QR Codes: Alternative ways of learning





QR code for resuscitation trolley video

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Driver for change:

During debrief after a resuscitation/ stabilisation event, staff voiced concerns that they were unhappy with their role in the situation. Exploring this, we found they considered a lack of knowledge as the cause. This was predominantly in two identified areas.

- The contents and layout of the neonatal resuscitation trollev
- The cooling machine

Literature shows that knowledge retention is enhanced with multiple exposures (Chen and Yang 2020)

We worked out that to engage all staff in training in both areas would be difficult due to time and availability of trainers and staff to attend training sessions.

These factors led us to think of alternative ways of sharing the knowledge required at the right time for the staff, and we decided to pilot the use of videos of the equipment linked to QR codes following a literature review of the use of OR codes in healthcare (Karia et al, 2019)



Anticipated benefits	Challenges
Accessible when staff have time	Detailed enough but not too long
Access to 'expert' guidance	Will staff actually use the codes and watch the videos
Accessible on the equipment/ device	How to get feedback for improvement
Access information at the point of need	Time needed for trainers to create videos
Ability for repeated views	Reluctance to use smartphone in clinical areas
Quick and easy to access	

Future:

- Develop robust feedback mechanism to inform future QR code development and identify any improvement to quality of care
- Increase output of QR codes and training videos based on feedback.

Evaluation:

We have had informal feedback from users of the QR codes, and this has been largely positive, with users reporting benefits in line with our anticipated benefits. We face challenges in terms of having time to create more content, and gathering effective feedback to ensure the project is useful, of benefit and improves patient care.

Downer T, Oprescu F, Forbes H, Phillips N, McTier L, Lord B, et al. Enhancing nursing and midwifery student Learning through the use of QR codes. Nurs Educ Perspect. 2016;37:242-3.

Karia et al. Uses of quick response codes in healthcare education: a scoping review. BMC Medical Education (2019) 19:456

Chen H, Yang J. Multiple Exposures Enhance Both Item Memory and Contextual Memory Over Time. Front Psychol. 2020 Dec 1;11:565169.