Infographic storyboard: Accidental External Breach

Co-created by the public, Kohlrabi and UPD

NOTE: this draft resource specification is intended to be a jumping off point for further shaping by feedback from stakeholders and designers.

Summary of findings guiding the resource development

Design/format: Dialogue participants overwhelmingly preferred storytelling to bring health data security issues to life with relatable experiences. In response, co-creation workshop participants were provided with draft scenarios to develop into relatable stories, explaining security processes, breaches, and responses.

Information level: Many participants realised that they knew less about this subject than they had thought. They requested basic information about health data security upfront, with the option to access more in-depth information via signposting supplementary materials.

Visual presentations:

A headline animation and interactive infographics were chosen to support the construction of visual understanding, and for accessible, self-paced exploration. Honest: All participants reported their need for clearer, more honest information about health data security to empower and restore trust. They particularly wanted honesty about what the risks are when breaches occur.

Presentation of risk: There was understanding that risk is everywhere, that it is hard to put a number on breaches or clarify individual impacts.

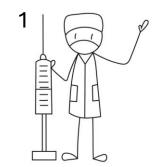
Acceptance of this must be balanced by clear evidence that those responsible for protecting data are present and take their duties seriously.

Key information: What is health data and why is it collected; Access: who is allowed to access; Sharing: How is health data shared within and between direct care staff and health services; What is a breach, who defines it and how to be aware that one has occurred; What are the harms of a breach; Steps to take in case of a health data breach

Summary of design decisions:

Overall, it's important that it's a story, relatable, moving through someone's journey, not a PowerPoint brought to life

- Tone: Serious. It's a serious issue, so not too playful. Realism- Not just a PowerPoint, properly moving through the story
- Character design: range of demographics to ensure relatable, 2D, no. 8. on real scale below, show emotions in expressions, all clearly different people. Healthcare workers wear calming, trustworthy colours (blues/whites), patients wear colours.
- Detail cues: Realism whether hospital or home, but muted to remove clutter and put focus on central characters
- **Sound:** Natural noises to accompany the visuals, for example the sound of a keyboard tapping, or 'data' whirring, or a whoosh of an email. No strong feelings about light background music either way, but it would need to fit the principles of staying relatable, while balancing between honesty, i.e not playful or upbeat, and conveying a sense of safety, reassurance, and gravitas of the topic.
- Narration: No final absolute steer for accent or gender but agreement that diversity is important (include a couple of voices), and suggestion to range Britain e.g. Welsh, English etc to ensure accessibility and maintain interest through variety.
- Script: Anywhere that text can be chunked and broken down, do it!
- Length: No more than 3 minutes for animation, or moving through infographic.



















How to use this material

• Interactive infographics for case study: The slides consists of 'case studies', each of which will be developed into an interactive infographic. In this section, the pop-up text is what will 'pop up' as the viewer scrolls throughover a graphic.

Background

- The participants discussed a few options for the format of the infographic.
 They spent time exploring each on this webpage.
 https://www.ceros.com/blog/interactive-infographic/
- They particularly liked this one where the viewer slides through at their own pace, with options to interact and click for more https://www.ceros.com/inspire/project/goodwin-moderna-history

Scenario 2: Accidental External Breach

Script and storyboard

Pop up text:

"Hannah recently had her routine cervical smear and she is waiting for a letter to arrive with her test results"

Visuals:

- Hannah (white, 20s/30s, light pink cardigan, jeans) exits a hospital building.
- She carries a small hospital folder/paperwork.
- A hospital sign is visible in the background.

Background:

- Hospital exterior with a blue sign reading "Women's Health Clinic."
- Other patients walking in and out.
- A receptionist seen inside through the glass doors.

Pop up text::

"After not receiving it for a long time, she calls her GP practice to check where her test results have got to."

Visuals: Time Passing – No Results Arrive

- Hannah in her open-plan kitchen/living room, sitting on the couch looking increasingly concerned, on the phone ringing the GP surgery. "My results haven't arrived" words coming from phone.
- Calendar on her fridge, a date marked with appointment, and with results--- and today marked out so clearly passing beyond the expected date of results

Background:

- A cozy home setting—couches, a bookshelf, a cup of tea on the counter.
- The window outside could show a slightly different season i.e. time passing

Pop up text: "The receptionist checks Hannah's record, and realises the address is out of date – Hannah's test results have been sent to her old address, which means another person may have seen her confidential medical information."

Visuals: Receptionist Realizes the Mistake

- GP receptionist (50s/60s, wearing a pearl necklace, hair in a bun, blouse/skirt) also on phone (to Hannah) with a worried expression, maybe hand to her cheek. Mid conversation with Hannah.
- A headset and microphone on the receptionist.
- Over-the-shoulder shot of receptionist's computer screen showing Hannah's record.
- The address listed is incorrect—her old address is still on file.

Background:

- GP reception desk with a sign reading "Patient Services."
- Computer screen visible on her desk.
- stacks of paperwork, medical posters on the wall.
- Receptionist text issuing from phone: "your results have gone to your old address."

Pop up text::

"This is an accidental external breach – Hannah's health data has accidentally been put at risk outside of the healthcare system that is caring for her."

Visuals: The Letter Arrives at the Wrong Address

- A male occupant (40s, casual hoodie) at Hannah's old address picks up an envelope labelled Hannah.
- He looks at the envelope, confused.
- A close-up of the envelope, NHS logo, "Confidential Medical Information."
- No suggestion he will read it; the story is left open here.

Background:

Its an entrance, suggests block of flats with other residents e.g. mail scattered on a hall table.

Pop up text:

"In this case, The Information Commissioners' Officer, or ICO - who regulate and enforce data protection laws in the UK -, require that the GP practice must report the breach to them within 72hrs"

Visuals: Receptionist Reports the Breach to the Doctor

- The receptionist, now red-faced and embarrassed, is speaking to a doctor (40s, in a white coat, female).
- The doctor listens seriously, he is picking up the phone to call someone, assumption is ICO. There is a strong sense that the matter has been dealt with quickly and the doctor is taking immediate action
- Background:
- GP office, medical posters, patient confidentiality signs.

Pop up text: "The health service involved must immediately inform Hannah of what has happened.

Preventing harm to Hannah also means that the health service must provide the tests results to her, so as not to delay her getting the required care.

Her address will be updated to prevent this mistake happening again."

Visuals: Hannah Reacts to the News

- Hannah holding her phone, eyes wide in shock. Her grip on the phone is tight. Her home now appeared in slightly dimmed lighting to reflect her mood.
- Note: wording has been broken up into chunks to give the impression of steps 1, 2, 3

Expert feedback: Sensitive information being leaked to an unidentified external individual may be assessed as leading to a high risk for the data subject, unlike the previous example where the recipient was internal to the health organisation with no indication of malicious intent.

Final: Pop up text box only:

"If a breach like this happens to your data, you will be notified by the service with information about what occurred and the process for what happens next. To learn more, click on this link."