Internal Audit

NHS
Lothian

eHealth Strategy

April 2016
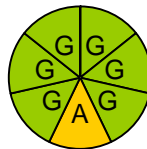
Report assessment

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Introduction

The NHS Scotland eHealth Programme aims to change the way in which information and related technology are used within NHS Scotland in order to improve the quality of patient care in support of the improvements and ambitions set out in the Healthcare Quality Strategy for NHS Scotland. To support this NHS Scotland has developed an eHealth Strategy 2014-17. The Strategy sets the national direction through a common vision and set of key aims. The eHealth Strategy 2014-17 has been refreshed to take cognisance of developments around integrated health and social care. Each NHS board is required to develop and implement its own eHealth Strategy which demonstrates how it will contribute towards the NHS Scotland eHealth Strategy 2014-17.

NHS Lothian had an eHealth Strategic Direction 2011-14 in place, which set out the vision and objectives of eHealth over that period. It is important that NHS Lothian has used the previous Strategic Direction when developing the new strategy to ensure all relevant factors and issues have been taken into account.

Scope

We reviewed the arrangements for developing and implementing NHS Lothian's eHealth Strategy, including how it links to NHS Lothian's Strategic Plan and the NHS Scotland eHealth Strategy 2014-17.

Acknowledgements

We would like to thank all staff consulted during this review, for their assistance and cooperation.

Executive Summary

Conclusion

The process in place to develop and deliver the NHS Lothian eHealth Strategy is, in the main, operating effectively. However, we have identified opportunities to improve the processes for consulting with key stakeholders and prioritising actions within the eHealth Strategy which, if addressed as part of the development of the next eHealth Strategic Plan will result in increased acceptance of the eHealth Strategy as a document that will support delivery of the NHS Lothian Strategy.

Summary of Findings

The table below summarises our assessment of the adequacy and effectiveness of the controls in place to meet each of the objectives agreed for this audit. Definitions of the ratings applied to each action are set out in Appendix 1.

No.	Control Objective	Control objective assessment	Number of actions by action rating			
			Critical	Significant	Important	Minor
1	NHS Lothian has an eHealth Strategy in place, which sets out the vision and objectives for NHS Lothian's eHealth activities.	Green	-	-	-	-
2	There is a clear link between NHS Lothian's eHealth Strategy and the NHS Scotland eHealth Strategy, as well as NHS Lothian's Strategic Plan.	Green	-	1	-	-
3	NHS Lothian has considered its strengths, weaknesses, opportunities and threats in relation to eHealth and incorporated these into the Strategy.	Green	-	-	1	-
4	Development of the eHealth Strategy included consultation with all relevant internal and external stakeholders.	Amber	-	2	-	-
5	NHS Lothian has developed supporting action plans to deliver the Strategy which are prioritised and aligned with budgets.	Green	-	-	1	-
6	NHS Lothian monitors and reports on progress made in	Green	-	-	1	-

No.	Control Objective	Control objective assessment	Number of actions by action rating			
			Critical	Significant	Important	Minor
	implementing the actions required to deliver the eHealth Strategy.	Green				
7	The eHealth Strategy sets out how NHS Lothian plans ensure that the impact of integrated health and social care is taken into account for future decisions around eHealth services.	Green	-	-	-	-

Control Objective Ratings

Action Ratings	Definition
Red	Fundamental absence or failure of controls requiring immediate attention (60 points and above).
Amber	Control objective not achieved - controls in place are inadequate or ineffective (21 – 59 points).
Green	Control objective achieved – no major weaknesses in controls but may be scope for improvement (20 points or less).

Main Findings

We noted a number of areas of good practice during the review.

NHS Lothian's eHealth Strategy was endorsed by the Strategic Planning Committee on 11 February 2016, following review of the Strategy by the Board's Corporate Management Team and Healthcare Governance Committee in July and August 2015.

eHealth managers have been assigned responsibility for providing expertise and advice to key operational units of NHS Lothian, in support of eHealth performance management and both strategic and operational change within the operational units. The operational units include University Hospitals Division, REAS and the Integration Joint Boards.

The eHealth Strategy is supported by the Delivery Business Plan, which has been developed by the eHealth Executive Team. The Delivery Business Plan takes the programmes identified within the Strategy and develops them further, recording deliverables, programme leadership, milestones and completion dates.

Each month, the eHealth management team reviews the progress of a number of eHealth projects. This project summary details the project title, lead manager, progress to date and whether the project is within budget and timescales. Each project is linked to the list of programmes recorded in the eHealth Strategy. Progress against plan for significant individual projects is reported to the Corporate Management Team, and progress against the eHealth

Delivery Business Plan is reviewed every six months by the Scottish Government, with the most recent review occurring in November 2015.

We identified three significant and three important areas for improvement during the review:

- A range of programmes (19 in total) have been developed to deliver eHealth's strategic outcomes and are described at a high level as an appendix to the Strategy. However, the programmes are not clearly aligned in the Strategy to the seven national aims and local strategic priorities.

- Feedback from eHealth staff and service users we met during the audit indicates a lack of effective communication between eHealth and service users, with staff in each group expressing frustrations about the extent of involvement of service users in the eHealth Strategy development programme.

- The eHealth team prioritised projects within the eHealth Strategy based on the results of consultations during the Strategy Development. However, there was no agreement of a prioritisation methodology and criteria in advance of the prioritisation exercise, to provide transparency to all stakeholders about how projects were prioritised.

Further details of each of these points and other, less significant findings are set out in the Management Action Plan.

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Management Action Plan

Control objective 1: NHS Lothian has an eHealth Strategy in place, which sets out the vision and objectives for NHS Lothian's eHealth activities.
We identified no significant issues in relation to this control objective.

We identified no significant issues in relation to this control objective.

NHS Lothian's eHealth Strategy was endorsed on behalf of the Board by the Strategic Planning Committee on 11 February 2016, following review of the Strategy by the Board's Corporate Management Team and Healthcare Governance Committee in July and August 2015. The Strategic Plan was distributed throughout NHS Lothian for wider consultation and incorporates the feedback received from this exercise.

Membership of the Strategic Planning Group includes a number of non-executive members of the NHS Lothian Board.

The eHealth Strategy has created a number of programmes, developed to deliver the Board's strategic objectives for eHealth. The programmes have been incorporated into a Delivery Business Plan, where they have been developed further, recording deliverables, programme leadership, milestones and completion dates.

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Control Objective 2: There is a clear link between NHS Lothian's eHealth Strategy and the NHS Scotland eHealth Strategy, as well as NHS Lothian's Strategic Plan.	
2.1 There is no clear link between the Delivery Programmes and the national eHealth aims and Board strategic aims.	**Significant**

Observation and Risk

NHS Lothian's eHealth Strategy uses the seven aims of the National eHealth Strategy 2014-2017 as a structure to highlight progress to date and the further outcomes to be achieved over the course of the 2014-17 national strategic plan.

In February 2015 the NHS Lothian Board formally approved its overall strategic plan – Our Health, Our Care, Our Future 2014-2024, which sets out the strategic direction and service changes required in Lothian to deliver the Scottish Government's 2020 vision for health and care. The eHealth Strategic Plan has recorded within its strategic context the six aims of the Board's Strategic Clinical Framework, approved by the Board in 2013, and repeated in the 2014-2024 Strategic Plan.

A range of programmes (19 in total) have been developed to deliver these outcomes and are described at a high level as an appendix to the eHealth strategy. However, the programmes are not clearly aligned in the eHealth strategy to the seven national eHealth aims and six NHS Lothian strategic priorities.

If the delivery programmes are not linked back to the national aims and the strategic priorities, the Delivery Plan will not demonstrate that each programme is necessary in taking forward the strategic priorities and objectives.

Recommendation

The eHealth Delivery Programmes listed in Appendix 1 of the NHSL eHealth Strategy should be updated to record which national eHealth aim each programme will address. Similarly, the delivery programmes should also be aligned with the Board's six strategic aims.

Management Response and Action

We agree that this could be made more visible in the document. Update appendix 1 of the document to more visibly link each project with one or more of the strategic aims

Responsibility: Director of eHealth	**Target date:** Complete

NHS Lothian

Control Objective 3: NHS Lothian has considered its strengths, weaknesses, opportunities and threats in relation to eHealth and incorporated these into the Strategy.	
3.1 The eHealth SWOT analysis is not clearly referenced within the eHealth Strategy.	**Important**

Observation and Risk

In December 2015, the eHealth Executive Team, consisting of the Director of eHealth, Head of eHealth Operations and Infrastructure, Head of Health Records, and the Head of Programmes and Development carried out an eHealth SWOT analysis, which identified a number of strategic, programme or project strengths, weaknesses, opportunities and threats. Our review of the SWOT analysis identified several strengths, weaknesses and opportunities that can be assigned to particular strategic priorities, such as the regular collation of eHealth KPIs and project summary reports, and the use of eComms to contact patients electronically.

However, the purpose of a SWOT analysis is to provide senior staff with the framework to consider everything that could potentially impact on the success in achieving the strategic objectives. While the SWOT analysis has been carried out, it is not comprehensive or clearly integrated into the strategic plan. There is no reference made within the eHealth Strategy as to how the output from the SWOT analysis is incorporated into the eHealth Strategy/Delivery Plans and the SWOT analysis did not consider the opinions of eHealth service users. In addition, the ongoing review and update of the SWOT analysis has not been agreed by the eHealth Executive Team.

Without regular review of the SWOT analysis by the eHealth Executive Team and service users, management may not identify emerging strengths, weaknesses, opportunities and threats which might impact on achieving the strategic objectives.

Recommendation

The NHS Lothian eHealth Strategy should be updated with clear reference made to the output from the eHealth SWOT analysis. The eHealth department should demonstrate through the strategy that the strengths, weaknesses, opportunities and threats identified from the exercise have been adequately addressed by current activity and future priorities. A process for the review and update of the SWOT analysis should be introduced. The review should be extended to include eHealth service users.

Management Response and Action

We agree that this could be made more visible in the document. Cross reference the SWOT analysis throughout the document where appropriate and to set out a timetable for the regular review of the SWOT analysis.

Responsibility: Director of eHealth	**Target date:** Complete

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Control Objective 4: Development of the eHealth Strategy included consultation with all relevant internal and external stakeholders.	
4.1 There is a lack of effective two-way communication between the e-Health team and service users.	**Significant**

Observation and Risk

The eHealth Strategy was developed during 2015 before being submitted for approval to the Strategic Planning Committee in February 2016. The Strategy incorporated findings from a workshop held in April 2014, which was attended by NHS Lothian clinicians and managers. In addition, the Strategy refers to the results of a National e-Health Strategy survey, which was promoted by the eHealth team, and to which almost 1200 NHS Lothian staff responded.

However, our interviews with a sample of service users identified that there is a perception that the eHealth Strategy does not currently include IT developments that would support the implementation of the NHS Lothian Strategy. Our subsequent discussions with eHealth staff indicated that, when opportunities were made available for management and staff to contribute to the development of the eHealth Strategy, there was little uptake. For example, a series of Show and Tell events were planned: one event had 2 attendees and another had no attendees.

These comments from both service users and eHealth staff reflect a common situation, where the parties involved in the working relationship have differing expectations of one another and lack of effective communication results in dissatisfaction and frustration with the outcome.

Without effective communication between the e-Health team and service users, there is a risk that the eHealth Strategy is not seen to be delivering the initiatives required to address the Board's strategic requirements.

Recommendation

The eHealth team should engage regularly with the Corporate Management Team in order to agree a methodology for capturing, reporting and consulting with senior management and Board members about the views of clinicians and other staff across the organisation.

The eHealth Team should develop a map or timeline to demonstrate at which points in the planning cycle service users will be consulted, to develop increased visibility of existing consultation processes.

The eHealth team should also provide feedback on service user response rates to consultation exercises, so the Corporate Management Team can take action to promote participation, where required.

Management Response and Action

As Executive Lead for eHealth, the Director of Strategic Planning and Performance Reporting will develop and agree an engagement model for eHealth/CMT which should ensure that eHealth matters become a routine consideration and part of everyday business within the corporate decision making of the organisation.

The Director of Strategic Planning and Performance Reporting will oversee the correlation of the eHealth planning cycle to ensure that it becomes a routine part of Planning processes rather than a separate entity.

Responsibility: Director of Strategic Planning and Performance Reporting	**Target date:** 15 August 2016

4.2 There are no formal prioritisation criteria in place to facilitate transparent decision-making	Significant

Observation and risk

Prior to approval, drafts of the eHealth Strategy were subject to review by the Corporate Management Team, Healthcare Governance Committee and Strategic Planning Committee. In addition, in July 2015 NHS Lothian's Director of Strategic Planning wrote to heads of service across the organisation asking them to respond to the content of the draft eHealth Strategy. Comments were received from representatives of seven areas of the organisation and the Director of eHealth has responded to each representative with explanation of how their comments will be addressed by the eHealth strategic priorities. These responses have been recorded under a number of the national strategic aims.

However, there was no formal engagement with stakeholders in advance of drafts of the strategy being circulated to obtain input from across the Board to identify a methodology and criteria for prioritising projects in the eHealth Strategy. We noted that the priorities in the eHealth Strategy were initially determined by eHealth, using information obtained during earlier consultations.

If clear and understood criteria are not used to prioritise projects within the eHealth Strategy, there is a risk that NHS Lothian uses the funding available for projects that do not maximise benefit to the organisation and promote delivery of the NHS Lothian Strategy.

Recommendation

The eHealth team should work with stakeholders to develop the prioritisation criteria and methodology to be used in order to identify projects to be included in the development programme. Stakeholders might include the clinicians, Board members and representatives of the national eHealth programme.

The criteria / methodology to be applied should include consideration of nationally mandated projects; projects that are required in order to maintain / upgrade existing functionality; and projects that will support changes to service delivery and achievement of NHS Lothian's strategic objectives.

Once the prioritisation criteria and methodology have been agreed and applied to the potential projects to be included in the development programme, the initial results should be reported to stakeholders, providing an opportunity for further comment.

Management Response and Action

eHealth will develop a range of options for prioritisation to be reviewed and the preferred methodology selected and approved by CMT. Once agreed, this methodology will be applied for the next and subsequent planning cycles.

Responsibility: Director of eHealth	**Target date:** 15 August 2016

Control Objective 5: NHS Lothian has developed supporting action plans to deliver the Strategy which are prioritised and aligned with budgets.

5.1 Programme completion dates recorded in the eHealth Strategy do not match those in the Delivery Business Plan.	**Important**

Observation and Risk

Each of the 19 programmes listed in Appendix One of the eHealth Strategy have recorded dates for their planned delivery, given as, for example Q4/16 (quarter 4 of 2016). No programme has a planned delivery earlier than Q4/15, with the delivery of some not expected until 2017. The programme priority has been determined by whether or not resources are in place to deliver them. Programmes with no supporting business case required have an earlier planned delivery date.

These 19 programmes are recorded within the Delivery Business Plan. However, the accompanying Programme Profiles within the Delivery Business Plan record target dates that do not correspond to those recorded in the Strategy. For example, the Strategy records the delivery date for Programme 10 – PACS Replacement Programme as Q2/16, while the Delivery Business Plan has target completion dates for this programme of July 2014 and December 2015.

The difference in dates is misleading and could result in confusion over when programmes are expected to be completed.

Recommendation

The eHealth Delivery Business Plan should be updated and more accurate target dates added to each programme recorded. Target completion dates recorded in the plan should match those assigned to each programme listed in the eHealth Strategy.

Management Response and Action

Agreed. These became out of sync as a consequence of the prolonged drafting period. The eHealth delivery plan should be refreshed to incorporate the most recent version of national and local target dates.

Responsibility: Director of eHealth	**Target date:** Complete

Control Objective 6: NHS Lothian monitors and reports on progress made in implementing the actions required to deliver the eHealth Strategy.	
6.1 Formal reporting to NHS Lothian Board or committee is not in place	**Important**

Observation and Risk

A Project Summary is updated monthly by Project Managers, recording progress made to date against a number of eHealth projects.   A colour coding system is used to record the status, using red, amber and green to provide summary information around such things as timetable/schedule and budget. The Project Summary is reviewed each month by the Director of eHealth and Head of Programmes & Development. Monthly highlight report meetings have been set up between eHealth senior staff and Programme Managers, Senior Project Managers and other project managers as required.

NHS Lothian's Director of eHealth and the Head of Programmes & Development meet twice each year with representatives from the Scottish Government's eHealth Policy & Strategy Department, to discuss NHS Lothian's progress against local and national priorities as set out in its eHealth Strategy.

However, while Project governance arrangements include reporting progress of significant individual projects to the Corporate Management Team, there is no regular reporting of overall progress against the eHealth strategy to the Board or a committee of the Board.

There is a risk that the NHS Lothian Board is unable to consider progress against the eHealth strategy and approve any actions necessary to meet the approved deadlines.

Recommendation

The Director of eHealth should agree with the Board or relevant committee a schedule for reporting on progress against the objectives of the eHealth Strategy

Management Response

Agreed.

Management Action

The Director of eHealth will work with the Director of Strategic Planning to agree in conjunction with the Director of Finance the most appropriate reporting route and agree a forward looking timetable to provide updates.

Responsibility: Director of eHealth	**Target date:** 27 May 2016

Control Objective 7: The eHealth Strategy sets out how NHS Lothian plans ensure that the impact of integrated health and social care is taken into account for future decisions around eHealth Services.

We identified no significant issues in relation to the control objective.

Included in the eHealth Strategy and the NHS Lothian Local Delivery Plan for 2015-16 is the commitment to develop and extend eHealth activity in specific areas. Health and Social Care Integration is an area of development that will be facilitated by eHealth in terms of both connectivity and information governance.

A future priority recorded in the eHealth strategy is to develop NHS Lothian's information systems and processes, using the Interagency Information Exchange to support multi-agency information sharing with local authority Adult and Children's Services. Moving into 2016-17 the Strategy recognises the need for a wider integration of agency systems to share information and support developing needs with the Lothian Integration Joint Boards.

To implement this, an eHealth Delivery Programme called "Health and Social Care Business Requirements, Architecture and Integration – supporting secure sharing of relevant patient/client information across Health and Social Care" has been developed. The programme currently has two projects assigned to it and these are reported regularly through the eHealth Project Summary reporting process.

Appendix 1 - Definition of Ratings

Management Action Ratings

Action Ratings	Definition
Critical	The issue has a material effect upon the wider organisation – 60 points
Significant	The issue is material for the subject under review – 20 points
Important	The issue is relevant for the subject under review – 10 points
Minor	This issue is a housekeeping point for the subject under review – 5 points

Control Objective Ratings

Action Ratings	Definition
Red	Fundamental absence or failure of controls requiring immediate attention (60 points and above)
Amber	Control objective not achieved - controls in place are inadequate or ineffective (21 – 59 points)
Green	Control objective achieved – no major weaknesses in controls but may be scope for improvement (20 points or less)