



**‘Changing everything
we do...’**



Dr Afzal Chaudhry

BSc(Hons) MA(Med Ed) MA(Cantab) PhD FBCS FHEA FRCP FAcadMed LFEDIP

Previously...

Consultant Nephrologist, Director of Digital, CIO & CCIO

Cambridge University Hospitals

Assistant Professor, Medicine, University of Cambridge

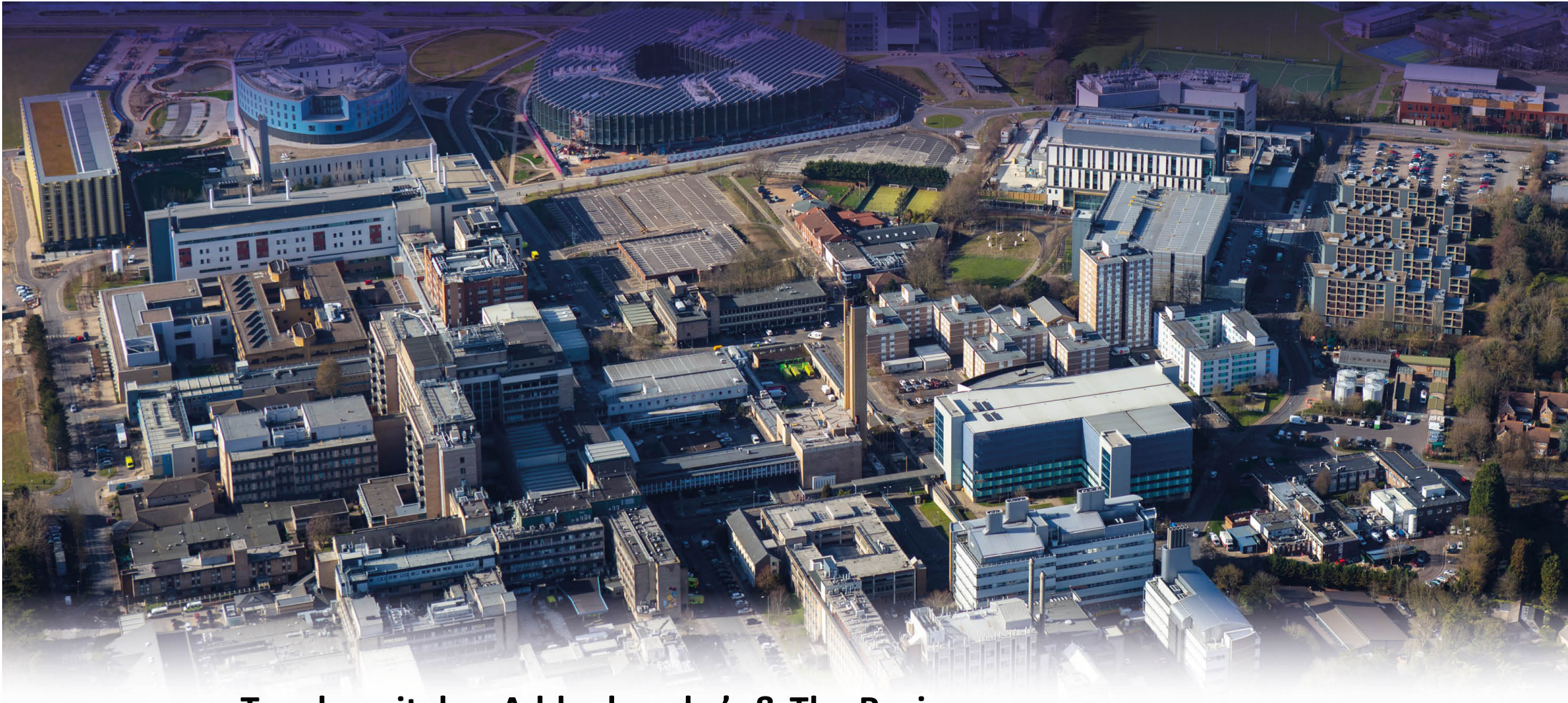
Thanks to CUH for permission to present this data

Why are we here....?

Ever-increasing high-quality care
underpinned by technology

‘Digital’ is **part of the ‘fabric’** of
who we are and how we deliver care





- **Two hospitals – Addenbrooke's & The Rosie**
- **Five clinical divisions – women's & children's healthcare fully integrated**
- **Situated on the Cambridge Biomedical Campus**

Trust in numbers

1,200+

Beds



530,000+

Catchment population
as a District General Hospital



4 million+

Population for UK-
wide specialist care



130,000+

ED attendances



58,000+

Inpatient episodes



860,000+

Outpatient episodes



131,000+

Day case attendances



38,000+

Surgical operations



5,500+

Births



12,500+

Staff



£1,200m

Turnover



Infrastructure

Item	Number
Desktops	> 9,000
Laptops	> 1,500
Wifi	> 3,300 APs
Mobile devices (trust)	> 1,000
Mobile devices (BYOD)	> 3,000

Item	Number
Staff needing access	16k - 17k
Peak concurrent	4k - 6k
Interfaces (bi-directional)	> 125
Specialist systems	> 50
Medical devices connected	> 3,000

Challenges after go-live (I)



Addenbrooke's Hospital consultants concerned over online records

🕒 31 July 2015

[f](#) [🐦](#) [💬](#) [✉](#) [Share](#)

Challenges after go-live (II)



The screenshot shows the top section of The Guardian's website. At the top left is a 'Support The Guardian' button. To its right are links for 'Subscribe', 'Find a job', 'Sign in', and a 'Search' dropdown. On the right side of the top bar is the 'International edition' link. Below this is a navigation bar with categories: 'News' (highlighted with a red underline), 'Opinion', 'Sport', 'Culture', 'Lifestyle', and 'More' with a dropdown arrow. The main masthead 'The Guardian' is on the right. Below the navigation bar is a horizontal list of topic tags: 'World', 'UK', 'Science', 'Cities', 'Global development', 'Football', 'Tech' (highlighted), 'Business', 'Environment', and 'Obituaries'. The main content area features a sub-header 'Internet' with the tagline 'The networker'. The primary headline is 'The NHS's chaotic IT systems show no sign of recovery' in large red font. Below it, a sub-headline reads: 'Paperless patient records are a necessity, but a new, US-made system at Addenbrooke's in Cambridge is a chronic misreading of patient needs'. To the right of the article is an advertisement for Dell Boomi, featuring a laptop screen and the text 'CREATE, PUBLISH and MANAGE APIs in one Cloud Platform'.

Support The Guardian

Subscribe Find a job Sign in Search ▾

International edition ▾

The Guardian

News Opinion Sport Culture Lifestyle More ▾

World UK Science Cities Global development Football **Tech** Business Environment Obituaries

Internet
The networker

The NHS's chaotic IT systems show no sign of recovery

Paperless patient records are a necessity, but a new, US-made system at Addenbrooke's in Cambridge is a chronic misreading of patient needs

Advertisement

AdChoices ▶

DELL Boomi

CREATE, PUBLISH and MANAGE APIs in one Cloud Platform

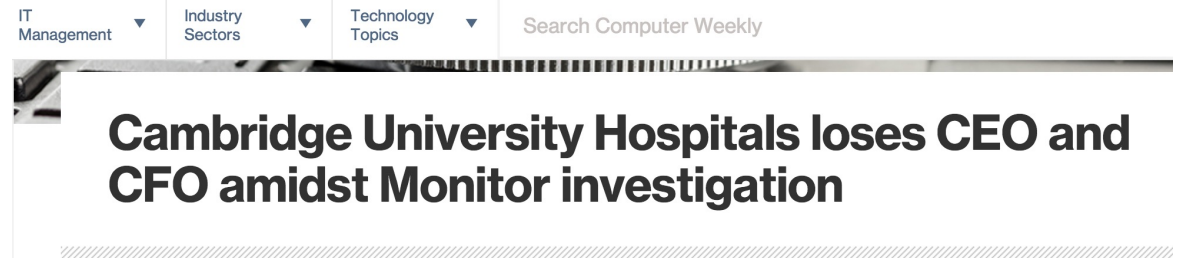
Challenges after go-live (III)

Addenbrooke's Hospital £200m IT system proves an Epic fail

Cambridge University Hospitals NHS Foundation Trust is put into special measures, in part thanks to a new online patient records system



computing



ComputerWeekly.com

Wachter Review (I)



Find

[About us](#) [Our work](#) [Resources](#) [Commissioning](#) [Get involved](#)

- Digital technology
- Harnessing the Information Revolution
- Empowering people
- NHS Digital Academy
- Local Digital Roadmaps
- Digital Maturity Assessment

[Home](#) > [Digital technology](#) > [Harnessing the Information Revolution](#) > [Wachter Review](#)

Wachter Review

The Wachter Review outlined 10 recommendations to inform the English health and care system's approach to the further implementation of IT in healthcare, especially the use of electronic health records and other digital tools to achieve a paper free system.

Wachter Review (II)

- **It was not surprising** to the Advisory Group that for CUH – and, we should add, for most healthcare systems that undergo a completely digital transformation - **the road to digitisation was anything but smooth.**
- Although the Advisory Group took away important lessons from CUH's early experience with implementation, in the eyes of the Group, **the trust's current digital maturity was the highest of any of the trusts visited.**

Progress (I)



🏠 News Feature Jobs CCIO Network Health CIO Intelligence Events
+ Analytics Clinical Software Cyber Security Digital Patient Infrastructure Interoperability Shared Records

CLINICAL SOFTWARE

🔗 Cambridge Hospitals | CQC |
eHospital | Epic



**Laura
Stevens**

Epic improvements pull Cambridge out of special measures



Progress (II)

The screenshot shows the top section of The Guardian's website. At the top left is a 'Support The Guardian' button. To its right are links for 'Subscribe', 'Find a job', 'Sign in', and a 'Search' dropdown. On the right side of the top bar is the 'International edition' dropdown. Below this is a navigation menu with links for 'News', 'Opinion', 'Sport', 'Culture', 'Lifestyle', and a 'More' dropdown. The main headline is 'How a digital NHS saves time and money - and transforms care', categorized under 'Healthcare Network'. The author is 'Dr Afzal Chaudhry' and the date is 'Tue 25 Apr 2017 12.14 BST'. The article text begins with 'Our hospital trust has introduced systems that released appointments and allow staff to spend more quality time with patients'. On the right side of the article is a Microsoft advertisement for Office 365, featuring the text 'Få det nyeste Office 365 til din virksomhed +1 TB fillager'.

Support The Guardian Subscribe Find a job Sign in Search ▾

International edition ▾

The Guardian

News **Opinion** **Sport** **Culture** **Lifestyle** **More ▾**

Healthcare Network

How a digital NHS saves time and money - and transforms care

Dr Afzal Chaudhry
Tue 25 Apr 2017 12.14 BST

Our hospital trust has introduced systems that released appointments and allow staff to spend more quality time with patients

Advertisement

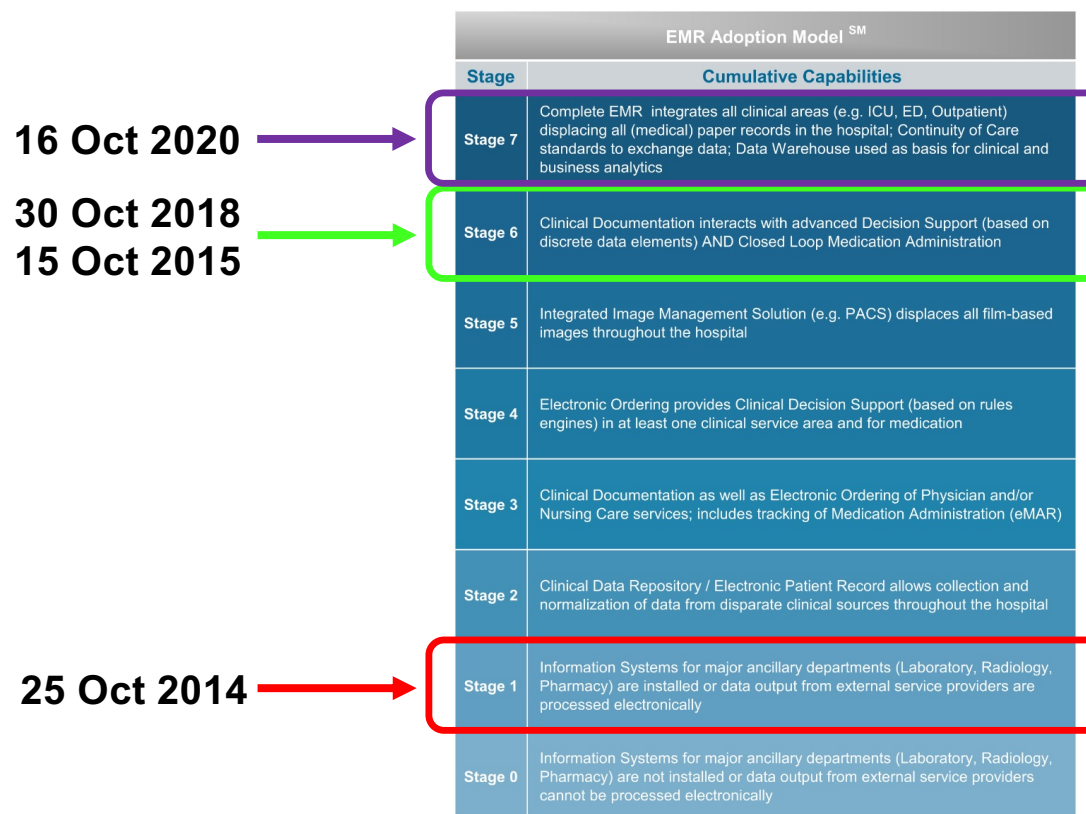
Microsoft

Få det nyeste
Office 365 til
din virksomhed
+1 TB fillager

Digital Maturity

Healthcare Information &
Management Systems Society
(HIMSS)

Electronic Medical Records
Adoption Model (EMRAM)



<https://www.himssanalytics.org/europe/electronic-medical-record-adoption-model>

Saving Lives from Sepsis

- **Aim**
 - earlier identification & treatment of patients with sepsis
 - delivered through strong clinical engagement & enhanced digital decision support systems
- **Outcome**
 - 70% increase in patients receiving antibiotics within 1 hour
 - 50% increase in inpatients receiving antibiotics within 1 hour
 - At least 64 lives saved from sepsis in 2018/19
 - National blueprint with NHS England



Scanning for Safety

- Patient wristband scanning & close loop administration

Aim

- Barcode medication administration, transfusion & sample collection scanning - all 56 inpatient areas including critical care & ED
- Breast milk in NICU & areas with communally stored milk

Outcome

- Positive patient assignment throughout
- National blueprint with NHS England

Staff Experience & Engagement

Item	April 2015	March 2016	May 2017	May 2018	June 2019	April 2022	April 2023
Staff are able to find relevant patient info easily in Epic	+44	+60	+63	+69	+74	+76	+74
Staff are confident that the Epic system supports them in caring for patients	+25	+55	+61	+66	+71	+71	+70
Staff are able to access metrics / reports relevant to their role	+37	+50	+51	+61	+70	+61	+62
Staff are satisfied with the support available for Epic issues / changes	-8	+18	+25	+31	+39	+49	+46
Staff can log in quickly	+48	+66	+59	+58	+33	+72	+73

Net promoter scores: +50 excellent; +70 exceptional; Clinical divisions, n= ~1,850-2,250

Continually challenge the *status quo*

- NHS is simultaneously both excellent and poor
- ‘*What sort of hospital do we want to be?*’
- ‘*What if it were **your** family?*’
- Accountability - ‘*Evidence based brutal simplification*’



It's all about the people

- *‘Understanding is power’*
- Take every opportunity to educate (and learn from)
 - Yourself
 - Colleagues - upwards and downwards
 - Patients



Approach – ‘painting the Forth bridge’

- Go out & find the problems / workarounds
- Professional mandate
- Prioritise - fair & transparent
- Be relentless - small steps add up



Communication

- Too much is **not** enough, yet TL;DR

 ANGLO-DUTCH TRANSLATION GUIDE 		
What the British say...	What the British mean...	What the Dutch understand...
I hear what you say.	I disagree completely.	They accept my point.
With all due respect ...	I think you are wrong.	They are listening to me.
Perhaps you could give this some more thought.	Don't do it, it's a bad idea.	It's a good idea. Keep developing it.
Very interesting.	I don't agree/like it.	They are impressed.
Could you consider some other options?	Your idea is not a good one.	They haven't decided yet.
That is an original point of view.	Your idea is stupid.	They like my idea.



Why are we here....?

Ever-increasing high-quality care
underpinned by technology

‘Digital’ is **part of the ‘fabric’** of
who we are and how we deliver care

