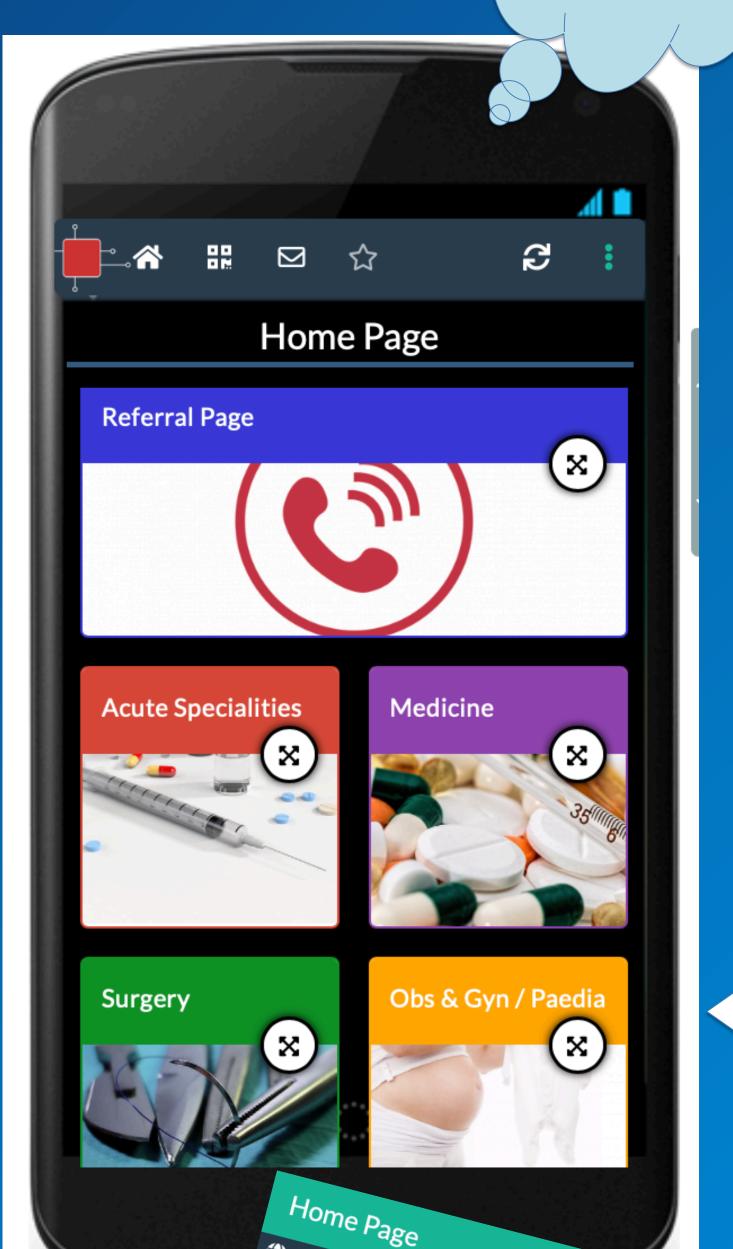


Development of Hospital App to Improve Efficiency and Connectivity

BECOME IMPROVERS AND INNOVATORS?

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BACKGROUND:

Mobile devices and apps are already invaluable tools for many Health Care Professionals (HCPs) with smartphone use exceeding 80%.[1] They allow medical physicians to make more rapid decisions with a lower error rate and have been shown to improve practice efficiency and base knowledge. Overall this has a positive effect on patient care outcomes. [2] [3] At University Crosshouse Hospital we recognise the importance and untapped potential of mobile technology and have developed an innovative new hospital app. After surveying a cohort of both trainees and consultants it was evident that over 60% (n=16) of doctors found accessing local guidelines challenging. 95% (n=19) said that having a hospital smartphone app available would be very useful, and 55% (n=11) said they would use it daily.

STRUCTURE:

We chose a software platform called "Learning Toolbox" (LTB) which has the benefit of being both intuitive to use and cost effective. The app is split into four medical domains as illustrated. Each specialty has an assigned 'Chief Resident' (CR) who will take responsibility for the upkeep of their domain. This ensures that workload is split fairly and the CRs receive valuable managerial experience.

Promoting Quality Improvement (QI) is a core component of this app. Each specialty will have their own forum that allows trainees to present and raise awareness of projects they are working on. Our aim is to promote our staff achievements' as well as inspire new recruits to make their own contribution.

To gain access to the app simply scan the QR code or type the web link into your phone.

Development timeline:

December 2018:

Approval received from Medical Directors
Funding Arranged

Contract with software company secured

Survey complete on doctors attitude towards new app

April 2019:

Pilot app released to anaesthetic dept

May 2019:

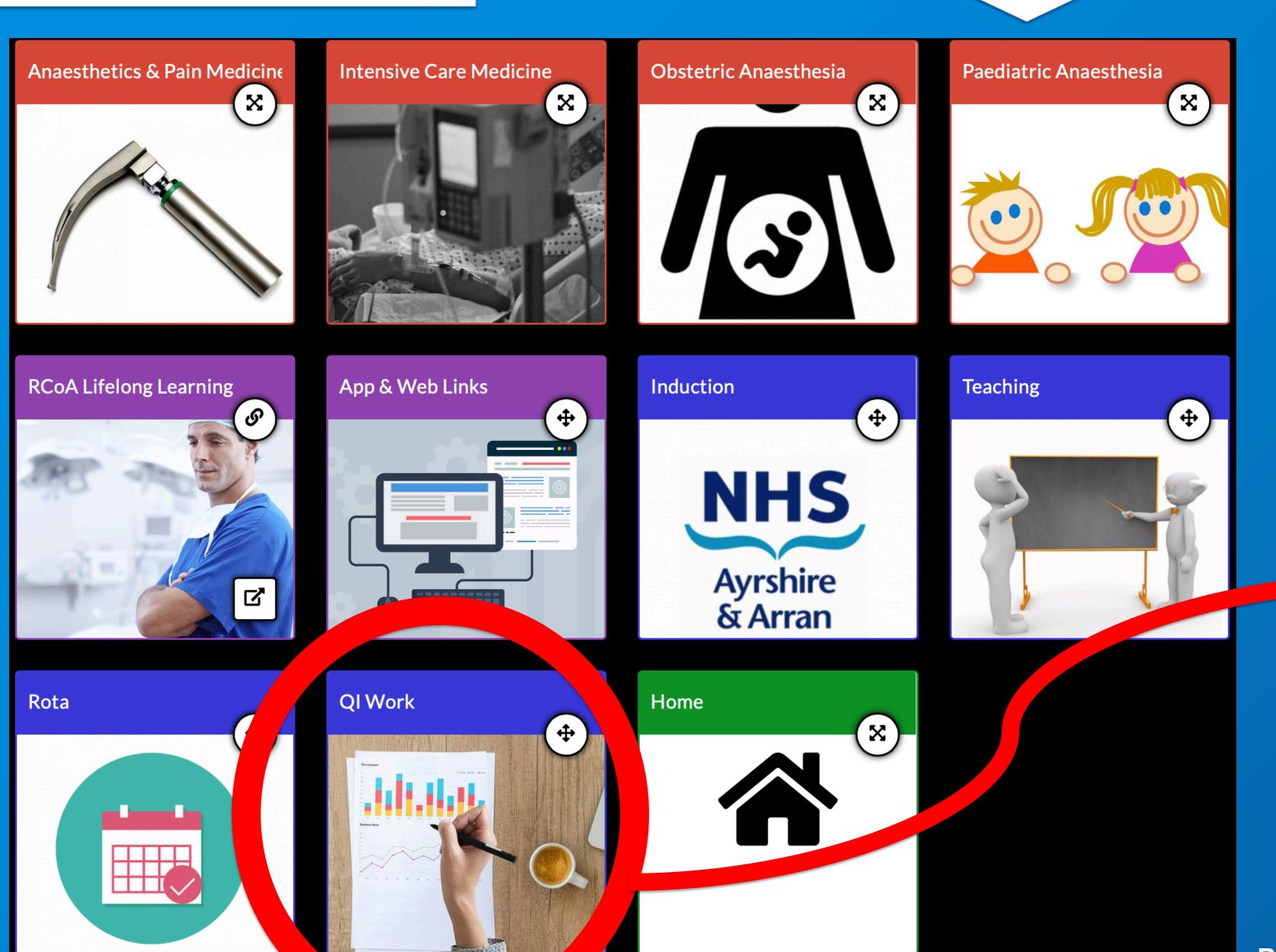
Engage with other specialties to take ownership of their app domain.

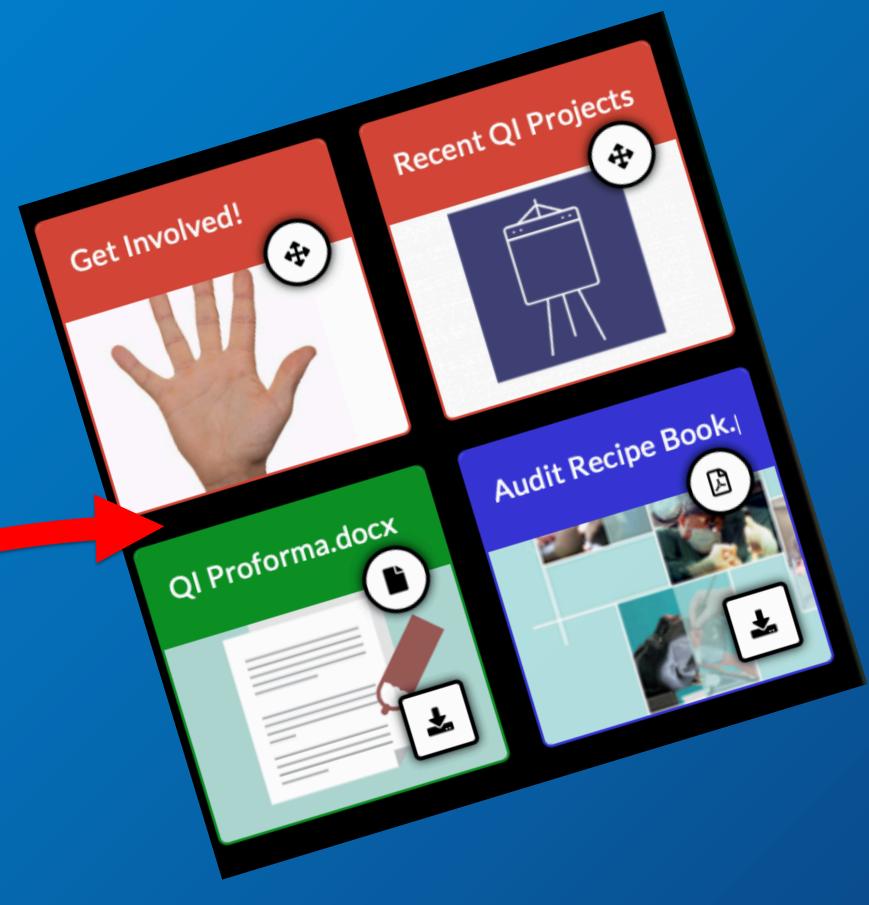
Assign Chief Residents responsibilities to ensure app updated.

AIM:

Create a portable online tool that:

- Provides local guidelines
- Referral Pathways
- Induction Material
- Rota Links
- Teaching Timetable
- Forum to advertise QI projects and a space that promotes staff achievements





References:

- **1.** Martinez F et al. (2017). Implementation of a Smartphone application in medical education: a randomised trial (iSTART). *BMC Med Educ*, 17(1), pp.1-9.
- **2.** Mosa AS, Yoo I, Sheets L. A systematic review of health care apps for smartphones. BMC Med Inform Dec Mak. 2012 Jul;12:67.
- 3. Ventola CL. Mobile devices and apps for health care professionals: uses and benefits. P T. 2014;39(5):356–364.