however further extension of skills to other areas of reporting should also be included to support a flexible and sustainable radiography workforce. This advanced role could provide a team lead function in areas where a managerial post is unsustainable.

Some of the larger RGHs may be able to sustain a number of advanced generalists in addition to individual sonographers as part of the radiography team. However consideration would need to be given to workforce flexibility and affordability and where demand would not require a full time Sonographer, the integration of this role with the advanced generalist radiographer could be considered. Some of these roles already exist in RGHs in NHS Highland.

Within remote and rural healthcare there are opportunities for further development in imaging services:

1. **CT reporting** as part of a network – there is evidence of radiographers successfully extending their role to CT head reporting (for example) in other parts of the UK.

2. **Barium studies** could be undertaken locally, however there is increasing evidence to suggest that the demand for this test will reduce as new technology is developed. NHS Boards should determine whether this should be provided within the RGH.

3. **Plain film reporting** There are examples of Radiographers in Scotland and other parts of the UK, with the required training and competences, undertaking reporting of chest or axial skeleton images resulting in a reduction in waiting time for reports assisting in the rapid diagnostic process.

5. **Prescribing** Radiographers are one of 3 AHP professionals who are currently able to work within supplementary prescribing legislation. Progress towards independent prescribing may also be considered in future. There are opportunities to utilise this increased flexibility within the workforce to reduce complex patient pathways and minimise hand over between professional groups, thus streamlining the patient journey.

6. **Other opportunities**   Where demand is sufficient, there may be opportunities to increase the range of diagnostic imaging in the RGH to include videofluoroscopy, hysterosalpingogram and injection under fluoroscopy, thus reducing referrals to specialist centres. Further work in this area to consider demand for these diagnostic procedures in each area needs to be completed.

Clinical Governance

Radiographers have identified the importance of clinical governance and in particular clinical risk management within the scoping exercise for the RGH workforce. They have also recognised the limitations of the service as well as opportunities for role extension. There has been repeated mention of the importance of regular audit of practice, second opinion, case review, mentoring, training standards and the importance of integrating the radiography workforce into the clinical team in the RGH.   A formal radiology network, in which the RGH radiographers participate and seek clinical decision support from radiologists within larger centres, will therefore be essential. Radiographers have also acknowledged that the physical presence of Radiologists on site as part

of a visiting service is highly valued and an important part of maintaining effective governance and supports the team approach.

It is acknowledged that concerns remain within the clinical community on how far role extension can be taken due to medico-legal and accountability issues. However, the recently published joint guidance from the College of Radiographers and the Royal College of Radiologists provides clarity on these issues. It is essential that developmental work be undertaken to alleviate these concerns if the RGH model is to be accepted and sustained.

Biomedical Scientists

There is a requirement for all Biomedical Scientists (BMS) to be able to undertake core tests in the disciplines Blood Transfusion, Haematology and Biochemistry so that they can participate in the laboratory service provision within and out of hours. A multi-skilled generalist model for Biomedical Scientists (BMS) should therefore be developed, with all BMS working within the RGH competent to deal with a core range of tests including:

Blood Transfusion	Haematology
• Grouping and Screening • Cross Match • Issuing of Fresh Frozen Plasma and other blood products	• Full Blood Counts • INR • Making and interpreting films • IM testing
Biochemistry	
• Urea and Electrolytes • Glucose • Liver Function Tests • Amylase, lipids, microalbumin • Troponin Levels • Blood Gases	• Thyroid Function • BNP • Salicytate or alcohol levels • Bone Profiles • Pregnancy testing

There is also a requirement for BMS to undertake quality management and audit, including the quality assurance of near patient testing equipment for utilisation in the primary and secondary care settings.

During the consultation, there were some Boards who intimated that there would also need to be a limited **microbiology** service provided locally. This was **not** identified as core but where it is provided, then the following limited workload has been identified.

- Routine Urines

- Swabs

- Sputum, Fluid and Blood Cultures

- For Occult Blood

- MRSA screening

- Sensitivity Testing

Work is currently underway nationally to create a National Strategy for Healthcare Science in Scotland. The strategy will examine such areas as workforce development, education and innovation. It is recommended that this strategy include accessible educational programmes to facilitate the development of the generalist biomedical scientist working in the Rural General Hospital.

The Wider Team

It is recognised that there are other, smaller professions such as Clinical Psychologists who provide valuable services within the remote and rural setting. Unfortunately, within the constraints of this project, it has not been possible to cover all professions in detail.

The role of the **Physicians Assistant** has been piloted within Scotland, however, to date there have been no pilots within remote and rural areas. During the development of this framework the potential for this role in remote and rural areas has been debated and it has been suggested that at this stage, the role might be of limited benefit, given restrictions on their ability to prescribe and the need for supervision. This role may have the potential to be of benefit to remote and rural areas, if innovative approaches to supervision can be developed and limitations to prescribing are relaxed. There are views however, that nurses offer a wider range of competence, without these identified limitations.

Commitments

Community Resource Hubs should have a skill mix appropriate to the health needs of the community.

The RGH will have a medical workforce which is predominantly consultant led in the area of anaesthetics, medicine and surgery, supported by GPwiSI and doctors in training.

Nurses in RGHs should be multi-skilled, generalist practitioners.

The Nurse with a Special Interest (NwiSI) in Acute and in Enabling Care will be developed.

AHPs should be multi-skilled generalised practitioners, to meet the therapeutic needs of patients across the spectrum of care.

AHPs should develop special interest roles (AHPwiSI) where there is a defined healthcare need.

The radiography team within the RGH will be flexible and consist largely of generalist practitioners.

A team of multi-skilled generalist Biomedical Scientists who are part of a formalised network will be developed.

A generic support worker will be developed to support the work of Nurses, AHP and Social Care professionals.

There should be robust systems established to allow for proleptic appointment of professionals to remote and rural areas.

Forward Issues

Working patterns within larger centres need to be reviewed to support the needs of the RGH.

Research into the acceptability and attractiveness of the GPwiSI within remote and rural communities is required.

An audit should be commissioned to undertake an evaluation of the effect on service delivery of a Consultant-led medical service as compared to a GPwiSI led medical service as part of an obligate network.

A pilot should be established to test the hybrid acute medicine/general practitioner role.

NHS Boards are encouraged to develop innovative solutions to providing access to community pharmacy services in remote and rural areas in the Pharmaceutical Care Service Plans.

Education

Generic Issues

Current Education	Emerging model of Education
• Varied skills • Difficult to access • Not rural specific • Minimal rotation to bigger centres	• Generalists • Remote and Rural Specific • Blended and Distance learning • RRHEAL • Supported rotations to bigger centres for CPD

Currently the trend for professional training is geared towards the development of a specialist practitioner. Practitioners working in remote and rural areas require to be generalists with a wide breadth of knowledge across the spectrum of care. They must also have a range of 'specialist' skills in immediate care so that they are able to provide care until a support or retrieval service can arrive, undertaking such courses as provided by the British Association of Immediate Care Skills.

Practitioners currently experience difficulties in identifying suitable and gaining access to specific, remote and rural education. The problems include the availability of specific courses, coupled with the need to travel and have their post backfilled in order to undertake this study. There must be an appreciation of the high costs incurred by remote areas in attending such courses and educational providers should be encouraged to provide programmes that are accessible from remote locations. This is not a uniquely Scottish issue and in other countries[44], for example, a Continuing Professional Development subsidy fund, to assist practitioners in remote and rural healthcare to participate in conferences and skills development opportunities relevant to remote and rural healthcare have been introduced.

Remote and Rural Specific education must be increased. The accessibility of remote practitioners to robust supported learning programmes, and rotation of remote and rural practitioners to bigger centres for skills update, should be implemented. The possibility of developing a specialist degree for practitioners working in remote areas should be explored. For example, there is the potential within the review of pre-registration nurse training by the Nursing and Midwifery Council

to incorporate a generalist non-branch option which would be of enormous benefit to remote and rural areas.

Skills decay is an acknowledged problem in remote areas where exposure rates to practice are low[45]. There must be more locally delivered training such as utilising the method of 'Clinical Fire Drills' to run through scenarios which practitioners are likely to face. The potential use of the e-library and the Rural Portal should be explored for professional updates, keeping up with the latest good practice standards and e-learning.

The GP appraisal and revalidation system and the nursing and midwifery fitness to practice process are good methods of ensuring that practitioners are constantly evaluating their professional development.

Commitment

The Remote and Rural environment should be recognised as a rich source for training opportunities.

A Practice Education Network for remote and rural healthcare should be established.

Education programmes which are specific and responsive to the needs of remote and rural practitioners should be introduced.

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[44] State of Victoria in Australia

[45] (2006) "Portfolio of Evidence for the Virtual School of Rural Health" 2006 Swann, G obo NES

Remote and Rural Healthcare Education and Learning Network

The North of Scotland Deanery of NHS Education for Scotland led the project to develop a Rural Educational Strategy for NHS Scotland. The Project identified four objectives for this Group:

1. Develop a proposal for a Virtual School of Rural Health Care;

2. Establish a Rural Educational Strategy group with involvement of the Scottish Medical Royal Colleges, Rural NHS Boards and other partners;

3. Align the Rural Educational Strategy to the future shape of rural services, especially the Rural General Hospital (RGH)/rural Community Health (and Social Care) Partnership (CHP) axis;

4. Develop a mechanism for development of appropriate education and training for the remote and rural NHS workforce.

Access, rural specific content and support for remote and rural learners were the key issues to be addressed. Remote learners need opportunity to access learning in a range of ways using modern media, whenever feasible. Learning needs to be relevant to the range of competences required and the context in which they must practice. The importance of team and peer support must also be recognised and tools to consciously support remote learners should be developed.

The concept of a Remote and Rural Healthcare Education Alliance (RRHEAL) supported by a remote and rural Managed Education Network emerged through an extensive consultative process. The RRHEAL would provide a linking role between the service and educational providers and be a sustainable structure supporting rural education for the NHS Scotland for the future. It would be managed under governance arrangements as part of NHS Education for Scotland (NES) as a Programme Board with supporting infrastructure. The NES role will be to provide a governance structure and infrastructure that will manage and enable a coherent managed education network for remote and rural areas throughout Scotland, that encompasses territorial NHS Boards, their rural CHPs, and Educational Providers, both institutional and non-institutional.

In developing detailed plans for the RRHEAL, a commitment remains to the establishment of a network that makes links between existing resources, systems and institutions more effective.

Establishing and Sustaining Educational Infrastructure

In order to identify education gaps the NES Rural work stream commissioned a project to map relevant rural education, define and then design an information resource for rural-based and rural-interested learners. This work is complete and a searchable database was embedded in the NES Rural E Library in early 2007[46].

Delivering Educational Support for National Clinical Priorities

It is inevitable that further workforce development needs will be identified as the national Rural Projects work streams develop their plans, and the NES Rural office will provide a focus for educational provision and enquiry from the rural NHS and contracted workforce.

NES provides many opportunities through existing strategies to develop rural-relevant and rural-accessible and well-supported training and education. In seeking access to financial resource to promote rural relevant design of training intervention RRHEAL stakeholders are contributing to discussion around mental health, children and building workforce capacity.

Appropriate workforce development products/programmes will be identified or developed to support emerging and extended roles. The outcome will be improved recruitment and retention, locally delivered services that are fit for purpose, rural career development opportunity and quality assured education.

GPs with Special Interests

In support of shifting the balance of care, NES is resourcing the development of rural GPs with Special Interest in Ultrasound Imaging using outreach educational methodology delivered from a Higher Education Institute (HEI). Accreditation from the HEI is available for successful GP participants. Evaluation is ongoing with reports due at the end of the 2-year programme (January 2008). The intended outcomes are reduced patient travel, improved access to diagnostics (reducing demand on hospital-based imaging systems) and improved operational use of existing facilities, including extension and use out of hours.

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[46] http://www.elib.scot.nhs.uk/portal/rural/pages/index.aspx

Commitments

RRHEAL should introduce Educational Programmes which are specific and responsive to the needs of remote and rural practitioners.

RRHEAL should ensure that Educational Programmes, wherever possible, are accredited.

RRHEAL should develop robust systems that establish a critical mass of remote and rural learners that secures viable investment for learners.

Remote and Rural Training Pathways for Doctors

The National Framework for Service Change highlighted the need to develop specific pathways for the training of remote and rural doctors, and asked the Royal Colleges to develop such models. The Remote and Rural Training Pathways Project was developed as a tripartite collaboration between the Academy of Medical Royal Colleges and Faculties in Scotland (The Academy), NHS Education for Scotland (NES) and the Remote and Rural Steering Group on behalf of NHS service requirements.

The objectives of this group were:

- To gain an understanding of the service requirements within remote and rural healthcare, including definition of a baseline of the health needs of the population
- To define the skills and competencies of medicine in the context of the multi-disciplinary team, required in remote and rural practice, linking as necessary with evidence base within the UK and beyond
- From the service requirements, to scope the educational requirements required to attain competence
- To develop appropriate frameworks for the establishment of educational standards for remote and rural healthcare, which are transferable between disciplines, but specifically address the needs of Anaesthetists, Physicians, Surgeons and General Practitioners working in a remote and rural environment
- To ensure that the framework has the flexibility to adapt to the changes in medical practice and training accreditation
- To develop appropriate curricula and training programmes, with supporting accreditation mechanisms, to deliver training
- Identify infrastructure to deliver CME/CPD programmes in remote and rural medicine
- Ensure that there are appropriate links between the development of educationally sound practitioners and the different aspects of remote and rural healthcare needs
- To identify solutions which address immediate recruitment and retention issues, including development of bespoke educational programmes

The work of the Training Pathways Group has been based around the four key medical specialties of Medicine, Surgery, Anaesthesia and General Practice. A Fifth Workstream looked at more

generic immediate service needs, such as recruitment and retention, and the uses of technology and mentoring.

The main focus of the medical subgroups has been to design a competency framework to train doctors for practice in the Rural General Hospitals adapting the general training curricula for each specialty when required. It was also noted that these initiatives on training might provide valuable contributions to the recruitment of other doctors who may wish to move to rural hospital practice, while at the same time being sufficiently broad-based to allow practitioners who so wish to practice elsewhere.

The work of the five subgroups is summarised below. The full reports from each group, including curricula where appropriate, are available separately on the Remote and Rural Portal of the NES e-library.

Programme and Curricula Development

The work of all four medical subgroups has centred on the generic curriculum for that specialty, and the recommendations from the groups are as follows;

Anaesthesia

This group recommended specific training to be achieved within an advanced module during years five to seven of run-through training, potentially requiring one year of training time. This could readily be incorporated educationally as the current curriculum has the facility to allow for up to a year of "off-rotation" training. The availability of this training on a post-CCT basis or for an existing consultant wishing to relocate to a RGH, would depend on a new funded slot either through NES/Scottish Government initiatives such as the new consultant scheme or by proleptic appointment by rural Boards.

Key areas meriting additional training and experience include:
- Consolidation of general skills appropriate to the spectrum of practice would be gained by 3 – 6 months' training in one or two Rural General Hospitals;
- Adult and paediatric transport medicine achieved by 3 months' rotation to West of Scotland Shock Team or equivalent;
- Neonatal resuscitation by rotation to an appropriate teaching hospital service for 6 weeks
- Aspects of chronic pain management and palliate care to be achieved in a major centre over 6 weeks.

General Practice

This group has developed a set of rural competences that follow the RCGP curriculum, addressing clinical, governance, education and patient safety issues for practitioners working in isolation. The group recommends that these competences be followed in the GP Rural Fellowship Programme. It also suggests that single-handed work in remote and rural General Practice should be considered a GPwiSI in its own right. The group has outlined the different staff models and levels, and GP specialty training categories, how they are met and governed.

Other recommendations include:

- Competency assessments need to be developed for the Rural Fellowship in a similar manner to GPST to match the new remote training competences.
- The GP rural fellowship requires a certificate of satisfactory completion. The group proposes a tripartite panel including RCGP Scotland, NES and the employing CHP establish a framework for certification.
- All GP rural training pathways and accreditation mechanisms must maintain flexibility to allow established urban GPs to move to remote and rural practice at a later point in their careers. Three-month orientation and allocation of a GP peer mentor are recommended, with CHPs funding training gaps during this time to courses such as BASICS.
- A curriculum and competency framework which follows on the educational methodology of GPST needs to be developed for GPs working in Community Hospitals which could be completed during a Rural Fellowship after GPST.

Medicine

This group suggests a mixed economy of routes into remote and rural medical practice, the main training pathway being via a CCT in General Internal Medicine (acute medicine) with a special interest in Remote and Rural Medicine. It is likely that the consultant led model will continue. However, GPs appropriately trained may provide important input in some areas.

The routes:

- CCT in General Internal Medicine (acute medicine) with a special interest in remote and rural medicine (level 3 competence in General Internal Medicine)
- CCT in a medical specialty with level 2 competence in General Internal Medicine

- For GPs who will contribute to Acute Medicine, a CCT in General Practice combined with level 2 competence in General Internal Medicine. Preliminary work on this model has been funded by NES and begins in January 2008.

Surgery

This group proposes that the construction of a curriculum for remote and rural practice is a relative easy process, given that the intercollegiate Surgical Curriculum Project and the Orthopaedic Competence Assessment Project have developed curricula from which it is a straightforward process to abstract the knowledge base and necessary competences required of a surgeon working in relative isolation.

Other considerations:
- Surgeons in remote and rural practice require a broad generic training.
- This would include experience in some aspects of Emergency Medicine (formerly A&E), Orthopaedic Surgery, Urology, Obstetrics and Gynaecology, Neurosurgery, otorhinolaryngology, ophthalmology and plastic surgery. Most of these elements could be achieved during attachment to busy A&E Departments with secondments to specialist departments built into the curriculum.
- In some specialties, Neurosurgery for example, the trainee would be required to acquire understanding of the principles of the specialty rather than a list of specific skills since there would be very few occasions in which these skills would be required.

The Fifth Workstream

This group explored and advised on cross cutting immediate service delivery issues. In particular, there is a need to develop sustainable approaches to recruitment and retention and to suggest ways of making posts attractive to prospective candidates. This group also researched the uses of technology and mentoring schemes.

Recommendations made by this group include:
- Comprehensive information packs should be available to all prospective candidates for remote and rural posts. These should include information on social and environmental aspects as well as information about the post and service. DVDs such as 'Live and Work in Lochaber' should be considered for those areas that do not yet have access to this type of marketing.

- Opportunities should be provided prior to appointment to explore the negative as well as the positive aspects of a professional living in a rural and remote community, and advice and support on dealing with these offered.

- Formal Networks with DGH and Tertiary Centres should be developed and supported to allow for professional development, opportunities for job swaps, skills maintenance, professional leadership and learning. The concept of a mentoring institution should be further explored.

- The use of technology for clinical, professional development, training, networking and meetings should be actively encouraged and the necessary infrastructure should be a priority for NHS Scotland.

Additional Work

Acute resuscitative care including advanced airways management

The Fifth Workstream is currently looking at issues around the setting of recognisable and consistent standards for acute resuscitative care including advanced airways management. It was agreed that these aspects of practice were not uniquely related to anaesthesia and that the competencies required more closely resemble those defined for airway management in the College of Emergency Medicine curriculum. Round the clock provision of acute care, resuscitation and airways management was agreed as being a key issue in both RGH and community hospital settings. The current work involves identifying the skills and competences needed, how to make this option accreditable for non-anaesthetists, and how to maintain skills in low-volume practice. This work is ongoing and a report is expected in December 2007.

Treatment of the Acutely Ill Child

Work is currently underway to develop a competency framework for the treatment of acutely ill children in remote and rural areas. It was agreed that this work was needed in view of the fact that many remote and rural physicians and practitioners feel ill equipped to treat children. It is difficult to attract consultant paediatricians to single handed posts in remote and rural locations, and a two-tier model is currently being researched; GPwiSI in Paediatrics and Child Health and GP Physicians with high level competence in Paediatrics and Child Health. This work is linking with the Emergency Care Framework for the Acutely Ill and Injured Child National Group.

Proleptic Appointments

All five groups have made recommendations in the area of proleptic appointments, suggesting that as far as possible appointments should be made in advance of need to allow sufficient time for targeted training. It is felt that Boards have a responsibility to ensure that sufficient skills are acquired to allow the candidate to function appropriately. The Fifth Workstream was awarded monies for the proleptic appointing of practitioners outwith the SpR scheme, and is currently liaising with the Boards to identify appropriate posts.

It is also strongly felt that training leave should be in place to allow individuals to maintain and upgrade skills.

Technology

The generic Fifth Workstream explored the various uses of telemedicine, which range from diagnostics to psychological treatments and patient visiting by videolink. Whilst the technology is in use, it is apparent that it is not currently used to best effect and technical support is lacking in some areas. It is suggested that this could be maximised to support both current and emerging models and reduce isolation for rural practitioners. Telemedicine needs to be reviewed in a wider context, with remote units linking to larger centres across Scotland, rather than attempting to support solely within individual Board areas. Evidence suggests that there is a place for a champion for this work, and that in pilot projects this had led to a move towards the option of telemedicine sooner.

Formal Mentoring and Networking

It is clear that there are some existing strong and invaluable links between consultants, but these are often forged through personal relationship and previous working arrangements rather than formal networks. All groups believe that networks could be strengthened and explicit and could also provide professional leadership within a clinical governance framework. The concept of a 'mentoring institution' was explored, whereby a rural general hospital (RGH) would, in its entirety, be formally supported by a larger unit. Managed Clinical Networks work well in some areas and for some conditions, but it was thought that these could be further developed.

Doctors in Training

Remote and Rural healthcare does and should continue to provide an important training environment and we need to ensure that the following trained doctors are produced each year:

Physician	ST3 Acute medicine/ Rural track to CCT	Medicine Training Board
	2 x ST3 available each year	
Surgeon	ST3 General Surgery/ Rural track to CCT	Surgical Training Board
	1 - 2 x ST3 available each year	
Anaesthesia	ST7 Anaesthesia/ Rural Option	Anaesthesia and Emergency Medicine Training Board
	1 x ST 7 slot each year	
General Practice /acute medicine (new hybrid programme (D)	Post-GP CCT/ Acute medicine slot	General Practice Training Board
	1 x ST 3 acute medicine slot each year	
General Practice (B/C/D)	Existing NoS Deanery Rural GPST output, linked to the existing Rural Fellowships	General Practice Training Board

Impact of GP 18 month training

Changes to GP training programmes moving to GP 18 month training will commence in August 2008 and there is a concern that the effect of this on rural hospitals will be disproportionate, given the small numbers of doctors in training in these systems, the majority of whom will be in GPST programmes. Early work suggests that across the six RGHs there will be six posts that are affected. This will have a significant impact on service delivery and legal rota systems for junior doctors in these areas. The Scottish Government has agreed to discuss the options for dealing with this change with the affected Boards to ensure services in these hospitals can be maintained during the implementation of this change.

This report strongly recommends that that a commitment is made to fund replacement posts, supported by the necessary educational approval, to ensure that we can continue both to deliver a sustainable service and to attract junior doctors to these posts. The current proposed solution of backfill with specialty FTSTAs may not be a tenable option in these localities where specialty approvals are not necessarily in place or achievable.

A full report from the Training Pathways Project will be made available on the Scottish Government Health Department's website.

Commitments

NHS Boards should consider proleptic appointments, either on an individual NHS Board or regional basis, to Consultant posts in order to allow for time for appointees to undertake site specific training prior to taking up the substantive post.

The Academy of Royal Colleges should commission research into the attractiveness of the GPwiSI role within remote and rural areas.

The importance of remote and rural areas as a training resource for doctors in training should be recognised and appropriate training opportunities should be established, through new Speciality Training posts if necessary, to ensure the supply of remote and rural physicians, surgeons, anaesthetists and GPs.

The proposed training curricula, developed by the Remote & Rural Training Pathways Group, should be adopted.

Remote and rural systems should not be destabilised, as a result of the full implementation of MMC.

NHS Education for Scotland should, in collaboration with the Academy of Royal Colleges establish a pilot to test the hybrid acute medicine/general practitioner role.

Forward Issues

The Scottish Government should review the proleptic appointment scheme to support sustainability of R&R services.

The Remote and Rural Training Pathways Group should seek to establish approval for the new curricula through the relevant medical training accreditation bodies.

The Training Pathways Group will progress the work in the areas of acute resuscitative care and airways management, and treatment of the acutely ill child.

NES, in collaboration with Remote and Rural NHS Boards, through the Deanery structure must continue to ensure adequate training opportunities for doctors in Remote and rural practice.

NES, through the deanery structure must ensure that a commitment is made to fund replacement posts for backfill of the 18 month GP training, and that these posts are supported by the necessary educational approval, to ensure that we can continue both to deliver a sustainable service and to attract junior doctors to these posts.

NHS Boards should undertake a review of the current medical workforce to provide NES with clear forward projections for training numbers.

Infrastructure to Support Remote and Rural Practice

Support Networks

Time and again throughout this process the need for formal, obligatory networks has been repeated as remote and rural health systems cannot exist in isolation but need to network with others to sustain local care, support practice and treat patients. There are few networks between primary and secondary or tertiary care, however, evidence shows that formal networks do improve the service to patients in remote areas and reduce the need for multiple visits to secondary or tertiary care[47].

Obligate networks should be developed as partnerships and should incorporate responsibility for the development of robust care pathways (both for planned and emergency care), and to provide support to remote and rural localities 24/7.

It has been suggested that two types of network arrangements are needed:

- Laterally between remote practices or RGHs to develop agreed standards, protocols, training and development, support and share good practice; and
- Vertically working with specialist experience in another location to ensure quality and sustainability of appropriately devolved local services. This is likely to be condition/specialist based e.g. cancer, neurology organised as part of a managed clinical network.

The benefit of establishing networks is mainly to support the local delivery of care, but includes:

- Access to expert opinion to inform local clinical decision making;
- Peer group support, training and education;
- Rotation for skills update and maintenance;
- Development of shared protocols and pathways;
- Transfer debriefs;
- Increased practitioner confidence;
- Improved discharge planning.

The development of these obligate networks are likely to have a bigger impact on the day to day working of those in the larger centres than in the remote and rural communities, however, these

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[47] (2001) "Cancer Care in Orkney" January 2001 Remote and Rural Areas Resource Initiative

are crucial to sustainability of local services and appropriate clinical decision making. Regional Planning Groups, through Directors of Planning and Board Medical Directors should facilitate discussions between those in R&R areas and those in larger centres to establish such networks.

Commitments

Vertical obligatory networks between RGHs and larger centres should be established.

Lateral networks between RGHs should also be established.

Forward Issues

Directors of Planning and Board Medical Directors should agree the nature and form of lateral and vertical networks.

Robust Care Pathways should be developed for the most common patient conditions.

Quality Assurance and Governance

Remote and rural healthcare needs to be supported by robust systems of governance and should be judged on the basis of the standards developed for NHS Scotland. Remote and rural healthcare providers need to have systems in place to assure the public of the level of competency to deliver identified activity. They are required to meet the appropriate standards and should have processes in place to demonstrate this. Where an RGH considers that a procedure beyond the core service can be provided locally, there should be a robust system for assessing whether the service can be supported locally. That system needs to take account of the skills and competences of the whole multi-disciplinary team.

Remote and rural areas must be subject to the same good practice standards as other geographical areas and should not be judged on the basis of lower standards. It is recognised, however, that there are difficulties for some remote and rural areas achieving national standards. Non-achievement, however, can often be due to reasons of structure and/or processes rather

than a low standard of outcome. It is proposed, therefore, that future standards developed by NHS Quality Improvement Scotland (QIS) for NHS Scotland services should be considered in the context of the different structures and processes necessary to provide services in remote and rural areas. To effect this, NHS QIS have agreed to establish a system through which Remote & Rural Clinical advice from an Advisory Panel is sought during the development of standards and, where appropriate, other publications.

Commitments

Remote and Rural healthcare should be judged using the same standards adopted throughout Scotland.

Forward Issue

NHS Quality Improvement Scotland (QIS) should appoint a Remote and Rural Clinical Advisor to ensure an understanding of remote and rural issues sought in the development of its standards. This Clinical Advisor should establish a Remote and Rural Reference Group to support him/her in this work.

Physical Infrastructure

Current Infrastructure	Future Infrastructure
• Disparate bases • Access to intermediate care variable • Variances in IT • Minimal diagnostics	• Purpose-built premises • Local access to Intermediate care services • Broadband access and Tele-health • Good diagnostics

Currently, practitioners in the community are based in different locations. Teams should be integrated with services based in the GP Practice to enhance communication and make best use

of local resource[48]. The ECCT where possible should be based within a purpose built building and NHS Boards should take this into account when prioritising capital plans.

The majority of practitioners other than GPs still reported utilising dial-up modem Internet access. Any new premises must have broadband capacity with access for all the multidisciplinary team, with shared links to health and social care computer systems. Computerised systems must be integrated with electronic referral to secondary care.

Where there is a community hospital within the locality, it is suggested that this be aligned to the GP Practice and act as a local resource centre.

Diagnostics

Diagnostic capability has been highlight as one of the key aspects of healthcare that remote and rural communities expect to have local access to. There are different levels of access across primary care, within a Community hospital and within the RGH. Locally provided diagnostics can reduce unnecessary trips for patients[49]. There follows a menu of diagnostic tests that are being proposed as minimum requirements in remote and rural areas. In the development of these proposals, there has been collaboration with other national workstreams such as the Diagnostics Collaborative and the Community Diagnostics Project.   These workstreams have given initial support for the remote and rural diagnostic proposals, however these workstreams are due to report at a later date, therefore some amendments may be required.

Self Care

As described in the primary care model, patients are to be encouraged and supported to manage their own care. This will include the utilisation of e-health solutions to monitor long term conditions which could be accessed in the patient's own home.

Primary Care

There is only limited diagnostics capability available within primary care, and a study was therefore undertaken in the Western Isles to establish evidence to underpin the proposals to invest in local diagnostic capability (see Annex 6). The outcomes of the study supports the case for investment in the increased provision of diagnostics, the enhancement of intermediate care facilities and coupled with the use of new technology, the balance of care would be shifted more from secondary and tertiary to primary care. The range of diagnostic capability recommended

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[48] (2007) "Connected care in a fragmented world: lessons from rural healthcare", Mar 2007 Farmer, J, British Journal of General Practice
[49] (2007) "Shifting the Balance of Care" Tierney F and Grant F , Unpublished Audit by Remote and Rural Project

below has been based on the outcomes of the study, the views of clinicians in remote and rural areas and validated through the national Community Diagnostics and Diagnostic Collaborative Programmes.

The diagnostics capability required will differ with a practitioner in a GP Practice to those with responsibilities for a Community Hospital. In very isolated or small practices, it may be possible to share this capability. The specific range of diagnostics tests which should be available in remote Primary Care locations are:

- Blood Gas Testing including haemoglobin, white blood cell count, urea, creatinine, creatinine kinase and amylase, Troponin T, and INR;
- Electronic access to laboratory results;
- Electronic access to digitised imaging reports;
- Ultrasound scanner;
- E-health link for clinical decision support and tele-clinics;
- Cervical Screening.

ECCTs should also have access to high quality and robust videoconferencing facilities to facilitate networking, learning and minimise travel times for professionals. There are examples where this system works well currently as in Orkney and the Western Isles. Telemedicine links should also be available to facilitate clinical decision-making support and for tele-clinics, thus increasing local management of patients[50]. The use of tele-health solutions must also be explored to increase local access to services.

A wider range of diagnostics tests should be available within a Community Hospital, including:
- Point of Care Testing: blood gas analysis (including haemoglobin and white blood cell capability), and electrolyte measurement, blood coagulation and cardiac enzyme measurement;
- Cardiac Exercise Testing;
- 24 hour blood pressure monitoring;
- Simple imaging (i.e. plain film X-Rays);
- Digitised imaging utilising the PACS system;
- Ultrasound scanner;
- E-health link for clinical decision support and tele-clinics;
- Endoscopy (although this **may** be a mobile resource).

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[50] (2006) "Effect of Telemedicine and Telecare on Patients' Diagnosis and Treatment" Journal of Telemedicine and Telecare 2006 (12)1

It may be more cost effective to consider mobile diagnostic facilities for:

- Aneurysm screening;
- Breast Screening Service;
- Osteoporosis Screening;
- Echo-cardiography;
- Endoscopy.

It is recognised that whilst the above lists are core diagnostics that should be available, there may be some community hospitals who may wish to augment locally available diagnostics. For example the New Galloway Hospital in Stranraer has a CT Scanner and it has been shown that since its introduction, this diagnostic tool has reduced the need for transfer of patients by 25%.

Diagnostics in Rural General Hospitals

A wider range of diagnostic facilities will be available within the RGH including:

- **Imaging:** digitised image capture, ultrasound and CT scanning;
- **Laboratory medicine:** a range of core tests as detailed in the BMS section in the disciplines of biochemistry, haematology blood transfusion and microbiology (where agreed);
- **Endoscopy:** upper and lower GI and Cystoscopy;
- **Surgical intervention/investigation**: e.g. biopsy of lesion;
- **Cardiac testing:** exercise stress testing and echocardiography.

In addition, the fabric of a number of the RGHs is also poor and NHS Boards should ensure that this is also addressed within capital planning.

Screening

Management of risk in remote communities is more challenging than in more urban areas. A key aspect of managing risk is to ensure that these communities have the tools to support nationally approved screening programmes.

Such screening would include antenatal screening, screening of the newborn, breast screening, cervical screening and large bowel cancer bowel screening. There is also a range of rural relevant programmes where the outcome advantage is predicated on where the person lives and access to specialised care e.g. aortic aneurysm. There may be advantage on building on this model in remote and rural areas to minimise risks.

E-Health

The concept of utilising e-Health in the remote and rural situation is not an addition or an add-on, it is more of a developing philosophy which should permeate thinking around every aspect of the remote and rural agenda. The principles to underpin a technological approach are:

- That specialist advice can be provided from a distance by videoconference, telephone or e-mail.

- Travelling to a central point can be obviated by the use of videoconferencing to an RGH. Community Hospital, GP Practice or indeed in certain circumstances direct to a patient's home.

- Digital data can be transferred from remote sites to other points, enhancing diagnosis. So, for example, blood tests, ECGs, images of all sorts and sounds can be sent to a central point from a peripheral location. RGHs could therefore supply a network of Community Hospitals and/or a Tertiary Centre could likewise supply scarce intellectual resource to the RGH, Community Hospital and isolated practitioners.

There are existing examples of relatively small scale projects supplying such services. The Scottish Centre for Telehealth is in the process of supporting evaluation and development of these and is currently looking at around 12 practical proposals.

In addition, with the wider e-Health agenda, there is a focus on the creation of the electronic patient record which will be a significant development in improving communication across the continuum of care.

The principles outlined above apply to clinical care, education and enhanced self-care. They are dependent not only on a formalised service network being put in place, but on the development of a robust infrastructure, capable of using broadband technology for videoconferencing. At the moment the gold standard depends on fixed telephone lines, which are expensive and inflexible. In addition, various NHS Boards have different policies around the implementation of their Information Technology projects, leading to problems with communication across firewalls and regions.

A piece of work is going on at this moment to develop a network that is technologically robust for Scotland, but it is unlikely that this will be in place until around two years from now. The Scottish Centre for Telehealth has stated that it will support interim solutions until the longer-term network is in place.

It is important that connectivity between remote and rural communities and larger centres and within remote and rural communities are identified and addressed as part of the NHS Scotland response to e-health. The infrastructure, the level and quality of connectivity should be the same throughout Scotland. This may mean that the level of investment is significantly disproportionate. This will of necessity include investing in high-specification links between those most remote centres and the larger centre that provides clinical decision support and should include image and data transfer and video-conferencing. It is also important that larger health economies invest in appropriate e-health solutions. Anecdotally, the most difficult place for R&R health professionals to communicate with, using technology, is that which is most centrally located.

Commitments

NHS Boards should review their primary care premises and prioritise their capital plans to include purpose built premises, working in collaboration with Local Authorities and other Agencies to facilitate the co-location of teams.

NHS Boards should ensure that the fabric of RGHs is fit for purpose and ensure that, where necessary, this is addressed in their capital plans.

Patients should not have to travel needlessly for those diagnostic tests that can either be provided and accessed locally or provided locally and reported within the larger centre.

A remote and rural diagnostics network should be established to ensure local access, consistent standards of care, support of services and professionals in remote and rural areas and make best use of scarce resource.

The roll out of digitised imaging (PACS) should prioritise remote and rural areas.

The eHealth Strategy Board should review their investment plans to ensure that the level and quality of connectivity should be the same across Scotland.

Remote and Rural Communities in Scotland should not expect anything less than a first class IT infrastructure to support local delivery of care. The IT infrastructure must therefore be robust across the whole of Scotland to allow for rapid and safe communication and reduce the need for patient and staff travel.

The concept of utilising e-heath in the remote and rural setting must permeate every aspect of service planning and delivery in remote and rural healthcare to maximise local access and reduce the need for patient travel.

NHS Boards should review their existing premises and ensure any new premises have access to a range of modern communication tools including broadband access, video-conferencing and tele-medicine as a minimum.

Emergency Response and Transport

Emergency Response

In remote and rural areas, the Scottish Ambulance Service (SAS) are presented with huge challenges in fulfilling accident and emergency response, which is one of their main functions, the second of which is patient transport. This is mainly due to the wide geographical areas to be covered within limited available resource. An audit undertaken as part of this project demonstrates some of the difficulties presented by the dispersed populations across remote and rural areas (see Annex 7). Another example is that of the Island Boards who have particular issues with the outer islands of Orkney and Shetland not having emergency land ambulance responses and so rely on local GPs or Nurses responding and utilising local transport to transfer patients to the local RGH.

The SAS have risen to these challenges by modernising their workforce and implementing modern technologies to improve responsiveness. These include new air ambulances; use of digital mapping technology, including automated vehicle location systems; and the extension of the role of SAS personnel to support local delivery of care. The SAS are keen to develop a multi-disciplinary team approach with other local healthcare providers.

However, it is clear that for remote and rural communities the SAS needs to adopt a more creative community emergency approach to fulfil its responsibilities. For example schemes such as the SAS 1st Responder Scheme[51] and GPs, Community Nurses and Community Paramedics. It is proposed that the SAS and NHS 24 take a lead role, in collaboration with their territorial NHS Board colleagues, to develop appropriate collaborative emergency response models in remote and rural communities.

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[51] (2005) "Pathfinder Project" Scottish Ambulance Service

Transport

Throughout the process of engagement and wide consultation in the production of this report, the lack of an integrated response to transport has been raised consistently as being problematic, resulting in delays for patients accessing appropriate healthcare. Currently, health related transport is provided by a range of different providers/agencies, including voluntary drivers, the Patient Transport Service of SAS, and the more specialised neonatal transport and paediatric retrieval services. In addition, this project has proposed the establishment of a pilot to demonstrate the benefits of an Emergency Medical Retrieval Service (ERMS).

There appears, however, to be little or no planning or co-ordination between and within agencies. The result is a fragmented approach sometimes resulting in duplication which is an inefficient use of scarce resource.

The transport infrastructure is crucial in the support of healthcare in remote and rural communities and is not the responsibility of any one organisation to resolve. A nationally co-ordinated response, which brings together all of the existing or proposed services under the umbrella of one organisation, but one which is more embedded in the NHS Territorial Boards than SAS currently is, will be required to develop responses which will overcome all of the difficulties presented by the geography and dispersed populations.

There is a pressing need for a co-ordinated and collaborative response to the development of an integrated transport infrastructure necessary to support healthcare across Scotland and in particular in remote and rural communities. This will involve the development of creative solutions across agencies including land, air and maritime responses. Therefore it is proposed that in order to improve health transport a national approach is adopted. In the interim SAS should become more closely aligned with local healthcare delivery through closer integration with local systems. In other countries[52], the ambulance service is often managed by the hospital service.

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[52] Tasmania and Queensland in Australia and Northern Norway

Commitments

An integrated transport strategy that is responsive to remote and rural patients' needs must be developed.

The SAS should be responsible for ensuring that robust and responsive local community emergency response models are developed.

Forward Issues

The Scottish Government should consider the development of an integrated transport strategy, including health.

Consider how closer integrated working arrangements between the SAS and NHS Boards can be achieved.

The Emergency Medical Retrieval Service

The National Framework for Service Change (NFSC)[53] suggests that "...poor access will adversely affect outcomes,,," for rural patients but this was challenged on the basis of a pilot carried out in NHS Argyll and Clyde[54], which demonstrated that through upskilling rural practitioners, providing them with rapid access to emergency medical advice and the ability to rapidly transfer a consultant with critical care skills to the patient, whatever their location, outcomes can be greatly improved. Consequently, the Remote and Rural Steering Group were tasked with reviewing the role of the Emergency Medical Retrieval Service (EMRS) and, if necessary, enhance the service in remote and rural Scotland.

The Emergency medical retrieval service pilot has the following aims:

- Creation of an integrated and well governed system of rural emergency care;
- Augmentation of rural healthcare practitioner training in emergency care and transfer;
- Provision of on-line expert advice on patient management and transfer;
- Rapid on site provision of emergency and critical care interventions; and
- Safe transfer directly to definitive care.

A subsequent EMRS sub-group report recommended that:

- NHS Scotland should establish an Emergency Medical Retrieval Service to support the care of seriously ill and injured people in Remote and Rural Scotland;
- This service would retrieve patients with life threatening injury or illness where advanced medical intervention is appropriate to optimise safe transfer;
- The service would be additional to that currently provided by SAS and would only be deployed if the consultant staff determine that medical intervention is required;

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[53] (2005) "National Framework For Service Change: Building A Health Service Fit For The Future" May 2005, Scottish Executive. (NFSC) p165

[54] A Corfield et al (2004) "Argyll and Clyde Air Transfer Study" Unpublished data

- The service should be established in a phased manner, building on the successful pilot within Argyll. Phase one should be implemented to cover the west coast of Scotland, covering three rural general Hospitals, thirteen community hospitals and a number of remote general practitioners. The first phase is likely to last 18 months;
- During this first phase, independent evaluation of the requirements for the whole of rural Scotland would be undertaken, including the clinical requirements for the Northern Highlands and Northern Isles, the implications for the air ambulance service, a health economic assessment and the impact on the areas where the service has been implemented;
- Following completion of the review, assuming a positive evaluation the service should be rolled out across all remote and rural Scotland.

During the consultation phase of the Remote and Rural Steering Group, specific questions were asked about transport generally and the EMRS proposals specifically.

Overall, there was broad support for the evaluation of the ERMS. However, many participants felt that in light of weather restrictions, it may be more beneficial to invest in road infrastructure or other means of transport such as boats. A large number of respondents suggested the need for an integrated transport strategy for remote and rural areas, because even the fundamental building blocks were missing in some areas. Pleas were made for creative solutions across agencies.

Benefits were perceived as the potential to reduce the waiting time for transfer of patients and ensure that they reach definitive care as quickly as possible, enhance support to local clinicians and protect them from leaving to undertake transfer duties. Additionally participants reported another benefit as that of the patient being collected by clinically experienced staff.

A number of risks were also identified however, including the dependency of ERMS on helicopters and the implications of adverse weather conditions, particularly for the islands. Participants also highlighted that the number and placement of centres for this service needed to be carefully considered. To illustrate, the examples of time delays currently being experienced in awaiting the arrival of the neonatal retrieval team (up to 6 hours). There was also a significant degree of concern regarding the opportunity cost of investment on such a service to local services.

One of the potential gains of a national EMRS service is the potential to change the model of care offered locally, however, participants during the consultation were not convinced that this would be the case.

The EMRS subgroup determined that whilst the pilot in Argyll and Clyde[55] has been successful and improved patient outcome, a further pilot would be required to determine:

- The scope and design of an EMRS to support emergency care in Remote and Rural Scotland
- The effectiveness of an EMRS across Scotland.

The pilot would cover the west coast of Scotland, including three rural general Hospitals, thirteen community hospitals and a number of remote general practitioners.

A two-phased approach to service scoping and development was proposed to the then Scottish Executive in May 2006. The Cabinet Secretary for Health and Well-being agreed in June 2007 that Scottish Government Health Finance would underwrite the 18-month pilot of an emergency medical retrieval service (EMRS) serving all remote and rural health care facilities in the West of Scotland. The Cabinet Secretary recognised the importance of the EMRS to the future sustainability of healthcare in remote and rural areas of Scotland. Allowing for the recruitment process the ERMS pilot should officially commence on the 1st of April 2008.

The establishment of the EMRS service has always included an element of evaluation. The evaluation should be undertaken by a body or organisation, which is independent of those providing the service. This was considered necessary to reassure the Scottish Government, NHS Boards, referring and receiving clinicians on the efficacy of the service. During preparation of the initial Proposal, a brief health economic overview was undertaken, however, it was recommended that if the pilot were approved, a full health economic appraisal should be included within the evaluation.

Aims of the Evaluation

- Assess the requirements for the whole of rural Scotland, including the clinical requirements for the Northern Highlands and Northern Isles;
- Undertake a health economic assessment; and
- Assess the impact on the areas where the service has been implemented.

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[55] A EMRS trial in Argyll and Bute has been in place for 3 years.

Commitments

The Emergency Medical Retrieval Service (EMRS) Pilot should be established as soon as possible.

The EMRS pilot should be supported by an independent evaluation including a prospective study which identifies the needs of the northern Highlands and the northern islands of Scotland.

Equality and Diversity Impact Assessment

Equality and Diversity Impact Assessment involves anticipating the consequences of policies or functions on relevant groups for example patients, carers, staff, and communities in respect of age, gender, faith, disability, race, and sexual orientation and making sure that as far as possible, any negative consequences are eliminated or minimised and opportunities for promoting equality are maximised.

The five key themes of the project have been examined using an EQIA approach[56]. Pervasive issues have been highlighted to illustrate how equality and diversity is relevant to the models described / strategic development and were possible specific working examples have also been included to illustrate the impact of equality and diversity on standards of practice and/or care.

Common issues reflected across all workstream themes leading to potentially positive and/or negative impacts for different individuals, groups and communities include: the sustainability of services; workforce in terms of capacity and as a representation of the broader community; managing technology; the presence of professional and social support networks; the availability and capacity of transport networks and community resilience.

Equality and Diversity Impact Assessment of the Remote and Rural Project has highlighted how many of the issues presented within a remote and rural setting would be reflected in any setting, the key differences are that a) the remoteness and rurality can significantly increase the potential of an impact either positive or negative; and b) any actual negative impact on an individual will be exacerbated by remoteness and rurality in terms of being able to raise an issue as well as finding appropriate support to address a negative impact.

Although addressing or preventing negative impacts may have resource implications, by giving appropriate consideration to such potential at the beginning rather than the end of a process resources can be used more effectively, will be of more benefit over a longer period of time and will be more clearly evidenced in terms of building up a longer term business case.

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[56] Equality and Diversity Impact Assessment: Draft Report to the Remote and Rural Steering Group August 2007 (unpublished)

Commitment

Within the Equalities legislative framework it is expected that each NHS Board will, when progressing local implementation of the models presented in the report, conduct and report on Equality and Diversity Impact Assessments according to locally agreed guidelines.

Support for Change

The amount of service change required in order to implement the commitments contained within this report should not be underestimated. It is important that capacity is built to support the implementation of commitments; otherwise this report will remain a policy document without effecting change. It is therefore proposed that the Scottish Government allocate funding for the appointment of a National Programme Manager, with appropriate administrative assistance to support NHS Boards and other groups in the implementation of this policy.

In order to implement recommendations, NHS Boards will also require to commit resource to effect change. During the production of this report, there has been a review of NHS Resource Allocation undertaken by the National Resource Allocation Committee (NRAC). The Scottish Government should consider the impact of the NRAC review on NHS Boards' ability to maintain and develop remote and rural services.

Forward Issue

The Scottish Government should consider providing funding for the appointment of a National Programme Manager with appropriate administrative assistance in order to ensure capacity is built to support the implementation of the remote and rural framework.

The Scottish Government should consider the impact of the NRAC review on NHS Boards' ability to maintain and develop remote and rural services.

Membership of Remote and Rural Steering Group

Dr Roger Gibbins, Co-Chair R&R Steering Group / Chief Executive, NHS Highland

Mr Paul Martin, Co-Chair R&R Steering Group/Chief Nursing Officer, Scottish Government

Dr Eric Baijal, Director of Public Health and Policy, NHS Highland / NoSPHN Lead Clinician

Mr Michael Bews, Director of Guidance & Standards, NHS QIS

Mr George Brechin, Chief Executive, NHS Fife / Chair, SEAT

Miss Susan Finlay, Scottish Partnership Forum / Council Member, Royal College of Nursing (until May 2007)

Dr Denise Coia, Secretary, Academy of Medical Royal Colleges and Faculties of Scotland (AMRoC) (until December 2006)

Mr Brian Dornan, Head of Strategy and Planning Team, Scottish Government

Mrs Myra Duncan, Director of Regional Planning, SEAT

Mr Derek Feeley, Director of Healthcare Policy & Strategy, Scottish Government

Mrs Fiona Grant, Remote and Rural Project Manager, NoSPG

Dr Stephen Hearns, A&E Consultant, NHS Argyll & Clyde / Clinical Lead, Emergency Medical Retrieval Service Sub-Group

Dr Annie Ingram, Director of Regional Planning & Workforce Development, NoSPG

Ms Heather Knox, Director of Regional Planning, WoSPG

Miss Sandra Laurenson, Chief Executive, NHS Shetland / Chair, NoSPG

Mr Adrian Lucas, Chief Executive, SAS / Ms Shirley Rogers, Director of Human Resources, SAS (until Sept 2007)

Ms Mary MacLeod, Professional Head of Podiatry, NHS Highland (until May 2007)

Mr John McGuigan, Chief Executive, NHS 24 (until April 2007) / Dr George Crooks, Chief Executive, NHS 24

Mr Paul Martin, Chief Nursing Officer, Scottish Government

Mr Dick Manson, Chief Executive, NHS Western Isles / Lead, Rural General Hospital sub-group (until August 2006)

Miss Fiona Mackenzie, Chief Executive, NHS Forth Valley / Chair, WoSPG

Prof. Gillian Needham, Regional Development Director, NES / Lead, Rural Education Steering Group

Mr Michael Pearson, Head of Service Change, NHS Borders / SEAT

Dr Gordon Peterkin, Associate Medical Director, NHS Grampian / Clinical Lead National Tele-medicine project

Dr Ken Proctor, Associate Medical Director, NHS Highland / Chair, Northern territories Group

Ms Michaela Rodger, Training Pathways Project Manager, AMRoC

Mr John Ross, Chair, NHS Dumfries & Galloway

Prof. Andrew Sim, Medical Director, NHS Western Isles / Clinical Lead, Rural General Hospitals Sub-group

Mrs Elinor Smith, Director of Nursing, NHS Grampian

Prof. Sir Graham Teasdale, President, AMRoC (until Dec 2006); replaced by Prof. Neil Douglas

Mr Malcolm Wright, Chief Executive, NES / Mr Mike Watson, Medical Director, NES

Implementation Plan

Commitment	Why	Who	Timescale
This new model of safe and sustainable health services for remote and rural areas with formal working links between rural areas and those in larger centres should be introduced.	Sustain and improve local access to appropriate services.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards, to implement this framework, supported by a National Project Manager.	December 2009

Improving the Patient Experience of Remote Primary Care

Commitment	Why	Who	Timescale
Patients should receive the same standards of care for common conditions irrespective of where they live.	Patients may currently be receiving sub-optimal care or have to travel needlessly.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent Boards to facilitate the network of RGHs in conjunction with larger centres to develop care pathways for common conditions. RGHs should share the role of developing draft pathways in collaboration with CHPs and seek approval.	April 2008
The system of care within remote and rural communities should support self-care, anticipate health needs and have the capability to respond to emergency situations.	Patients should expect health and social care professionals to anticipate health needs to avoid crises in chronic diseases and be able to respond to emergency situations.	CHPs should review the service they provide to ensure that it is consistent with the model described. Specific actions should ensure that: • Teams are integrated and co-located including heath and other agencies; • The ECCT supports individuals to self-manage their own care utilising self help groups and informal carers; • Priority is given to the provision of anticipatory care and that systems are in place for the prevention of disease escalation; • Action plans to implement long term condition management; • There is local access to emergency care provision within the community and work with the SAS to develop robust emergency community response systems.	December 2008

The systems of care should build community resilience.	To ensure that all available scarce resource is utilised towards local patient care.	CHPs and SAS should explore the use of the wider healthcare team to develop resilience within the community, including a pilot to test the role which Ambulance Technicians and Paramedics can play, particularly in anticipatory care and long term condition management. Out of Hours services should be reviewed.	December 2008
Remote primary care will have common methods of data collection and data set.	To ensure that information is available to guide planning.	ISD should work with CHPs to develop a common data set and make arrangements to routinely collect and report.	August 2009
Remote Community Hospitals, acting as a community resource hub, should provide an agreed range of services, including enhanced diagnostics to ensure the right treatment by the right person in the right place at the right time.	Patients will have access to services locally and will know what services they can expect to receive.	CHPs must ensure that their Community Hospital is an integrated resource within the spectrum of care. CHPs should review their Community Hospitals to determine which, if any, should be enhanced, and develop plans to implement this. CHPs should review the service provided within their Community Hospital(s) to ensure that these services are consistent with the model described. Investment should be appropriate to meet clinical demands of safety. This includes: • Utilising the Community Hospital as a resource hub to the community, integrating and co-locating services provided by health and other organisations; • First line emergency services are provided along with a minor injury/illness service; this will include acting as a Place of Safety for Mental Heath crisis; • A range of diagnostic services are provided as described below; • Undertaking a role in pre-operative assessment; • Providing a range of outpatient visiting services, appropriate to the health needs of the population; • Provision of an intermediate care service provided, accessible by all practitioners; • Provision of a community midwifery service; and • Palliative care services are provided.	December 2009

Sustainable Secondary Care

The RGH is a Level 2 + facility undertaking the management of acute medical and surgical emergencies and is the emergency centre for the community, including a Place of Safety for mental health emergencies. It is characterised by more advanced levels of diagnostic services than a Community Hospital and will provide a range of outpatient, day case, inpatient and rehabilitation services.

To improve local access for patients to local secondary healthcare.	NHS Boards should review the service provided within their RGH to ensure that these services are consistent with the model described. NHS Boards should ensure that:	December 2009

- The role of their RGH(s) is consistent with the definition contained in this Report;
- A core range of services is provided in the RGH(s), consistent with those described in this Report.

For unscheduled care: nurse-led urgent care service, first-line emergency treatment, an acute medical and surgical service, midwifery-led maternity service, including neonatal resuscitation and appropriate transfer arrangements.

In terms of planned care, the RGH should manage patients with stroke, step-down, rehabilitation and follow up of a range of patient conditions; management of patients with long term conditions; ambulatory care for children; routine elective surgery and visiting services, appropriate to the health needs of the population.

The surgical procedures provided within the RGH is consistent with those prescribed within the RGH Surgery Report and that governance process are in place for where there is a defined health need to provide surgery outwith the prescribed list.

The range of diagnostic capability includes endoscopy, surgical intervention (e.g. biopsy), cardiac investigation, digitised image capture, ultrasound and CT scan, and laboratory services providing biochemistry, haematology and cross match blood.

RGHs should also have appropriate clinical decision support via e-health links to other centres, along with a pharmacy service.

- NHS Boards should review their surgical services against the described model, and ensure that any procedures to be undertaken which are not included in the core model are subject to explicit NHS Board approval following formalised governance processes.

The amount and range of secondary care undertaken locally should be maximised.		NHS Boards should undertake an analysis of appropriate activity linked to population intervention rates.	December 2008
		ISD should work with NHS Boards to develop a common dataset for RGHs, which is routinely collected and published.	
		NOSPHN should support Boards to progress this.	
Larger centres have an obligation to support services within remote and rural communities. Formal obligatory networks should be developed to support this.	To improve the patients experience of secondary care through supporting local care delivery and decision-making.	NHS Greater Glasgow and Clyde, Grampian, Highland and Lothian should enter into formal agreements with remote and rural providers to develop obligatory networks. This may require larger centres to review working patterns.	August 2008
		The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards, to facilitate the development and introduction of these Networks.	December 2008
		NHS Boards should ensure a clear governance framework for these Networks.	December 2008
Formal networks should be established for radiology and laboratory services.	To improve local access to services and specialist opinion.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards, to develop formal networks for both radiology and laboratory services.	August 2008
Maximise the range of diagnostic and secondary care interventions available locally.	R&R communities should expect that a core range of diagnostics and interventions are available within local communities.	NHS Boards, supported by the NOSPHN should investigate the variations in population intervention rates and seek to maximise the amount of secondary care undertaken locally.	August 2008
Establish a network of Rural General Hospitals.	To develop common protocols and standards for appropriate local intervention.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards, to establish a network of RGHs.	April 2008

Mental Health Service

The focus of mental health services in remote and rural communities must be upon early detection and prevention of disease escalation.	To reduce the number of times where patients with mental health problems experience a crisis situation.	NHS Boards should ensure that their mental health services focus upon early detection and prevention of disease through proactive case finding and targeting hard to reach groups and those in need.	December 2008
The extended community care team must have the ability to manage mental health crisis 24/7.	Patients should expect to receive a response which meets their needs in a timely and professional manner.	NHS Boards should ensure that their PEP is current, includes specific contingencies for the management of mental health crisis in remote and rural areas 24/7 and that their staff have received the necessary training in the management of mental health crisis.	December 2008
Formal support networks should be developed with larger psychiatric centres.	To ensure robust systems are established to support the care of patients living in remote and rural areas with mental health problems.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards Rural NHS Boards should work with regional partners to establish a formal regional psychiatric service networks.	December 2009
There must be responsive retrieval systems for patients experiencing mental health crisis.	Patients should expect to be transferred to definitive care where that is required in a timely fashion.	The Scottish Ambulance Service (SAS) should review their transport arrangements for responding to mental health crisis, and also ensure that the 30 minute response target for picking up specialist psychiatric support teams is met.	April 2009
A pre-hospital psychiatric emergency care course must be developed and be accessible to practitioners working in remote and rural areas.	To ensure that practitioners are competent to manage mental health crisis.	RRHEAL must urgently ensure the provision of a pre-hospital psychiatric emergency care course utilising a 'BASICs-type approach'.	December 2008

Child Health Services

The model of care for children and young people promotes ambulatory care and intermediate care with the majority of care being provided in the community as part of a formalised network with larger paediatric centres.	To increase local care provision for children and young people.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards, including the four main paediatric centres to establish a Paediatric Network(s) and to negotiate the shape of local service delivery, with robust care pathways for the management of the most common conditions. Network establishment will also include the identification of consultants responsible for remote and rural support, the use of e-health links and the agreement of discharge planning arrangements where a child has been treated in secondary or tertiary care.	August 2008

Standard	Expectation	Recommendation	Date
Paediatric teams within remote and rural communities should have the necessary training to undertake their role.	Patients expect to be cared for by competent practitioners.	The Paediatric network should support CHPs and RGHs to identify practitioners who will be included in paediatric teams.	December 2009
		A training needs analysis of those practitioners should be undertaken, the outcome of which should inform education and training packages for local delivery brokered through the Remote and Rural Healthcare Education Alliance (RRHEAL), supplemented by outreach training through the formal paediatric Network.	December 2008
There must be responsive retrieval systems in place for transfer of the acutely ill or injured child or young person.	Children and young people who require transfer to definitive care should expect a responsive service.	The Scottish Ambulance Service (SAS) should review their transport arrangements to ensure responsive systems are in place for transfer of the acutely ill child.	April 2008
		The review of Specialist Services for Children and Young People should consider expanding the role of the Paediatric Intensive Care Retrieval Teams to incorporate those patients from remote and rural areas requiring transfer to high dependency care.	December 2009
		NES, through RRHEAL, should ensure that appropriate and accessible paediatric educational solutions are in place for remote and rural practitioners.	April 2008
		The Rural Training Pathways Steering Group should ensure that future curriculum for medical remote and rural practitioners incorporate specific elements of paediatric training.	December 2008
		Regional Planning Groups should commission their Child Health Planning Groups with considering the principles of the Remote and Rural Child Health Report and their applicability to urban areas.	

Recommendation	Objective	Action	Date
Health and Social Care should be organised as integrated teams, known as Extended Community Care Teams (ECCTs).	To ensure maximisation of scarce resource within small communities. To reduce professional isolation and enhance the services available to local communities.	CHPs should work with Local Authorities, SAS, and Voluntary Sectors to ensure integrated working across agencies. NHS Boards should consider opportunities to link single handed practices.	December 2009
The ECCT should be co-located with other services, both within normal working hours and out of hours. Specific services to be considered are health, local authority, ambulance service and voluntary sector.	To ensure maximisation of scare resource within small communities and to enhance communications within teams.	NHS Boards should co-ordinate discussions with other services as part of a property strategy to review the location and premises of their teams.	December 2008
Community Resource Hubs should have a skill mix appropriate to the health needs of the community.	To ensure that there is staff competence that is appropriate to the role and capacity of the facility.	CHPs should review the skill mix within their Community Resource Hubs to ensure that there is the appropriate competence that is appropriate to the role and capacity of the facility.	December 2009
The RGH will have a medical workforce which will be predominantly consultant led in the areas of anaesthetics, surgery and medicine, supported by GPwISI or Rural Practitioners.	To improve access for patients to local secondary healthcare which is inappropriate to be provided at the primary tier.	NHS Boards should review the workforce within their RGH(s) to ensure that it is devolved appropriately and is consistent with the model described.	August 2008
		The Remote and Rural Steering group should commission the North of Scotland Public Health Network to undertaken an audit to evaluate the effect of a consultant–led medical service, as compared to GPwISI-led medical service as part of an obligate network, on local service delivery.	April 2008
Establish a pilot to test the hybrid acute medicine/general practitioner role.	To improve the range of medical skill available to Remote and Rural communities.	NES should, in collaboration with the Academy of Medical Royal Colleges, establish a pilot to test the proposed curricula for the hybrid role and, if successful, should make the necessary arrangements to seek PMETB approval as an accredited training route.	April 2009
	To evaluate and validate the role of the GPwISI in remote and rural communities.	The Academy of Royal Colleges should commission research into the acceptability and attractiveness of the GPwISI in remote and rural communities.	April 2008

Recommendation	Aim	Action	Date
Proleptic appointment to remote and rural areas should be encouraged and should be extended beyond Consultant medical staff roles.	To ensure continuity of service delivery whilst additional site-specific training is being undertaken.	The Scottish Government should review the proleptic appointment scheme to consider funding of proleptic appointments in multi-professional areas as well as for consultants in remote and rural areas.	April 2008
		NHS Boards should consider proleptic appointments in multi-professional areas as well as consultants in remote and rural areas.	April 2008
Locally based services will be enhanced by visiting specialists as part of obligatory networks.	To improve access to patients to local secondary healthcare.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards to review their organisational arrangements and working patterns of larger centres to support the needs of the RGH/Community Hospital.	April 2009
Nurses in RGHs should be multi-skilled generalist practitioners.	To ensure that there is capability to manage the spectrum of patient care needs.	NHS Boards should audit the skills of nursing workforce within the RGH and work with RHEAL to ensure that there are accessible training programmes developed to fill any gaps identified.	April 2009
		NES should ensure that undergraduate training for nurses takes account of the generalist skills set required to work in R&R areas.	
The Nurse with a Special Interest (NwSI) in Acute or Enabling Care will be developed.	To support nurses with generalist skills.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards to review their nursing workforce within the RGH to develop a skill mix which includes NwISI according to local population need.	April 2009
AHPs should be multi-skilled generalised practitioners within own profession.	To meet the appropriate therapeutic needs of patients across the spectrum of care.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards to review their AHP workforce and establish programmes to ensure consistency with models described.	April 2009
AHPs should develop specialist interest roles (AHPwISI) where there is a defined healthcare need.		The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards to review their AHP workforce and develop AHPwISI according to local population need.	August 2009
		NES, through RHEAL, should commission education programmes to support the emerging roles as required by workforce planning.	December 2009

The radiography team within the RGH will be flexible and consist largely of advanced generalist practitioners who combine plain film, CT and ultrasound imaging. There is an opportunity to develop assistant practitioners where adequate supervision by radiographers can be provided.		The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards to review their radiographer workforce to ensure consistency with models described and define their skill mix according to local need.	August 2008
		NES, through RHEAL, should commission education programmes to support the emerging roles.	April 2009
A team of multi-skilled generalist Biomedical Scientists who are part of a formalised laboratory network will be required to support service delivery in remote and rural areas.	To ensure that patients have access to a wide range of diagnostic tests locally available within remote and rural areas.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards to audit the skills of Biomedical Scientists within the RGH and work with RHEAL to ensure that there are accessible training programmes developed to fill any gaps identified.	April 2009
There is appropriate access to pharmaceutical support within R&R communities.	To ensure pharmaceutical care is well managed.	NHS Boards are encouraged to develop innovative solutions to providing access to community pharmacy services in remote and rural areas in the Pharmaceutical Care Service Plans.	August 2009
A generic support worker role will be developed.	To support the work of nurses, AHPs and social care professionals.	NHS Shetland will lead the work of the development of the Generic Support Worker, in collaboration with other Rural Boards and RHEAL, including the development of an education programme.	April 2008
		NES, through RHEAL should commission an appropriate education programme and support the development of an accessible programme.	December 2008
		Scottish Government should commission an independent evaluation of the benefits of such a role.	December 2009

Education

Recommendation	Objective	Action	Date
Remote and Rural environment should be recognised as a rich source for training opportunities.	To ensure continued sustainability and development of R&R healthcare.	NES should ensure that training programmes include appropriate exposure to R&R healthcare, during training.	December 2008
A Practice Education Network for remote and rural areas should be established.	To ensure professional updating and peer group support for remote and rural practitioners.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs), their constituent NHS Boards and RHEAL to establish a Practice Education Network.	August 2008
Education Programmes which are specific and responsive to the needs of remote and rural practitioners should be introduced.	To ensure that practitioners have the wide range of competences required to care for patients living in remote and rural communities.	RRHEAL should work with NHS Boards, utilising their Learning and Development Plans to identify training needs and work with Educational Providers to ensure the development of appropriate and accessible training programmes. RRHEAL must ensure that the educational response meets the speed of change in remote and rural service.	December 2009
Educational Programmes for remote and rural practitioners should, wherever possible, be accredited.	To ensure that career progressive opportunities are available to individuals who work in remote and rural practice.	RRHEAL should ensure work with Educational Providers to ensure that learning is accredited wherever possible.	April 2009
Robust systems should be developed that establish a critical mass of remote and rural learners that secures viable investment for learners.	To ensure that remote and rural practitioners have the wide range of competences required to care for patients living in remote and rural communities. .	RRHEAL should ensure that the needs of the remote and rural learners are used collectively to create a critical mass in order to make it a viable option for educational providers to deliver appropriate and accessible educational training programmes	August 2008
Remote and rural areas will continue to provide an important training opportunity for doctors in training, especially, although not exclusively for doctors wanting to specialise in R&R practice.	To ensure that the supply of remote and rural physicians, surgeons anaesthetists and GPs.	NHS Scotland should recognise the importance of remote and rural areas as a training resource for doctors in training and NES should establish appropriate training opportunities through new Specialty Training posts, if necessary.	April 2008

Fit for Purpose Training Programmes for Doctors aiming to enter R&R practice will be introduced.	Training should cover a curricula that will ensure that the doctors has the appropriate skills and competencies for the role expected. To encourage recruitment.	The Specialty Training Boards should ensure that R&R specific programmes, based on the proposed curricula developed by the Rural Training Pathways Group, are developed.	August 2008
Remote and Rural systems will not be destabilised through changes to training.	To ensure sustainability of remote and rural services.	The Scottish Government should ensure that implementation of MMC takes account of the need to continue to deliver service in remote and rural systems.	April 2008

Infrastructure

Support Networks

Vertical Obligatory Networks between RGHs and larger centres should be established.	To improve the patients experience of secondary care by meeting quality and care standards and by providing consistency, continuity and integration.	The North of Scotland Planning Group should take a lead role, bringing together Regional Planning Groups (RPGs) and their constituent NHS Boards, to facilitate Networks to determine the exact range of local and visiting services that should be provided on the basis of population need within the framework of core services.	August 2008
		Where additional services are provided, NHS Boards should develop a clear governance framework.	December 2009
A lateral network between RGHs should be established. Robust Care Pathways should be developed for the most common patient conditions.	To improve the patients experience of secondary care by meeting quality and care standards and by providing consistency, continuity and integration.	The North of Scotland Planning Group (NoSPG) should take a lead role, bringing together RGHs to facilitate the establishment of networks to develop agreed standards, protocols, training and development and share good practice. This should include the development of robust Care Pathways for the most common patient conditions.	August 2009
			December 2009

Quality Assurance and Governance

Remote and rural Scotland should be judged using the same standards as throughout Scotland.	To ensure that QIS standards are outcome based and take cognisance of different process used to achieve those standards in remote and rural settings.	NHS Quality Improvement Scotland (QIS) should appoint a Clinical Advisor to ensure an understanding of remote and rural issues are sought in the development of its standards. The Clinical Advisor should establish a remote and rural reference group to support him/her in this work.	April 2008

Physical Infrastructure

Primary Care premises should be purpose built.	To ensure that the multi-agency teams in remote and rural communities are co-located and have premises that fit for integrated purpose to enable them to deliver the maximum of care locally.	NHS Boards should review their primary care premises and prioritise their capital plans to include purpose built premises, working in collaboration with Local Authorities and other agencies to facilitate the co-location of teams.	December 2008
RGHs should be fit for purpose	Services should be provided in modern and appropriate premises.	NHS Boards should ensure that the fabric of RGHs is fit for purpose and ensure that, where necessary, this is addressed in their capital plans.	December 2008

Diagnostics

A remote and rural diagnostics network should be established.	To ensure consistent standards of care, support of services and professionals in remote and rural areas and make best use of scare resource.	The North of Scotland Planning Group should take a lead role bringing together the Regional planning Groups and their constituent NHS Boards, to facilitate the establishment of a remote and rural diagnostics network.	August 2008
There should be an agreed menu of diagnostics available locally, and local access to a wider range of tests provided and reported by larger centres.	Patients should not have to travel needlessly for those diagnostic tests that can either be provided and accessed locally or provided locally and reported within the larger centres.	NHS Boards should review the diagnostics provided within their areas to ensure that the service provided is consistent with the menu of diagnostic services described for each care setting, including self care within patient's own home.	December 2008
The roll out of digitised imaging (PACs) should consider the needs of remote and rural areas and prioritise accordingly.	Patients should not have to travel needlessly for those diagnostic tests that can either be provided and accessed locally or provided locally and reported within the larger centres.	The National PACs project should consider remote and rural areas as a priority for the roll out of digitised imaging and ensure that transmission performance is as good as for urban settings.	April 2008

Recommendation	Rationale	Action	Date
IT infrastructure must be robust across the whole of Scotland.	To allow for rapid and safe communication and reduce the need for patient and staff travel.	The e-Health Strategy Board should review their investment plans to ensure that the level and quality of connectivity should be same across Scotland.	April 2008
Premises in remote and rural communities should have access to a range of modern communication tools including broadband, videoconferencing and telemedicine as a minimum.	Provision of this service to rural areas will reduce the need for patients to travel.	NHS Boards should review their existing premises and ensure that any new premises have access to a range of modern communication tools including broadband access, videoconferencing and telemedicine as a minimum.	December 2008
The concept of utilising e-health in the remote and rural setting must permeate every aspect of service planning and delivery in remote and rural healthcare.	To maximise patient access to local healthcare delivery and reduce the need for patients to travel.	NHS Boards must pro-actively consider the use of e-health solutions in every aspect of service and work with the SCTEH to change cultural views of the use of new technology. This will include as a very minimum the use of technology for: • Information sharing; • Linking to larger centres; • Diagnostics; • Telemedicine; and • Monitoring of long-term conditions in the patient's own home.	December 2008
		NHS Boards should collaborate with the SCTEH to ensure that staff undertakes adequate training in the use of new technology.	December 2009

Emergency Response and Transport

The Fundamental Building Blocks

Robust and responsive local community emergency response systems should be developed.	Patients should expect to receive a responsive emergency service.	NHS Scotland should consider closer integrated working arrangements between SAS and NHS Boards. — December 2008 The SAS should be responsible for ensuring that robust and responsive local community emergency response models are developed. — December 2008
An integrated transport strategy must be developed that is responsive to remote and rural patient's needs.	Patients who require transport/transfer should expect to receive a responsive service.	The Scottish Government should consider the development of an integrated transport strategy, including health. — December 2008

An Emergency Retrieval Service for Remote and Rural Scotland

The Emergency Medical Retrieval Service (EMRS) pilot should be established.	To support the care of the seriously ill and injured in people remote and rural communities.	NHS Scotland should establish the ERMS in a phased manner, building on the successful pilot within Argyll. Phase One should be implemented to cover the west of Scotland, covering three RGHs, thirteen community hospitals and a number of remote general practitioners. The first phase is likely to last 18 months. — December 2009
The ERMS pilot should be supported by an independent evaluation including a prospective study which identifies the needs of the northern Highlands and the northern islands of Scotland.	To support the care of the seriously ill and injured in people remote and rural communities	NHS Scotland should commission an independent evaluation of the first phase of the ERMS pilot. The evaluation should identify the requirements for the whole of rural Scotland for the Northern Highlands and Northern Isles, include a health economic assessment and risk assessment, the implications for the air ambulance service, a health and the impact on the areas where the service has been implemented. — April 2008

Equality & Diversity Impact Assessment

Opportunities for promoting equality will be maximised.	To eliminate or minimising any negative consequences.	NHS Boards will, when progressing local implementation of the models presented in the report, conduct and report on Equality and Diversity Impact Assessments according to locally agreed guidelines.	December 2009

Support for Change

Adequate capacity must be built in order to ensure implementation of remote and rural policy commitments.	To ensure that service change is effected as a result of the remote and rural policy commitments.	The Scottish Government should consider the providing funding for the appointment of a National Programme Manager with appropriate administrative assistance to support the implementation of remote and rural commitments.	January 2008
The cost of providing remote and rural services should be acknowledged and adequately funded by the Scottish Government.	To ensure that service change is effected as a result of the remote and rural policy commitments.	The Scottish Government should consider the impact of the NRAC review on NHS Boards ability to maintain and develop remote and rural services.	December 2009

The Scottish Government

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