



Safeguarding patient records at NHS Lothian

Overview

NHS Lothian, one of 14 Health Boards in Scotland, provides services to a population of around 800,000. It runs four main teaching hospitals and 15 community hospitals, and employs nearly 28,000 staff. It already had strong computer security and HR policies in place; the challenge, says Alistair McLeod, was to find a way to more effectively police them and ensure they were being followed.

Alistair McLeod, clinical application and integration manager at NHS Lothian, shares the Health Board's experiences of being the first in Scotland to introduce automated privacy monitoring. The key insight, he says, is that deploying privacy monitoring is not a purely "eHealth project", though it is an essential component in the wider deployment of electronic patient records: it's an HR project that needs buy-in at the highest levels of the organisation.

Challenges

As NHS Lothian moves forward with their eHealth strategy, they need to ensure electronic patient records are available to those who need to see them, yet reassure patients that their data is safe and secure. NHS Lothian is using FairWarning®'s privacy monitoring solution to supervise access to clinical systems and identify suspected breaches of their computer security and HR policies for further investigation. FairWarning® is allowing NHS Lothian to respond to growing demands from patients for better privacy, in order to protect the reputation of the Health Board and expand the trust between patients and healthcare professionals, which is the foundation of high-quality care.

"The public are increasingly aware that we are making a lot more information available electronically across the Health Board and they are, understandably, growing more concerned about how we are sharing that information and controlling access to it," he explains. "We needed to put systems in place that would give them a greater level of comfort that we take privacy and security seriously, and to demonstrate that we are being proactive in monitoring access and dealing with any suspected breaches."

The issue NHS Lothian faced, he says, was that "We had a lot of audit data coming from our systems but we did not have any good tools to analyse it. We were using these to carry out random spot checks

Organization

- 4 teaching hospitals
- 15 community hospitals
- 28,000 employees

Health Information Systems

- CareFx FusionFx
- InterSystems TrakCare Core
- NHS Emergency Care Summary
- NHS Scottish Care Information Store
- Staff Governance Information System (SGIS)

Interviewee

- **Alistair McLeod**, Clinical Application & Integration Manager

"The introduction of FairWarning® as an addition to our existing capabilities, has allowed us to significantly move ahead as we strive to ensure compliance with the Data Protection Act and provide assurance to our patients that their data is in safe hands."

- Martin Egan, NHS Lothian's Director of eHealth

targeting particular staff groups or departments to monitor information being accessed, respond reactively to freedom of information requests and to complaints when a patient was concerned that someone had gained access to information they should not have through our systems. However, we did not have a way of easily running algorithms across a number of different data sources to pull together a more comprehensive picture of potential breaches that we could then investigate.”

Solution

Realising it needed to become more proactive in its monitoring, NHS Lothian looked at a number of options before deciding to implement patient privacy monitoring. McLeod says FairWarning® offered exactly what NHS Lothian was looking for: “It allows us to process very large amounts of data from multiple systems in just a few hours each month and very quickly flag what needs to be investigated further. It lets us identify access patterns that may indicate staff are looking at the records of colleagues, family members or neighbours or their own records or breaching our policies in other ways, such as sharing passwords.”

“We can also identify potential breaches involving staff ordering investigations for family members or themselves, or training colleagues using their own records.” He points out that, as well as breaching the board’s security and HR policies, these incidents can be breaches of professional standards and are sometimes the first indicators of a wider pattern of inappropriate behaviour.

Implementation Experience

Having chosen FairWarning®, NHS Lothian found deploying the technology the easy part. “We were able get the clinical systems delivering their audit data into FairWarning®, and write the reports we wanted all within a few weeks,” McLeod says. “However, when we switched the system on and discovered the scale of the problem, we realised we needed to take a step back.”

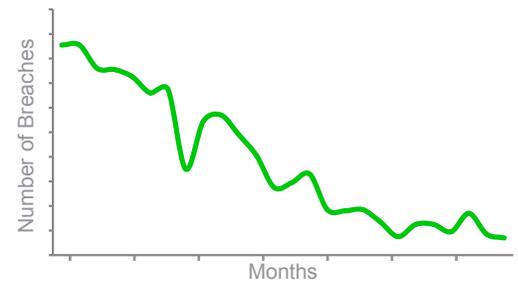
“We had to develop a communication campaign to remind staff of their responsibilities and make them aware of the more rigorous monitoring. We also required a process for dealing with suspected breaches once they were identified. Finally, we realised that it would be essential to establish a steering group to include people at the highest levels of the organisation in order to gain senior management buy-in and to ensure a culture in which all managers respond correctly to possible breaches.”

Results

With the steering group in place and the process drafted, NHS Lothian ran a publicity campaign to let staff know the system was being introduced. “We initially told staff that we would be collecting data but would not take action until a set date,” McLeod explains. “Then, for a month before that date, we called staff members that had been inappropriately accessing records to warn them of the awareness of their actions and that further inappropriate access would be subject to the full formal investigative process.”

“That whole approach proved very effective, with the number of suspected breaches decreasing significantly by the time the system went fully live.” McLeod adds that the board continues to run occasional publicity campaigns aimed at staff, as the number of breaches tends to creep up slowly over time.

Reduction in Breaches



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- Alistair McLeod, Clinical Application & Integration Manager

With both the FairWarning® system and the associated processes now well-established, NHS Lothian undertakes routine monitoring for a variety of breaches through a standard set of monthly reports. A clinical advisor working for the Information Governance team verifies any suspected breaches against the original audit trail, before passing the details to the HR department and the appropriate manager. The manager then carries out any further investigation and management of the incident required under the board's "Employee Conduct" HR policy.

In addition, FairWarning® helps NHS Lothian proactively monitor access to the records of high profile patients such as celebrities or high-profile prisoners to ensure these patients are treated appropriately. A daily routine running within FairWarning® emails McLeod each morning if there has been activity in the previous 24 hours on the records of any high profile patients. He is then able to check with the relevant department whether the patient was actually attending, allowing him to quickly close the investigation if the access is legitimate.

Since introducing FairWarning®, NHS Lothian has seen the number of suspected privacy breaches fall, with the trend continuing on downwards over the long term. The Health Board is able to provide more comprehensive and thorough monitoring with considerably less effort, using a process that is repeatable and consistent.

At the same time, NHS Lothian, in line with the rest of the NHS, is receiving an increasing number of Freedom of Information requests and complaints. This is due primarily to patients becoming more aware of the amount of information being stored and shared electronically and their associated privacy rights. NHS Lothian is now able to respond quickly to each request, enabling the board to handle the growing workload without a corresponding increase in resources.

However, McLeod says, "The biggest benefit is for our patients: we can reassure them that we are protecting their information by ensuring that only people who need to access their information are doing so correctly and appropriately. I'm certainly more comfortable myself as a patient, and as a parent, because as I know what the board is doing to look after my family's information by deploying FairWarning®."

With NHS Lothian as the first Health Board in Scotland to implement automated privacy monitoring, NHS Scotland has now adopted FairWarning® as a national solution to be rolled out across all 14 Health Boards. Martin Egan, NHS Lothian's Director of eHealth, says: "The introduction of FairWarning® as an addition to our existing capabilities, has allowed us to significantly move ahead as we strive to ensure compliance with the Data Protection Act and provide assurance to our patients that their data is in safe hands."



About FairWarning®

FairWarning® invented and is the global leader in patient privacy monitoring solutions which guard against abuse of patient information in Electronic Health Records (EHRs) and Health Information Exchanges (HIEs), enabling care providers to confidently connect physicians, clinics, patients and affiliates.

FairWarning®'s patient privacy monitoring solutions are compatible with healthcare applications from every major vendor, and available as either on-premise or software-as-a-service with managed services available to complement existing resources.

Customers consider FairWarning® solutions essential for compliance with healthcare privacy regulations such as ARRA HITECH privacy and meaningful use criteria, HIPAA, EU Data Protection, UK Freedom of Information Act, California SB 541 and AB 211, Texas HB 300, Massachusetts 201 CMR 17.00 and Canadian provincial healthcare privacy law.



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