

The 2015/16 audit of NHS 24

Update on management of an IT contract



Prepared for the Public Audit Committee by the Auditor General for Scotland
Made under section 22 of the Public Finance and Accountability (Scotland) Act 2000
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Introduction

1. I have received audited accounts and the auditor's report for NHS 24 for the year ended 31 March 2016. I submit these accounts and the auditor's report under section 22(4) of the Public Finance and Accountability (Scotland) Act 2000, together with this report which I have prepared under section 22(3) of the Act.
2. The purpose of this report is to update Parliament on further delays to the implementation of a new IT system in NHS 24, and its financial impact on the board. This is the third consecutive year that I have reported to Parliament on these matters.¹ NHS 24 gave evidence on my October 2015 report to the Public Audit Committee in January 2016, and the Scottish Government gave evidence in February 2016.²

Summary

3. NHS 24 has invested significantly in implementing a new IT system over the past six years. The delays in implementing this system have led to additional costs and risks to NHS 24's ability to meet its financial targets in future years.
4. During the delay in implementing the new IT system, NHS 24 has maintained the existing IT system, minimising the impact on services for patients. It met 14 of its 15 key performance indicators, only narrowly missing staff attendance targets.
5. Over the last nine months, the Board of NHS 24 has taken a fundamental look at what needs to be addressed in order to fully implement the new system. Whilst significant challenges still remain, the Board is taking reasonable steps to mitigate the risk of further delay.

Background

6. NHS 24 is a special health board of NHS Scotland. It provides a confidential online and telephone-based health advice and information service to the public. It delivers an out-of-hours service allowing people who feel unwell or those caring for them to obtain advice. Following an initial assessment, callers are given advice on self-care or transferred to an appropriate clinician for advice and assistance. Where the caller is reporting a serious or urgent concern, this can result in an immediate referral to the Scottish Ambulance Service.
7. In 2009, NHS 24 began work on its Future Programme. The programme's objective was to improve patient experience by modernising NHS 24's core telephone and online technology. The implementation of the new system, originally scheduled for June 2013, is still not complete.
8. In 2011, NHS 24 procured the technology for the new system. NHS 24 appointed Capgemini to deliver the clinical and patient handling applications together with a ten-year contract for ongoing support once the system was in operation. It appointed BT to deliver the hardware and infrastructure and to support the infrastructure for the ten-year contract term.

¹ *The 2013/14 audit of NHS 24: [Management of an IT contract](#)*, Audit Scotland, October 2014 and *The 2014/15 audit of NHS 24: [Update on management of an IT contract](#)*, Audit Scotland, October 2015.

² [Official Report of Scottish Parliament Public Audit Committee](#), 20 January 2016.

9. In July 2013, NHS 24 postponed the implementation date for the new system from June 2013 to October 2013; and in October 2013 it postponed implementation indefinitely. This was due to the new system's failure to meet critical patient safety performance measures such as the ability to function with multiple users at an acceptable speed. Capgemini disputed that the system was not meeting the requirements specified in the contract. It subsequently became apparent that there were flaws within the contract documentation.
10. Following the withdrawal by NHS 24 of legal action against Capgemini, NHS 24 has worked with its suppliers to resolve the performance issues associated with the new system. The Board of NHS 24 agreed an implementation plan at its February 2015 meeting; and proposed a first phase of the system becoming operational in October 2015, with the second phase concluded by the end of March 2016.
11. Between 2012/13 and 2014/15, the Scottish Government provided additional loan funding of £20.756 million to NHS 24 to help it manage the implementation costs and costs associated with delays in the new IT system. This form of loan funding is known as brokerage. NHS 24 repaid £0.4 million during 2014/15, leaving £20.356 million still to repay (see Exhibit 2 on page 9).
12. In December 2015, I reported to the Public Audit Committee that the total cost of the Future Programme had risen by 55 per cent to £117.4 million, compared to a business case cost of £75.8 million covering the ten-year contract period. The increase was due to changes in the contract specification and costs associated with the delay in implementing the IT system.
13. Timelines of key events are included in Appendices 1 and 2.

Auditor's opinion

14. The auditor gave an unqualified opinion on NHS 24's financial statements for 2015/16. The auditor reported that NHS 24 generally has appropriate processes in place to manage its resources. The auditor has obtained assurance over the 2015/16 Future Programme accounting treatment, but the technical and operational setbacks are having a significant impact on its financial position and projections. Each month the Future Programme is not operational, NHS 24 incurs around £0.5 million in additional costs.

Findings

Continued delays in implementation

15. The new IT system went live on 28 October 2015 as planned. During the period when GP practices are normally open, the system was stable. However, the system failed shortly after the 'out-of-hours' period began, causing NHS 24 to revert to its previous IT system.
16. The new system was relaunched on 3 November 2015. After six days of operation, NHS 24 experienced a dramatic deterioration in call handling times as NHS 24 staff struggled to use the new system. The average call handling time experienced across the weekend 6-8 November 2015 almost doubled, from 11.8 minutes to 23.3 minutes. An increase in call

handling time can affect patient experience and patient safety. This applies to both people on a call and those trying to call in.

17. On 13 November 2015, NHS 24's Medical Director recommended that the new system be withdrawn again to protect patient safety. Following consultation with the Executive Management Team, the chief executive took the decision to withdraw the system from service. The new system remains under development.
18. To learn from the withdrawn launch, NHS 24 undertook a series of reviews and identified a number of key issues:
 - The system needed further improvement to allow it to be used effectively both internally (how calls are passed between NHS 24 operators using system) and externally with partner NHS boards.
 - There was a lack of cohesion and joint working between the Future Programme and operations teams at senior levels.
 - There were weaknesses in partner engagement at planning and testing stages, resulting in incorrect assumptions about how the new system would integrate with the out-of-hours service in individual NHS boards. It was incorrectly assumed that all NHS boards used the same configuration of the 'out-of-hours' system. This caused problems with the format and content of the clinical patient information passed from NHS 24 to the NHS boards.
 - Operational staff lacked confidence and experience with the new system because of weaknesses in training and familiarisation, contributing to longer calls and longer waits for calls to be answered.
 - There were problems with the clinical content of the system resulting in operational processes and workflow not working effectively. For example, a new risk assessment at the call handler stage did not operate as intended, resulting in an increase in referrals to the Scottish Ambulance Service.
 - Testing did not adequately simulate peak call volumes.
 - Senior management and the Board lacked experience of implementation of significant change management projects in a call centre environment.
19. In March 2016, NHS 24 appointed an external contact centre specialist with significant call centre experience. He identified that weaknesses in matching resources to the workforce plan, team working and performance management within NHS 24 had contributed to many of the difficulties experienced during the attempted implementation.
20. In addition, during system testing in April 2016, NHS 24 identified that an intermittent problem experienced during 2015 testing had yet to be rectified. This caused concern about the overall integrity of the IT infrastructure and applications. At that time, concerns were also being raised about partner readiness and organisational preparedness. As a result of the improvements needed to address these problems, the Board was advised that roll out of the new system would not be completed in 2016.

Governance developments

21. In March 2016, Angiolina Foster was appointed as NHS 24's interim Chief Executive, following the departure of the previous interim Chief Executive, Ian Crichton, in February 2016. Ms Foster is the Chief Executive of Healthcare Improvement Scotland.
22. Since that time, NHS 24 has established a number of additional arrangements to address weaknesses highlighted during the lessons learned reviews, in relation to the lack of relevant experience at senior management level, and the need for wider scrutiny and challenge. This includes establishing:
 - an Independent Contact Centre Specialist Advisor to provide independent advice to the NHS 24 Board
 - a User Reference Group comprising managers and staff not directly involved in the implementation process to act as a critical friend
 - a Technical Assurance Group (TAG) comprising senior eHealth and IT directors from NHS Greater Glasgow and Clyde, the Scottish Government's eHealth Directorate and NHS National Services Scotland to provide independent scrutiny and challenge in relation to technical aspects of the implementation
 - an Independent Advice and Assurance Group to provide advice to the NHS 24 executive management team and provide assurance to the Scottish Government.
23. In addition, NHS 24 is in the process of establishing the following two scrutiny groups:
 - a Partner Assurance Group to provide oversight of the plans to implement the Future Programme, chaired by the Deputy Chief Medical Officer for Scotland.
 - an Organisational Assurance Group to provide oversight of the organisation improvement plan and the aligned plan for technical staff readiness to implement the Future Programme, chaired by the Chief Officer, Scottish Fire and Rescue Service.

Contractual developments

24. I reported last year that NHS 24's contractual arrangements with Capgemini and BT were found to be flawed and needed to be substantially revised to provide all parties with clarity on relative roles, responsibilities and commercial liabilities.
25. Detailed negotiations were held between the three parties in the run up to the October 2015 implementation date, but NHS 24 did not reach full and formal agreement on the contractual changes required. Following NHS 24 Board's consideration of advice from the Central Legal Office (a division of NHS National Services Scotland), all parties agreed that a Letter of Intent would be signed, outlining what had been agreed, to allow implementation to go ahead.³

³ A Letter of Intent is a document outlining one or more agreements between two or more parties before the agreements are finalised.

26. The support arrangement negotiations have continued, allowing NHS 24 and its contractors to make progress with finalising the contracts. NHS 24 aims to finalise these with BT and Capgemini by the end of December 2016.

Financial implications

27. The auditor has provided assurance over the treatment of the Future Programme in NHS 24's 2015/16 accounts, but the financial implications remain significant and ongoing. A final, definitive cost for implementing the system will only be available once it has been launched and is operating successfully.
28. Failure to launch successfully and additional double running costs have meant that NHS 24 now estimates that total projected cost of the programme will be £131.2 million, 73 per cent above the £75.8 million included in the original business case (Exhibit 1).

Exhibit 1

Comparison of the outline business case and current projected costs for the new IT system

	Outline business case £ million	Projected costs (at October 2015) £ million	Current projected costs (at June 2016) £ million	Projected overspend against business case £ million
Implementation costs (including double running costs)	29.6	56.9	68.7	39.1 (+132%)
Ongoing support costs for ten-year contract	46.2	60.5	62.5	16.3 (+35%)
Total	75.8	117.4	131.2	55.4 (+73%)

Source: NHS 24 Annual accounts 2015/16

29. In July 2015, NHS 24 had agreed with the Scottish Government Health and Social Care Directorate to repay the outstanding brokerage of £20.356 million in full in the four-year period from 2017/18 to 2019/20. NHS 24's 2015/16 budget for the Future Programme implementation was £12.735 million, including double running costs of the current system. This assumed a re-launch date of June 2016. However, costs of £13.837 million were incurred during 2015/16, nine per cent over budget. In order to break even, NHS 24 needed to make additional in-year cash releasing savings and did not repay any brokerage to the Scottish Government in 2015/16.
30. In June 2016, NHS 24 and the Scottish Government agreed a revised brokerage repayment profile following delays to the programme. The revised agreement is to extend repayment by a further two years, to 2021/22 (Exhibit 2).

Exhibit 2

Summary of Scottish Government brokerage to NHS 24 and repayment plans

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Total
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	
Brokerage received	0.320	16.577	3.859	-	-	-	-	-	-	-	-	20.756
Original Repayment plan		-	-	5.275	5.492	5.700	3.689	-	-	-	-	20.156⁴
Revised repayment plan July 2015				0.400 (paid)	0.788	3.580	4.334	6.224	5.430			20.756
Revised repayment plan June 2016				0.400 (paid)	-	-	0.123	6.292	5.622	5.256	3.063	20.756

Source: NHS 24 Annual accounts 2015/16

⁴The original brokerage repayment plan agreement total was £20.156 million, as this did not reflect an additional £600,000 brokerage that was agreed later in 2013/14.

Looking forward

31. NHS 24 previously attempted full implementation of the new system on a national basis, to avoid any potential problems of return callers who may access the service across different geographical boundaries. However, NHS boards had expressed concern about this approach. NHS 24 has since done further work to assess the scale of this potential problem and has now determined that it is possible to introduce the new IT system through a single health board for a period of time. This will allow NHS 24 to thoroughly test the new system in real conditions and establish greater confidence in the system prior to national roll out.
32. At a special Board meeting on 29 June 2016, the NHS 24 Board approved a revised, three-stage, implementation approach. The first stage involves implementing Planned Care services (see paragraph 33) in the autumn of 2016. The second stage involves the initial implementation of Unscheduled Care services (for people who feel unwell or those caring for them to obtain advice out with GP hours) in a single NHS board by March 2017. For the third and final stage, NHS 24 plans full national rollout of Unscheduled Care services by December 2017. This approach will now be subject to detailed planning and consultation with internal and external stakeholders.
33. NHS 24 has identified that some Planned Care services can be introduced independently from other services. Planned Care services represent around ten per cent of NHS 24 calls and include:
 - Breathing Space, a confidential telephone service for people experiencing low mood, depression or anxiety
 - Living Life, a confidential telephone service based on Cognitive Behavioural Therapy, for people aged 16 and over, who are feeling low, depressed or anxious
 - Musculoskeletal Helpline, providing information and advice for people with muscle or joint problems
 - Fit for Work Service, a confidential support service to help employees with long-term sickness absence to return to work more quickly
 - Death Certification in Scotland, guidance on death certification and registration
 - Scottish National Blood Transfusion Service, an information service about blood donation and becoming a blood donor.
34. These services use the new customer handling systems but do not rely on the decision support systems.
35. In looking forward to a safe and successful future implementation, NHS 24 is progressing work through four key streams called:
 - organisational preparedness
 - partner readiness
 - technical assurance

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- contractual arrangements.
36. The external auditor has recommended that NHS 24 should agree a business case that covers the ten-year operational period. This should reflect the revised scope of the programme, the costs involved and the initial work undertaken on benefits realisation. A business case would also allow the NHS 24 Board to set out how it intends to manage the continuing risks associated with this challenging programme. The auditor has highlighted that, until the IT system is successfully launched and running as intended, NHS 24 will continue to face significant uncertainty with regard to financial planning and sustainability.

Conclusion

37. NHS 24 has invested significantly in a new IT system over the past six years. The delays in implementing the new system have led to significant additional costs and risks to NHS 24's ability to meet its financial targets in future years. The Board has taken a fundamental look at what needs to be addressed in order to fully implement the new system. Whilst significant challenges still remain, the Board is now taking reasonable steps to mitigate the risk of further delay. Delivery of financial targets will be very challenging and will largely depend on achieving efficiency savings.

Appendix 1

Timeline of events/decisions regarding NHS 24's Future Programme reported to the Public Audit Committee in October 2015

Date	Event
January 2009	NHS 24 work on Future Programme started. At this time, it was expected the technology would be implemented in June 2013
July 2010	Procurement commenced. NHS 24 procured the new technology in two lots: Lot 1 tender related to clinical and patient handling applications together with a ten-year contract for on going support once the system was operational Lot 2 related to the provision and implementation of hardware and underlying infrastructure with contract for support
August 2011	Omissions in tender document discovered by NHS 24 staff member
October 2011	Contract awarded: NHS 24 appointed Capgemini to deliver lot 1; and BT to deliver lot 2
March 2012	Lot 1 and Lot 2 contracts signed
April 2012	NHS 24 staff identified that some sections were missing from the signed contract
June 2013	Original (2009) scheduled time when the new technology was expected to be implemented
July 2013	Gateway Review by the Scottish Government was undertaken
July 2013	Board decided to postpone implementation to September 2013, and then to October 2013
October 2013	Capgemini supplied version of the application
October 2013	The Board decided to postpone implementation indefinitely
October 2013	Capgemini disputed that the application was not meeting the requirements specified in the contract
November 2013	The Scottish Government agreed to provide additional loan funding (brokerage) to help NHS 24 manage unexpected changes in planned expenditure
January 2014	NHS 24 Chief Executive and Director of Finance made aware of size and nature of flaws within the contract documentation
January 2014	Omissions reported to the Board. Chair requested PricewaterhouseCoopers review of contract management
January 2014	Board agreed to progress with Declarator and Rectification action against Capgemini. A Declarator is a judgment of a court which determines the rights of parties without ordering anything be done or awarding damages. NHS 24 requested this Declarator to seek the legal interpretation of the existing contract with Capgemini, particularly in relation to the procurement "intention" of parties regarding the missing performance section
March 2014	Scottish Government and NHS 24 jointly commissioned Ernst and Young to carry out an independent review
March 2014	NHS 24 raised a Declarator and Rectification action against Capgemini to address the contractual flaws
April 2014	Capgemini provided a further version of the systems application which was subjected to a six-week technical evaluation

Cont.

Date	Event
May 2014	An independent lessons-learned review by PricewaterhouseCoopers of the Minute of Amendment process for both the BT and Capgemini contracts was carried out at the request of the NHS 24 Chair
May 2014	Following the six-week technical evaluation, NHS 24 concluded that the system was not delivering a safe patient handling application
June 2014	NHS 24 used the findings of the Ernst and Young and PricewaterhouseCoopers reviews to improve its programme governance and focus on constructive negotiation with its suppliers
June 2014	NHS 24 served a Default Notice on Capgemini requiring action to rectify the performance problems within 20 days
June 2014	NHS 24 appointed a new Future Programme Director
July 2014	The Future Programme Director carried out a risk assessment and the Board agreed to further diagnostic work to identify a way forward
September 2014	At the request of the Future Programme Director, NHS 24 commissioned an internal audit review to ensure the actions arising from the various reports and reviews were being implemented in line with agreed timescales
October 2014	Section 22 report on NHS 24 published 24 October 2014
November 2014	NHS 24, Capgemini and BT undertook a forward planning review
November 2014	During the detailed planning for the October 2015 implementation, NHS 24, Capgemini and BT found differences in their understanding of their respective roles
November 2014	The Future Programme Director identified that the Board of NHS 24 needed to recognise and address its role as Systems Integrator. The Future Programme Director also highlighted to the Board the requirement to engage more with NHS National Services Scotland as its strategic technical partner to ensure the availability of expert advice on IT, procurement and contracts and negotiation
January 2015	A review into the contractual obligations of NHS 24, Capgemini and BT began. This is still on-going. They are working to move to direct contracts (rather than contractual relationships through BT as the prime contractor) from June 2016
February 2015	NHS 24 assembled a specialist team including systems architect and test manager. The team established a Programme Management Office within Capgemini's offices
February 2015	An implementation plan for the Future Programme was agreed by the Board. This is an approach with the first phase operational in October 2015 and the second phase operational in March 2016
May 2015	Mediation process initiated between NHS 24 and Capgemini
June 2015	Following the mediation process, NHS 24 and Capgemini signed an agreement in relation to outstanding issues arising from the contract documentation. As part of this agreement, NHS 24 withdrew its legal action
July 2015	NHS 24 agreed to replay all brokerage by 2019/20
July 2015	Chief Executive, John Turner, resigns
August 2015	Ian Crichton, Chief Executive of NHS National Services Scotland, appointed interim Chief Executive of NHS 24

Appendix 2

Timeline of events/decisions regarding NHS 24's Future Programme since last reporting to Public Audit Committee October 2015

Date	Event
5 October 2015	Public Audit Committee considered the Auditor General's report on the 2014/15 audit of NHS 24 which highlighted problems with the management of the IT contract
28 October 2015	The first phase of the Future Programme was implemented. The system experienced performance issues
3 November 2015	System re-launched
13 November 2015	NHS 24 decided to revert to the old system while it worked to resolve performance issues
20 January 2016	NHS 24's former Interim Chief Executive, Director of Finance and former Chief Executive gave evidence to the Public Audit Committee
February 2016	Interim Chief Executive, Ian Crichton, resigns from his substantive CE post with NSS and concluded his 6 month interim CE role with NHS 24
8 February 2016	User Reference Group established
24 February 2016	Scottish Government's Director-General Health & Social Care and Chief Executive NHS Scotland and Director-General Communities gave evidence to the Public Audit Committee
March 2016	Angiolina Foster appointed interim Chief Executive
March 2016	Series of reviews undertaken by NHS 24 (Programme Management, Approach, Staff Readiness Plan)
1 March 2016	Independent Contact Centre Advisor appointed
8 March 2016	Technical Assurance Group established
1 April 2016	Independent Contact Centre Advisor to the NHS 24 Board appointed
April 2016	System incompatibility identified by NHS 24
25 April 2016	Advice and Assurance Group established
May 2016	Board decided to establish a Partners Assurance Group
May 2016	Board decided to establish an Organisational Assurance Group
June 2016	Scottish Government and NHS 24 agree to extend the brokerage repayment plan to 2021/22
29 June 2016	NHS 24 Board approved revised implementation approach