The Digital Future of Health and Care in Birmingham and Solihull

Professor David Rosser Chief Executive, University Hospitals Birmingham NHS Foundation Trust





Agenda

An introduction to UHB

Our Digital achievements so far

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Our vision for the future





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Building healthier lives

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UHB in Numbers







UHB COVID Pandemic



Total

- 24232 +ves
- 3678 deaths

Peak

- 1067 inpatients
- 211 ITU
- 37 deaths / day
- 197 +ves / day





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UHB's history as an innovator in digital health

🐳 PICS - Login	×			
Prescribing Information & Communication System	<u>L</u> og In E <u>x</u> it <u>A</u> bout			
 Drug interactions, disease interactions and all warnings given in this system are selective. It remains the responsibility of the doctors and nurses to ensure that all prescriptions are carefully considered. If in doubt, always check the BNF or seek advice. Click 'About' above for copyright information User name: Password: 				
Help, Information and Downloads				

ilding healthier lives

- We were at the forefront of designing clinical decision support in the NHS, through the development of PICS
- PICS provides real-time drug prescribing checks for drug interactions, contra-indications, dose limits and allergies; observations, early warning
- Well-recognised across the NHS; implemented at neighbouring trusts
- Substantial improvements in patient outcomes achieved



PICS impact: Mortality and missed antibiotics



Building healthier lives



Around 10,000 patients now through world's first AI powered skin cancer pathway, 2,200 avoiding the need for a face-to-face appointment

2WW performance improved from 7% in August 2020 to 94% in January 2021

Skin

Recall recommended Malignancy suspected on: R-CC R-MLO Recall recommended Malignancy suspected on: R-CC R-MLO

Ground truth: Surgery <u>proven cancer</u> on R side (H5) **Radiologists:** not recalled (IC) **X Mia:** recalled







Scheduled to be UK's first operational deployment of AI as an independent second reader in breast screening

Community Diagnostic Hubs

- Asynchronous virtual review by default
- Example benefits (eye care):
 - Patients time in department: 20 minutes in a community clinic (versus baseline 45 mins in hospital)
 - Clinicians spend 12 minutes on average reviewing each case (versus baseline 20 minute appointments in hospital)
 - Expecting reduction in referral rates from richer communication between secondary and primary care
 - New recruitment and development opportunities for non medically registered staff, drawn from the local communities we serve







Establishing Routine Digital Lines of Communication With Our Patients

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Messages DrDoctor Contact	Messages DrDoctor Contact	Messages DrDoctor Contact	←●●●●● Sprint_LTE 6:32 AM 75% ■● ✓ Messages Details
From: University Hospitals Birmingham You have a new appointment letter. Read it online at https://nhs.my/d5jZpxtMv4 If you can't go online, please reply PRINT. We will send you your letters in the post. Thank you.	Your appointment is booked: 31 Jul at 11.05am at DrDoctor Unreal Hospital - View more information and manage your appointments online by visiting https://nhs.my - For any queries please call 0330 321 1206	CHANGE Thank you. To change this appointment a member of staff needs to check any changes. They may call you or you could be booked into the next available time. If you definitely can't make your current appointment and want to change, please reply with YES followed by any comment you wish to send to the booking team. YES – Sorry, I'll be on holiday on the 4th of October, back on the 10th!	Your Cardiology video appointment starts soon. - A few minutes before 10:15am join the video call using this link: <u>http://video.drdoctor.co.</u> <u>uk/34ec63a/join</u> - You may need to wait a while if the clinic is running late so please stay on the call - If there is any difficulty with the video call we will phone you on this number instead

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Moving from service change to transformed healthcare

- Need to move away from just delivery of point solutions aimed at targeting discrete areas of clinical practice – in themselves, haven't fundamentally changed the model of care for patients
- Instead need to create ecosystem of transformation, changing paradigm of care delivery



Our Vision for a Technology Enabled Care Model

Dynamic clinical resource scheduling and allocation – urgent and scheduled





Using our estate to enable new model of care



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Digital solutions required to enable model of care

- E.g. wearables, sensors, targeted health advice, digital twins
- E.g virtual wards step up / step down, digital therapeutics
- E.g high street diagnostic hubs, cutting edge solutions including AI
- Digital hub pulling / pushing data;
 "command centre" / integrated health and innovation centre



How are we building this vision?

- Working in collaboration with our ICS partners, focussed on key test beds first e.g. Solihull
- Collaborating with some of the leading suppliers in the health tech industry using our collective knowledge and expertise
- Identifying potential ways to "glue" point solutions together looking for "super integrators"
- Continue to deliver value for patients and clinical teams in short to medium term, to demonstrate potential of digital transformation e.g. best of AI.

