

Date: 28 March 2000

Venue: British Telecom Video Conferencing Suite, 2nd Floor, Cardiff International Arena

Title: Developments in Telemedicine and Telecare in Wales

Purpose

1. To update the Committee on progress in the Telemedicine Development Programme.

Summary and Action

2. This paper provides a progress report on Telemedicine and Telecare in Wales and, invites the Health and Social Services Committee to:

- Note progress on the **Telemedicine Development** Programme
- Consider what further developments would be appropriate in Telemedicine and Telecare in Wales.

Timing

3. This paper is presented at the Committee's request.

Background

Work in Hand

4. Following the presentation of paper HSS-19-01 to the Committee in November 2000 a number of significant steps have been made in the two year Telemedicine Development Programme, which was announced by Jane Hutt and Edwina Hart and allocated £900,000 of central funding.

5. Two key staff have been appointed and have started work (5 March 2001), with the remits to:

- establish the Telemedicine demonstrator projects
- establish the Health video conferencing network
- develop the Telemedicine Strategy for the next five to ten years

Demonstrator Projects

6. Welsh Health Circular (2001) 010 "Using Technology to Transform Local Care" - Invitation to Bid for Grant Aid of Telemedicine Developments was issued to the NHS in Wales on 9 March 2001. Attached as Annex 1. This circular invites consortia of NHS organisations and their partners to apply for grant aid to support development of operational scale pilots in dermatology and minor injuries services. The closing date for applications is 30 April 2001 with results announced in early June 2001.

Video Conferencing Network

7. The roll out of the network of **Health video conferencing** facilities is critically dependent on the negotiation of a framework contract for telecommunication links (Internet Protocol - Virtual Private Network - IP/VPN) Agreement with a Supplier is now imminent. A model business case has also been developed for local organisations to identify optimal siting and sizing of the facilities. Initial plans are for the implementation of the communications links and technology by November 2001.

Strategy development

8. Work has commenced on identifying the scope and content of an **All Wales Telemedicine and Telecare Strategy**. A draft for consideration could be prepared by November 2001. The strategy will focus on how the exploitation of technology can aid delivery of Improving Health in Wales. Links with Department of Health and other Home Country Administrations confirm that equivalent strategies are being developed. Key components could include:

- A review of existing Telemedicine and Telecare systems in Wales
- A general review of systems in the UK, Europe and other key areas
- Promotion of awareness and education amongst the NHS and its partners
- An examination of development potential and collaborative opportunities within the NHS and its partner organisation, such as Local Government, Further and Higher Education and the voluntary sector.
- Relationship and dependency to other key initiatives for the NHS in Wales
- Guidance on issues relating to Security, Confidentiality, etc
- Using "Access and Excellence" as a starting point, undertake trend spotting analysis to provide a picture of technology - supported care over the next 5 to 10 years.
- Establish Industry links and involvement
- Establish mechanisms for the production and promulgation of clinical guidelines and protocols
- Benefit realisation
- Strategic development options with indicative business cases

Consideration: Progress and Challenges

What Benefits are we seeking? - and what Impact?

9. There is a growing body of academic evidence confirmed by practical experience in Wales, the UK and beyond that the introduction of Information Communication Technologies (ICT's) has the potential to enable significant transformation of existing practices, delivery mechanisms and outcomes. The main areas that need to be considered are:

- **Transforming the Patient experience:** for example, reduced travel, improved quality of consultation easier access to information about themselves, their health care and their health. The opportunity for exploitation exists through enabling relatives and friends to remotely visit patients in hospital and nursing homes by Tele-visiting.
- **Transforming health professional practice:** for example, reducing travelling and improving access to information for the health care professional at the point of practice and at the time of need. This will enable information sharing between clinical team members thereby changing the skill and allowing greater flexibility in the delivery of health care services.
- **Transforming management processes:** for example, reducing travelling and enabling the uptake of an emerging range of electronic service such as e-commerce, e-procurement in health supplies and improving the sharing of information for management purposes through intranet development.

What practical steps could be taken to make further progress in Wales?

10. The release of the WHC to the NHS has prompted a number of enquiries about support for a range of Telemedicine applications in other specialities than those specified (Dermatology and Minor Injuries). This interest is indicative of the pace that is being generated by the NHS and its partners. There is growing expectation that the application of ICT's within healthcare and the installation of the IP/VPN will generate further Telemedicine and video conferencing (V/C) applications. These could include:

- Further development of applications in out patient services ultimately leading to provision of a virtual out patient service. Other development might include electronic visiting including televisiting, clinical case conferences and tele-education and professional development through virtual life long learning.

11. Across the UK there is growing recognition that uses of other technologies will also contribute to the transformation of both patients and professionals' experience within the health care system. Advances in the commercial telecommunications sector will need to be closely monitored and reflected in the developing Telemedicine and Telecare Strategy. Developments of particular interest to Wales could include:

- The digital TV revolution (including the interactive component) will enable people to tune into channels dedicated to health issues and internet resources, with the NHS using its expertise and experience to kite mark the best sources and materials.
- Mobile communications technologies will become increasingly powerful and are set to rival PCs as a means of accessing Internet services.
- Currently, a single phone call to NHS Direct will provide a one-stop gateway to healthcare, to give patients more choice about accessing the NHS. Technology could enable this to be extended, for example Patients would also have the choice of e-mailing or phoning their practice nurse or GP for advice and booking their appointment online and receiving test results at home. If the wide-scale availability of low cost Video conferencing facilities is taken up by the Public V/C access to NHS Direct online may need to be considered.
- A growing range of new technologies focussed on the Care of the Elderly (or other similar client groups) in the home enabling independent living and making after care easier and deliverable.

12. The term e-Commerce is widely used and understood used in the business world for online financial transactions. It might now be timely for the National Assembly to consider the use of e-Health as a badge. This term if adopted could broadly describe the emerging range of electronic Health applications and related activities and would demonstrate to technology supplies and health application developers the NHS in Wales and Assembly commitment to the implementation and exploitation of emerging applications and technologies.

Compliance

13. The programme of work identified in the paper has been set up within the NHS Directorate with its activities covered by Section 2 of the NHS Act 1977, the powers of which have been transferred to the Assembly and delegated to the Minister for Health and Social Services. The Government of Wales Act 1998 (section 40) provides the Assembly with the power to do anything which facilitates, or is conducive or incidental to, the exercise of any of its functions. There are no issues of regularity or propriety. The Assembly Compliance Office and Office of the Counsel General have seen and approved this paper.

Financial Implications

14. There are no new financial implications resulting from this progress report. All initiative and activities identified have been approved previously and are fully provisioned. NHSF and Financial Planning Division have seen and are content with the financial aspects of this submission.

Cross-cutting themes

15. The Telemedicine and Telecare Development Programme will be a major contribution to the Cymru Ar-lein /Wales on line initiative and could serve as an exemplar to other sectors within Wales, in particular:

- Wales' e-Minister Andrew Davies, who has responsibility for Cymru Ar-lein and the development of the Information Age Framework for the delivery of e-Government in Wales has also been made President of the European TeleRegions

Network. The TeleRegions Network was established to promote development of information technology in European regions with the aim of strengthening competitiveness and job creation. Four regional groups have been established co-operation and share best practice on services to the citizen, health care, and networking for small and medium-sized enterprises (SMEs) and education and training.

- There may opportunities for the National Assembly and the NHS and its partners to make a significant contribution to evolution of this group and its activities across Europe.

16. In addition to the investment made in the local government and National Assembly video-conferencing facilities, the Assembly has also contributed to video conferencing in the further and higher education sector through the Welsh Video Network (WVN). This network provides the distribution and support of video-conferencing studios and other video facilities to all Higher Education Institutions and Further Education Colleges throughout Wales. It is all compatible with the NHS development and with that used for the Health and Social Services Committee meeting.

Action for Committee:

17. The Committee is invited to:

- note progress on the Telemedicine Development Programme
- approve the outline content of the Strategy
- consider what further reports and / or demonstrations would be appropriate for developing Telemedicine and Telecare in Wales.
- consider what contribution the National Assembly and Telemedicine Demonstration sites might make to the European TeleRegions Network Group and programme.
- note existence and parallel development of the Welsh Video Network
- consider adoption of the E-health to describe the evolving range of Information and Communication Technologies applications in healthcare

Jane Hutt
Minister for Health & Social Services

March 2001

Annex A

WHC (2001) 010



Status: For Information and Action

Title: USING TECHNOLOGY TO TRANSFORM LOCAL CARE – INVITATION TO BID FOR GRANT AID OF TELEMEDICINE DEVELOPMENTS.

For Action by: Chief Executives of Welsh NHS Trusts and Health Authorities and Chairmen of Local Health Groups.

Action required *See paragraph(s) : 8 & 9*

For Information to:

Sender: Mr Richard J Phillips, Deputy Director, Health Information Management & Technology Division, NHS Directorate, National Assembly for Wales.

National Assembly contact(s): Mrs Lydia Bateman, Health Information Management & Technology 3 Division, NHS Directorate, National Assembly for Wales, Cathays Park, Cardiff. Tel: 029 2082 3389

Enclosure(s): n/a

**Tel: 029 2082 3389 GTN: 1208
Llinell union/Direct line: 029 2082 3389
Ffacs/Fax: 029 20
Minicom: 029 2082 3280**

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Members	Health and Social Services Committee
Claire Morris	Deputy Clerk to Health and Social Services Committee
Secretary	Welsh Health Information Management Group

Dear Colleague

Using Technology to Transform Care - Invitation to Bid for Grant Aid of Telemedicine Developments.

Summary

1. This circular identifies the key components and actions necessary to establish the All- Wales Telemedicine Development Programme announced by Ms Jane Hutt and Mrs Edwina Hart in June 2000. This circular has been delayed until the outcome of the Telecommunications 2000 strategic review has been completed. The full Telecommunications strategic review report, recommendations and the implementation plan have been approved by Health Information Management Board and will be circulated shortly.
2. NHS Bodies working with partner organisations are invited to establish consortia and submit locally developed projects in tele-dermatology and minor injuries. A total of £300,000 is available for grant aid for demonstrator projects. Following evaluation successful projects will receive grant aid up to a maximum level of £150,000 over 2 years. This grant aid will be available to support non-recurring costs of project set up and post-project evaluation.
3. Chief Executives are asked to note Paragraph 6 & 7 and the required action in Paragraphs 8 & 9.

Background

4. Telemedicine and telecare is key to the National Assembly's plan for modernising and reconfiguring the NHS in Wales. Explicit reference to the potential of telemedicine and telecare services is made in "*Improving Health in Wales - a plan for the NHS with its partners*" launched in February 2001. This complements the strategic context presented in *Better Information - Better Health*, the strategic framework for information management & technology in health and healthcare. Like *Information for Health* in England the primary focus is improvement in clinical information, local ICT and corporate infrastructure. It also requires trusts and health authorities to actively consider opportunities to transform services through the exploitation of ICT e.g. in Health Improvement Plans.
5. The National Assembly for Wales, in consultation with a wide range of clinicians and managers, proposes to establish a Wales-wide programme of grant aided developments and initiatives that introduce telemedicine and telecare services into operational scale patient care.

Programme Overview

6. The programme will initially include a combination of new corporately commissioned, but Service-defined initiatives which are implemented and managed by the NHS in Wales. These projects will complement a number of existing local developments. In the next 2 years the initial focus and priority will be dermatology and "minor injuries" services. The future development path for the programme is currently under consideration by the health and Social Services committee and the Minister for Health and Social Services.
7. These newly commissioned projects will be designated as ***Demonstrator*** projects. Key features of demonstrator status will be:
 - their ability to transform the nature and delivery of existing patient care services
 - a source of experience and lessons which can be rapidly disseminated to, and adopted by, other NHS Wales Organisations.
 - the ability to be self-sustaining as an operational service on the completion of the demonstrator project and expiry of grant aid.

Tele-dermatology and Minor Injuries Pilots – Invitation for Bids

8. NHS organisations are invited to collaborate, form consortia and submit proposals to participate as demonstrator sites. The intention is from the bids submitted to select a minimum of 2 sites that will set up large-scale operational implementations. Central funding, in the form of grant aid to a limit of £150,000, will be made available. The patient service focus should be dermatology and "minor injuries" services. Proposals focussed on other services, which meet the bid criteria below, may be considered, but the programme priority remains as stated in paragraph 6.

The deadline for submission of proposals is 30 April 2001.

A. Bid Requirements

9. There will be no predetermined format for submissions. However the investment proposal should comply with current guidance on the submission of outline business cases.

In addition, proposals should clearly indicate:

- The full membership of the consortium, which should include relevant Trust(s), HAs, LHGs and General Practitioner services as a minimum. A letter of support for the project will be required from the relevant Health Authority(ies) will be required confirming the sustainability of the project and its consistency with the Authorities strategic development plans. The consortium should also consider involving commercial technology and communications suppliers.
- The consortium members will collectively be **expected to resource** the project to **at least** an equivalent level of the grant aid requested.
- A formal project management structure, demonstrating clinical and managerial commitment at the highest level with the ability to commit local resources, determine action and manage central grant aid. Membership of the Board and the

Project Manager should be identified. A lead partner organisation in the consortium should be identified.

- The scope of the project, including well developed project activity and finance plans, detailed objectives and deliverables, allocation of activity within the consortium membership, sources of local funding, scope and methodology for post-implementation and project evaluation reports upon completion.
- The proposal must take into account the future strategic modernisation of the NHS in Wales as outlined in the NHS Strategy "Improving Health in Wales" announced by the Minister for Health and Social Services in February 2001. In particular the bid must address:
 - the issues of clinical governance, quality, accountability and continuity of care.
 - integration of proposals with other related service developments, including for example, work being progressed by the Innovations in Care Programme.
 - An outline of current telemedicine initiatives, prior experience and any complementary work currently being undertaken,
 - An estimation of anticipated patient numbers and benefits arising from the demonstrator project. The successful projects will need to demonstrate commitment and robust methodologies capable of delivering BOTH improved productivity AND improved service quality.
 - the submission must identify how benefits will be realised and
 - identify how the telemedicine demonstrator project contributes to existing targets in the Waiting List and Innovations in Care Initiatives.

Advice on Bid Development:

Chief Executives, or their nominated lead contact may wish to discuss expressions of interest prior to the commitment of major resources to the bid production process with the newly appointed All Wales Telemedicine Strategy Development Officer, Mr Adrian Savill 029 2080 1058, E-mail: adrian.savill@wales.gsi.gov.uk.

Technical Configuration and Technology Requirements

11. The Telecommunications 2000 review recommends that NHS Wales migrate its current network structure to an IP-VPN technology in the coming years. A project is being established to manage the strategic migration to IP-VPN. Therefore, in terms of technical telecommunications standards, this means that those intending to procure and implement video conferencing technologies MUST ensure that the equipment purchased can operate over the current and future communications environments. This means, in practice, that equipment should have a dual capability of ISDN2/6 and IP working.

Procurement of Equipment

12. A national framework agreement for the procurement of video conferencing technology exists. This framework is operated by the CCTA and is referred to as the Government Telecommunications Contracts.
13. Where appropriate, it is expected that successful demonstrator projects will wish to consider taking advantage of the economies of scale, compatibility and common technical standards, which this framework offers. This framework has been successfully used by both the National Assembly in Wales and by the Welsh Ambulance Trust.
14. Further technical advice and guidance is available from Mr Ken Pile 029 2080 3389, E-mail: ken.pile@wales.gsi.gov.uk and can be made available on request to any organisation considering procurement of telecare and video conferencing equipment.

Post-Implementation and Post-Project Evaluation

15. Projects must have an evaluative component to their design to aid operational development and enable comparisons with existing approaches to be made. Evaluations should be capable of describing patterns of usage, degree of acceptability to patients and staff, outcomes for patients and provide cost data comparable with existing approaches.

Deadline for Submissions

Bids should be submitted by 30 April 2001.

Submissions should be sent to:

Mrs Lydia Bateman
Health Information Management & Technology 3 Division
NHS Directorate
National Assembly for Wales
Cathays Park
Cardiff CF10 3NQ

E mail: lydia.bateman@wales.gsi.gov.uk ;
Tel. no: 029 2082 3389 (WHTN 1208 3389)

16.

Links with other Home Country projects and initiatives

The National Assembly for Wales Health Department will establish:

(i) **An All-Wales Telemedicine Programme Board:** This Board will be chaired by an NHS Chief Executive. The Board membership will be drawn from an appropriate range of stakeholders. The programme board will:

- oversee the planning, implementation, operation and co-ordination of the telemedicine demonstrator sites and in due course integration of the Demonstrator sites with the All-Wales Videoconference network.

(ii) During recent years the National Assembly for Wales has developed a substantial number of contacts for telemedicine and telecare projects in the other Home Countries and beyond and will be able to facilitate discussions to aid and inform the demonstrator sites. Details of UK Telemedicine projects can be found at www.dis.port.ac.uk/~health/newndtm