Focus on eHealth & Technology

Welcome to the final issue of HEAR. The purpose of the Health Evidence Awareness Report is to provide carefully selected information to health professionals, patients and the public about specific health topics. Each issue is a result of the collaboration of librarians from health organisations across Ireland. This issue looks at how technology, medical devices and ehealth are impacting healthcare today and their possible applications in the future.

Key message: exciting potential, but be aware of the risks!

FAST FACTS on Health & Technology

Technology in health: definition (WHO) “A health technology is the application of organized knowledge and skills in the form of devices, medicines, vaccines, procedures and systems developed to solve a health problem and improve quality of lives.”

Jan 2018: “80% of the health apps evaluated in a European study transmitted health-related data to third-party companies, with only half doing so over secure (HTTPS) connections.” Article available here.

From a study by the NHS National Institute for Health Research: “Technology can help people to stay living well and safely at home as they get older.”

E-Patient Dave (Dave deBronkart) is a leading advocate of patients helping each other—and their healthcare teams—through online networking and communication, following his own experience with cancer. This is his talk at IPPOSI “Connected Health & Me - ePatient Dave - Nov 24th 2014” (PowerPoint presentation)
Global research


Irish Publications

DoHC (2013) **eHealth Strategy for Ireland**. “The purpose of the strategy is to provide an outline of eHealth and demonstrate how the individual citizen, the Irish healthcare delivery systems – both public and private – and the economy as a whole will benefit from eHealth.”


HIQA (2018): **Information requirements for a national patient summary - draft standard for public consultation** (consultation document is now closed)


Click [here](https://www.ehealthireland.ie/irish-case-studies/) to see a collection of Irish Case Studies, collected by eHealth Ireland, “highlighting the benefits already being realised by patients and clinicians through the use of eHealth technology.”

Clesham JG, Galbraith SR, Kearns ME. **Fracture Patients’ Attitudes towards Online Health Information & a ‘Prescribed’Fracture Website**, Irish Medical Journal. 2018 Apr19; 111(4):732


Nolan L. **The rocky road to App-iness**, Nursing in General Practice. 2014. 4(7):24-26
Electronic Health Record


3D Printing in Healthcare


From “The Medical Futurist” blog: The Ultimate List of What We Can 3D Print in Medicine And Healthcare! By Dr. Bertalan Meskó


Try your luck at The Fake News Game, from the University of Sheffield

“The use of digital technology in health and social care can improve quality, efficiency and patient experience as well as supporting more integrated care and improving the health of a population.”

From The King’s Fund “Digital change in health & social care”

“We have got to go beyond this paradigm of isolated specialists doing parts care to multidisciplinary teams doing person care.”

Eric Dishman for TED Talks “Health care should be a team sport”.

Image: Department of Defense USA
Most vulnerable risk being 'excluded' from digitisation of health and care services.” itv.com, 7/11/2018 relating to the Report “Digital inclusion in healthcare and care in Wales.”

“Cell Phones and Cancer Risk” is a topic that is frequently raised. For a trustworthy summary of risks, this is worth a read. From the US National Cancer Institute.

Not strictly health-related but this article in the NY Times has some useful advice: How to Stop Apps From Tracking Your Location

Conferences


International Conference on Digital Health, April 2019, Houston USA Details at: https://digitalhealth.conferenceseries.com/

Patient driven healthcare

“Become a Cochrane citizen scientist. Anyone can join our collaborative volunteer effort to help categorise and summarise healthcare evidence so that we can make better healthcare decisions.” People helping to manage the clinical information overload through Cochrane Crowd.


Maloney EK, D'Agostino TA, Heerdt A, Dickler M, Li Y, Ostroff JS, Bylund CL. Sources and types of online information that breast cancer patients read and discuss with their doctors. Palliative & Supportive Care. 2015 Apr;13(2):107-14.


BMJ Opinion (blog): “Nicola Bedlington: Patient involvement in medical devices—an opportunity we may be missing”.


Health apps

Apps for Communication For Augmentative and Alternative Communication  "These tools can be used to assist patients during a critical illness when their communication or motor skills are impaired."


US FDA (Food & Drug Administration): FDA roundup: The major device, app, and algorithm approvals of 2018 (so far)

L’Oreal have brought out the L’Oréal My Skin Track UV. It measures your exposure to ultraviolet light, so essentially tells you when you’ve spent too long in the sunshine and are at risk of causing damage to your skin.
The market for mobile apps in healthcare: see the infographic by Octal IT Solutions here. By 2020, the mobile health market is expected to be worth US$60 billion (€53bn).

For more statistics on the mobile health market, see the statistical breakdown at the Statista site here.

The most popular types of mobile apps in 2016 were:
1. Fitness
2. Diet
3. Women’s health
4. Lifestyle
5. Disease management

Suggested reading for Public & Patients

Margaret E. Morris: Left to Our Own Devices: Outsmarting Smart Technology to Reclaim Our Relationships, Health, and Focus. 2018 MIT Press.


Testing Treatments International: “How to think critically about treatment claims”. Tools to check the claims made in the media, with a range of different format materials. (text, visual, audio).

Anne McCormack: Keeping your child safe on social media: Five easy steps. 2017 Orpen Press.


Easy-Read books

Safernet, by RESPOND, UK: “The Respond Action Group (RAG) are five people employed by Respond as expert advisors, they have spent the last year researching online safety.” For people with learning disability.

eHEALTH—virtual support sites

“FEELING UNDER THE WEATHER? We’re here to give you practical advice on how to mind yourself or your family when you’re sick. From the HSE, GPs and Pharmacists, http://undertheweather.ie/

“Through an online medical questionnaire, face-to-face consultation or home health test, our GPs will review your case and prescribe treatment at their discretion.” https://www.webdoctor.ie/

For useful health communication/intercultural apps, see: https://www.hse.ie/eng/about/who/primarycare/socialinclusion/about-social-inclusion/translation-hub/mobile-health-apps/


@eHealth_EU @HealthTechYou @HarvardHealth #innovateforage

WebMD—one of the earlier online interactive tools “Get trusted, physician-reviewed healthy living information on demand. Whenever. Wherever.”

There are countless online support groups and mobile health apps but we recommend that you first check: the provider’s health qualifications if any; whether they provide their identity and contact details; whether they are supported by or endorsing commercial interests e.g. drug companies; whether they are transparent in their aims and back up their claims with evidence; are they asking for non-essential personal or identifying details when registering; whether they are trying to sell you something (any ads on the page should be clearly indicated as such) and finally, do they update their site on a regular basis?
In the news

“Why ‘approved’ medical devices in the U.S. may not be safe or effective” (HealthNewsReview blog). In a BMJ poll conducted online from 6th Dec 2018, over 80% of respondents supported regulation of medical devices in a similar way to drugs.

Read the science behind these headlines as explained by the NHS “Behind the Headlines” team:

“Swallowable gastric balloon could help with weight loss” Thursday May 18 2017

“Machine that keeps livers 'alive' may boost transplant rates” Friday April 20 2018

“New, more powerful MRI scanners may cause fillings to leak mercury” Wednesday June 27 2018

“Online reviews of health products 'are misleading'” by Dr Micheál de Barra, Monday February 13 2017

Research has shown:

* 74.7% of the Irish population has access to smartphone technology, this equates to 3.59 million devices in 2018

* Over 80% of browsing time on smartphones is through APP technologies and not through traditional web browsers

From: “Facilitating better patient engagement at Tallaght University Hospital”

In the 2017 HEAL survey, 91% of those surveyed (total no of respondents: 1,329) had searched for health information online. (Source: Health Education and Libraries (HEAL), online survey via Dublin City Libraries, 8-24 May 2017.) Contact email: anne.madden@ucd.ie for more details.

We hope you find this issue useful but please note, the information in HEAR is neither advice nor endorsement and should not be treated as such.

“Chinese scientist claims to have created ‘world’s first genetically edited babies’” Telegraph, 26th November 2018

PATIENTS + DOCTORS + MACHINES Meet Today’s Healthcare Team: Accenture 2018 Consumer Survey on Digital Health

“Ireland’s government looks to support its fledgling digital health companies.” Mobihealth news, 1 Oct 2018