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Health Department
Directorate of Performance

eHealth Division
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Dear Colleague

eHEALTH: GUIDANCE FOR PLANNING AND DEVELOPMENT PENDING SINGLE RECORD

Purpose

1. This document defines the strategic context for the Single Record programme and provides guidance for eHealth developments to ensure they will align with the Single Record when it is implemented.

2. The eHealth community – national and local - should understand the scope and plans of the Single Record programme and the implications for any proposed developments.

Action

3. Each NHS Board and national programme to review plans covering the period to end 2007 in the context of this guidance.

4. Comment to SEHD eHealth Division on where they see a good fit with plans, and more particularly where there may be issues.

5. Where developments are desired which are significant, including replacement to existing IT systems, contact the eHealth Design & Approval Authority.

6. Agree with the eHealth Design & Approval Authority arrangements for review of the proposed development.

7. Act on feedback and identified actions.

8. Establish and maintain an ongoing dialogue with the Single Records programme, for example to ensure that new requirements can be captured.

18th October 2005

Addresses

For action

Chief Executives, NHS Boards, Special Health Boards and NHS National Services Scotland

Directors of Finance, NHS Boards, Special Health Boards and NHS National Services Scotland

IM&T Managers, NHS Boards, Special Health Boards and NHS National Services Scotland

Directors of Clinical Information NHS Boards

For information

Directors of Information, NHS Boards, Special Health Boards and NHS National Services Scotland

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9. Contribute to the establishment of a National register of eHealth applications.

Yours sincerely

DR PETER COLLINGS

INTRODUCTION

1. The Single Record programme consists of three streams of work:

    - Universal implementation and use of existing national systems
    - Filling a limited number of strategic gaps in infrastructure and certain clinical applications
    - Acquiring and delivering a Single Record system.

2. This will have the effect of concentrating IM&T effort on a relatively narrow front until the Single Record system is implemented. This is a conscious decision to ease as far as possible the task of migrating to Single Record, an objective which will not be helped by adding to existing 'spaghetti'.

3. However, it is accepted that there is already clinical IM&T activity and development, both national and local, which is outside the scope of the programme and that this should continue. This must be supported to ensure there is no 'planning blight' during the interregnum while the Single Record system is established. However, there must be an optimum balance between focussing on readiness and supporting innovation while avoiding wasted effort.

4. It is also accepted that in principle there may be new developments not yet underway but which may be appropriate.

STRATEGIC CONTEXT FOR PLANNING

5. The main context is the eHealth High Level Plan which sets targets and priorities. Further clarification of the direction for national 'cornerstone' products is given in annexe A below.

Programme A: Exploiting what Exists

6. About exploiting what already exists in order to ease the task of migrating to Single Record while enhancing clinical value. Implications for local planning include ...

    - Undertake programme to improve CHI based identification, including implementation of the SCI Index facility (general target, for further definition, is CHI-based patient identification to be universal by June 2006)
    - Expanding the types of clinical information held within SCI Store, in particular clinical letters
    - Initiatives agreed among eHealth (formerly ECCI) Project Managers ...
    - All GP Practices able to receive and incorporate into own electronic patient record haematology and biochemistry results from Store by end March 2006
    - All GP Practices to be sending 90% of all referrals via the Gateway electronic referral system by end March 2006

- Encouragement to use Gateway for Secondary to Secondary Care, AHP and A&E/OOH Service to GP Practices referrals, and all forms of discharge communication.
- Implementation of the national Emergency Care Summary system to OOH services in NHS Boards by June 2006
- Implement national A&E system, or ensure existing alternative conforms to national standards by June 2006

Programme B: Filling the Gaps

7. Key objective here is to facilitate migration towards the Single Patient Record. In relation to certain key national initiatives local planning must cover areas such as...

    - National PACS system rolled out by end 2007
    - Work with national approach to staff identity and authentication service, when agreed
    - Establishing standard desktops
    - Use of national contract for Managed Technical Services
    - Use of Generic Clinical System (GCS)

8. It is also recognised that over and above national strategic priorities and the cornerstone projects that are essential to their delivery, a number of prevailing initiatives are underway in NHS Boards (many already well established with funding and resources committed) that are consistent with the eventual vision of a Single Record.

9. The learning that is being gathered from these initiatives, and the contribution that they make to both cultural change and organisational development will be key enablers of the changes that will be required across Scotland to reap the full benefit of the Single Record.

10. An inventory of such projects and initiatives will be prepared to enable their worth to be quantified within the context of Single Record, and to ensure that they are broadly consistent with and able to be readily translated to the Single Record vision.

11. Such initiatives will include:

    - Systems to service Community Nursing Services and Allied Health Professionals where there has been little progress historically and users are poorly served in relation to IT systems.
    - Infrastructure developments that enhance secure access to IT resources and improve aspects of service delivery
    - Order communications and results reporting systems
    - Systems and processes that are endeavouring to rationalise patient numbering and enhance the availability and accuracy of CHI across health systems
    - Systems rationalisation projects that will make transition to Single Record easier (e.g single radiology, laboratory etc. systems within NHS Boards)

- Enhancements to existing PACS Systems to bring them closer to the national PACS solution

Programme C: Planning and delivering Single Record

12. Implications for local planning include ...

    - Cement organisation of unified NHS Board IM&T services, including Information Governance.
    - Collaborate with national Single Record Core Group
    - Work with the eHealth Design & Approval Authority for any proposed developments.
    - Press on with IT staff development in areas such as training, support, facilitation and project management.

PROPOSALS FOR DEVELOPMENTS

13. New proposals may arise locally or nationally to undertake innovation or development outside what was listed above. It is essential that innovation and development is not stifled but at the same time is progressed with an eye to impact of the Single Record programme. That is, potential risks are understood and accepted.

14. Key principles to be recognised and applied to both national and local developments are described below.

15. The procedures in this paper will apply to any new 'significant' development, which is proposed. This is defined as one or more of the following …

    - Costing more than £100,000 (or man-day equivalent) effort
    - Crossing traditional organisation boundaries, for example cross NHS Board clinical networks
    - Involving replacement of existing core systems.

16. If the development is not part of the Single Record programme then it is:

    - Likely to be replaced by Single Record at some point in the foreseeable future.
    - Not to be funded by central SEHD budgets.
    - Unlikely to be supported by the existing eHealth resource and governance arrangements.

17. Must include a viable exit strategy to allow the development to be replaced (absorbed) by the Single Record. A key part of this is that any contracts undertaken must include early termination dates or no cost 'early walk away' clauses to allow a cost neutral switch to any SR contracts. Any proposed new contracts of more than three year term will require SEHD approval.

18. Any development is communicated to the NHSScotland eHealth community to allow the potential for sharing in the development and any subsequent use. For example to ensure that local procurements benefit from other's experience and could be used elsewhere.

19. Any development must not duplicate any element of the roll-out and gap-filling elements of the Single Record Programme.

20. Must use, or be ready to use, early deliveries from the Single Record programme. For example, identity and authentication, managed technical services and standard desk-top.

21. Must conform to approved NHSScotland information standards where applicable including data standards/ datasets (to be published in the Health and Social Care Data Dictionary); XML messaging standards and terminology standards.

22. Must be developed to conform to the NHSScotland Minimum Development Standards.

23. Must align with the NHSScotland Technical Architecture, which defines an extensive set of characteristics that will ensure that the development will fit with the existing architecture and facilitate migration to the Single Record System.

REVIEW

24. Any and all new developments must adhere to the principles outlined above.

25. For significant developments this will be checked by a formal review by SEHD eHealth supported by the eHealth Design & Approval Authority.

26. The eHealth Design and Approval authority will be formed by clinical, IM&T and management representatives of the eHealth community under the direction of SEHD eHealth Division. In the interregnum until this authority is established this function will be performed by the Single Record Programme Core Group, see annex B.

27. The scale of the review will reflect the scope of the development and is not intended to be a significant bureaucratic burden, either to would be developers or reviewers.

28. Outcome of the review would be:

    - Agreement to proceed with the development.
    - Agreement to abandon the development.
    - Agreement to proceed with a modified the scope or approach to the development. For example to combine with other similar projects
    - Acceptance that the development is not sanctioned by the eHealth Programme and progressed against the advice of the programme at the risk of the local sponsors.

REGISTER OF NHSSCOTLAND EHEALTH APPLICATIONS

29. A register of eHealth applications will be established. This will:

    - Improve planning for the migration to Single Record.
    - Improve requirements capture for the specification of the Single Record.
    - Avoid waste by minimising duplication of effort and re-inventing wheels. This by facilitating building on what already exists.
    - To facilitate sharing of experience and expertise by those working in similar functional areas.

30. All relevant existing and any new applications will be held in the register, which will be made readily available to the service.

31. Relevant applications will include all software applications that are:

    - Used in conjunction with eHealth.
    - Cost more than £20,000 (or man day equivalent).
    - Thought to be of potential interest to other areas.

32. A survey will be undertaken to record the current operational applications based on the form shown in annex C. A web-based method of completing and updating forms will be established, and instructions for completion will be communicated when this is ready.

33. The eHealth community must ensure the register is maintained by adding all new applications that meet the above criteria and reflecting any changes in existing applications.

Direction for national 'cornerstone' products

Purpose of this section is to give a statement on the direction for national 'cornerstone' products over the period now till end 2006 in order to help local and national planning. The products covered are SCI Store, in both its traditional and Emergency Care Summary guise, SCI Gateway, National Directory and CHI-based patient identification/ SCI Index. Statements of direction are at a high level.

The context is the work toward the Single Record. At this stage, ahead of options appraisal and procurement, we cannot know the details and priorities. However, the assumption underpinning this statement is that a Single Record system will be purchased and introduced incrementally across NHSScotland.

The perception may be that Single Record implies no future for the current national cornerstone products. This conclusion is wrong for several reasons. Firstly, the strategy is not 'big bang' implementation of Single Record but rather is one of incremental steps. Secondly the cornerstone products will have an important role in the migration to Single Record. Finally it may be that the successful supplier will wish to include one or more cornerstones in their overall permanent architecture.

There is therefore no reason to wind down or even coast with these products. In fact pressures to make progress mean that this statement is if anything over-ambitious about what developments are possible within available time and resource. However, it must be stressed that the developments other than those listed below will not be undertaken, save for a level of user group commissioned enhancements/ fixes.

The Single Record context does however mean that there is a need for greater focus on developments which will ease the eventual migration task. It also means focusing on how the cornerstone products will help other key areas where progress must be made, ie. interfaces and other support for A&E, PACS and Generic Clinical System.

SCI Store

The direction for Store development and implementation are …

1. Support for CHI-based patient identification (see below)

2. Single hub for exchange of structured information. Store is our hub for integrating and making available clinical information. To ease establishment of Single Record – and provide clinicians with a single source of collated patient information – Store must be the single conduit for interfacing. Hence for example if system x needs information from system y then x feeds to Store and y feeds off Store. Key is the use of published NHSScotland XML standards, current examples are test results, radiology reports, referrals, discharge. Over 30 different systems, some with several instances, currently use this approach.

3. Hold and make available unstructured information. Store's facility to receive and make available content from other systems, eg. cancer summaries, pharmacy records, theatre operation summary, is available now in 'document' form supported by descriptive 'metadata' tags. Hence this human-readable view of the

information treats such information no differently to Store's letters repository, ie. a document with associated metadata. There may however be a case for storing the information content of these documents as fully defined and structured data, assuming such definitions exist. This would enable re-use of the data for statistical analysis, for example. If and when such cases come forward then the case for added development to Store to enable this can be looked at.

4. Development of a test requesting facility. There be will options ranging in sophistication. In addition it need not be assumed that this facility is a development of Store itself, ie. could be an add-on.

5. Links with Emergency Care Summary (see below)

6. Undertake proof of concept for centrally hosted service, then roll out.

7. Produce options appraisal and business case for migration to a single national instance of Store

There is in addition the important work related to CHI-based patient identification, which is covered below.

Emergency Care Summary

The objectives for ECS development and implementation are …

1. Complete roll-out to all OOH services, including NHS24. Options to be assessed for Scottish Ambulance Service.

2. In parallel, consider options for enhancement of content, eg. QOF data.

3. Plan and undertake an evaluated trial of patient access.

The relationship between SCI Store and Emergency Care Summary (ECS)

SCI Store is our single hub for integrating and making available clinical information. In ECS, a single instance of SCI Store has been created to give OOH services access to key patient GP information as an alternative to setting up look-up access to each and every GP practice system.

There needs to be clarity around how Store and ECS inter-relate. From a patient care point of view there is content in each which will be of clinical benefit to users of each. Moreover it makes no sense for an individual user to have separate access log-ons to each repository.

There are various technical options for achieving inter-relationship, however ahead of that any clinical and access control principals must be agreed. Following that there will be options appraisal on how best to deliver the two-way access goal.

CHI-based Positive Patient Identification (encompassing national CHI system and Local SCI Index)

1. Complete 'NHS Board multi-index' work to support Positive Patient Identification founded on links to national CHI index. As part of this work the national CHI index will be re-developed as SCI Index. As a consequence and to ease future migration, Store should become the only local system-to-system source of interfacing for demographic services – no links to PASs to be developed – and for accesses to national CHI.

SCI Gateway

1. Develop facility for all referrals including secondary care to tertiary care and OOH Centres to A&E Departments.

2. Support delivery and associated workflow of any clinical message to any NHS or social work entity

National Directory/ User Authentication

Pursue work described in Providing a NHSScotland solution to staff identification and authentication – consultation paper circulated for IM&T Leads meeting of May 2005.

ANNEX B

SPR CORE GROUP TERMS OF REFERENCE AND MEMBERSHIP

Remit is to …

Act as principal working group to deliver Single Record through initial stages of business case preparation and procurement.

Undertake Approval Authority role with regard to interim strategy and developments.

Become the main conduit for Single Record-related liaison and consultation between NHS Boards, SEHD, national IM&T Project Boards, eHealth Steering Groups and other relevant bodies.

Take direction and report to the eHealth Programme Board.

Members include clinical and IM&T leads both national and NHS Board. Current list is …

Ian Fenton	IM&T Lead, NHS Tayside
Dr Kenneth Robertson	Clinical Lead, SEHD
Kinley McDonald	IM&T Lead, NHS Grampian
Dr Cliff Barthram, / Dr Beena Raschkes,	Clinical Leads, NHS Tayside
Martin Irving	Technical Lead, SEHD
David Knowles	Head of Data Intelligence Group, ISD
Ron Anderson	Head of IM&T Programmes, NSS
Robin Wright	IM&T Lead, NHS Lanarkshire
Charlie Knox	Head of IM&T Strategy, SEHD
Jackie Stephen	Acting IM&T Lead, NHS Borders
Margaret Hastings	Clinical Lead, NHS Argyll & Clyde
Marian Stewart/ Cliff Baister	IM&T Leads, NHS Glasgow
Alan Hyslop	IM&T Strategy Lead, SEHD

SINGLE PATIENT RECORD PROGRAMME – APLICATION SURVEY AND REGISTER

NHS Scotland - Single Patient Record - Clinical Applications Survey

Please include Clinical Applications either in the planning stage, in development and or already in use. This survey does not require CENTRALLY Supplied Systems (SIRS, CYTOLOGY etc) or non clinical systems (i.e. Finance/Payroll, WIMS, Estates Monitoring Systems, Email Systems, Office Administrative Systems etc etc) input.

NHS Board:			Head of IM&T/eHealth:				Date Originated:			
Name of Application	**Brief Description of its purpose**	**Which Phase is Application Currently in: Planning, Development or In Use**	**Is the Application CHI compliant YES/NO ?**	**Database Type i.e. SQL, Oracle, Access etc**	**Version**	**Is it Supported In-House**	**Is it Supported Externally, by whom?**	**Contract or Support Agreement Expiry Date**	**Perceived Business Priority - High, Medium, Low**	**Support & maintenance cost per annum (£)**