



## Topic Exploration Report

Topic explorations are designed to provide a high-level briefing on new topics submitted for consideration by Health Technology Wales. This report was prepared by Health Technology Wales on behalf of the Bevan Commission. It summarises the existing evidence on the technology of interest to support a Bevan health technology exemplar application.

Topic:	QR Info Pods - Communicating digitally with patients
Topic exploration report number:	TER019
Referrer:	Steffan Gimblett
Topic exploration undertaken by:	Health Technology Wales

### Aim of Search

Health Technology Wales researchers searched for evidence on the use of QR (Quick Response) codes to create a dynamic patient information poster.

### Summary of Findings

There is very limited evidence on the use of QR codes to produce dynamic patient information posters. NICE Guideline on Community pharmacies: promoting health and wellbeing states in section 1.3 (Awareness raising and providing information) that QR codes can be used to obtain further information.

Four studies were identified that discuss the use of QR codes as a means to link patients to information sources of which two investigate access to prescribing information for medication (Yeung et al (2017) and Tseng & Wu (2014)).

Bellot et al (2015) and Jones et al (2015) both discuss using QR codes to provide dynamic posters in a health care setting and conclude that it is a useful tool.

### Key sources of evidence

- Bellot, J., et al. (2015). "Use of quick response coding to create interactive patient and provider resources." *Journal of Nursing Education* 54(4): 224-227.
- Jones, R., et al. (2015). "Quick response (QR) codes: a novel approach to research education." *International journal of obstetric anesthesia*. 24: S35.

## Areas of Uncertainty

Evidence on the impact and/or effectiveness of using QR codes to provide dynamic patient information posters in a healthcare setting is very limited. Further research in this area is required.

## Brief literature search results

Resource	Results
<b>Guidelines and guidance</b>	
<p><a href="#">NICE</a></p> <p><i>We searched for guidelines, technology appraisals, diagnostics, interventional procedures, and medical technologies guidance.</i></p>	<p>NICE guideline NG102: Community pharmacies: promoting health and wellbeing</p> <p><a href="https://www.nice.org.uk/guidance/ng102">https://www.nice.org.uk/guidance/ng102</a></p>
<p><a href="#">Healthcare Improvement Scotland:</a></p> <p><i>We searched the HIS website for any relevant advice and hand-searched Scottish Health Technologies Group and Scottish Intercollegiate Guidelines Network publications.</i></p>	<p>We did not identify any guidance on the use of QR Codes for dynamic patient information posters.</p>
<p><a href="#">Guidelines International Network</a></p>	<p>We did not identify any guidance on the use of QR Codes for dynamic patient information posters.</p>
<b>Secondary literature and economic evaluations</b>	
<p><a href="#">ECRI</a></p>	<p>We did not identify any assessment of the use of QR Codes for dynamic patient information posters.</p>
<p><a href="#">Cochrane library</a></p> <p><i>We searched for relevant Cochrane Reviews.</i></p>	<p>We did not identify any Cochrane Reviews on the use of QR Codes for dynamic patient information posters.</p>
<p><a href="#">Medline</a></p> <p><i>We searched the Medline database for systematic reviews, meta-analyses, economic evaluations only.</i></p>	<p>We did not identify any systematic reviews or economic evaluations on the use of QR Codes for dynamic patient information posters.</p>
<b>Primary studies</b>	
<p><a href="#">Medline</a></p> <p><i>We searched the Medline database for studies of any design.</i></p>	<ol style="list-style-type: none"> <li>1. Bellot, J., et al. (2015). "Use of quick response coding to create interactive patient and provider resources." <i>Journal of Nursing Education</i> 54(4): 224-227.</li> <li>2. Tseng, M. H. and H. C. Wu (2014). "A cloud medication safety support system using QR code and Web services for elderly outpatients." <i>Technology &amp; Health Care</i> 22(1): 99-113.</li> <li>3. Yeung, D. L., et al. (2017). "Low-health literacy flashcards &amp; mobile video reinforcement to improve medication adherence in patients on oral diabetes, heart failure, and hypertension medications." <i>Journal of the American Pharmacists Association: JAPhA</i> 57(1): 30-37.</li> </ol>
<p><a href="#">Cochrane library</a></p> <p><i>We searched the Cochrane Trials database for studies of any design.</i></p>	<p>Jones, R., et al. (2015). "Quick response (QR) codes: a novel approach to research education." <i>International journal of obstetric anesthesia</i>. 24: S35.</p>

Ongoing research	
<a href="https://clinicaltrials.gov">Clinicaltrials.gov</a>	We did not identify any clinical trials of relevance.

Date of search:	September 2018
Concepts used:	QR Code*, quick response code*, poster* (specifically patient information or dynamic information)