Using digital technologies to support delivery of high-quality equitable health and care services

Dawn Dowding
Professor in Clinical Decision Making
ARC-GM Digital Health theme

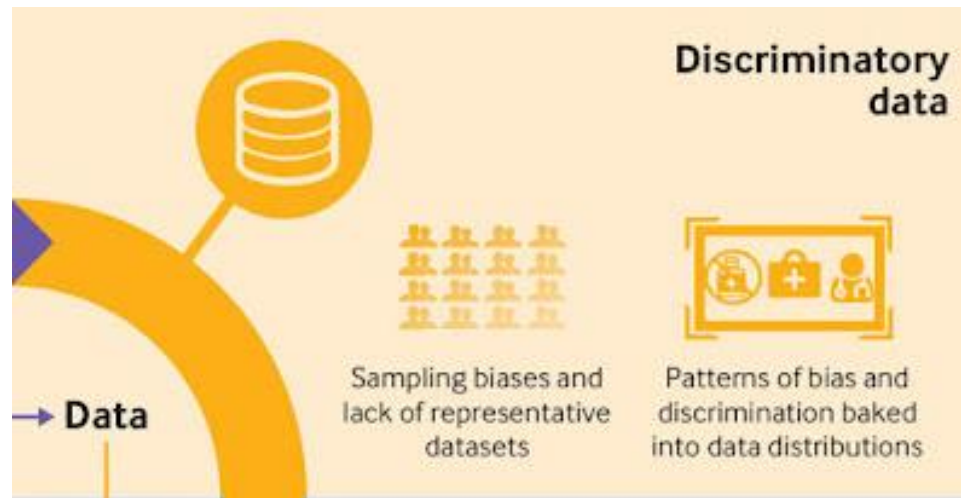# **Digital Technologies** have the potential to…

Help individuals self-manage conditions, support health and well being (prevention of poor health outcomes)

Provide infrastructure to support care of patients across organisations, enabling health care practitioners to work more effectively

BUT…..

Can also lead to increased inequity, lack of access to care, and increase workload/burden for health care professionals

In the Digital Health Theme we have:

• Conducted Citizens Juries on health data sharing during the pandemic

In collaboration with the NIHR Patient Safety Translational Research Centre (PTSRC):

• Evaluated PATCHS – a tool using Artificial Intelligence (AI) which helps GPs triage patient requests for appointments and provide remote consultations

• Evaluated a new care pathway based on remote monitoring using cardiac implantable electronic devices

In collaboration with the NIHR ARC-GM Organising Care Theme:

• Evaluated a Digital COVID-19 tracking tool for care homes in GM
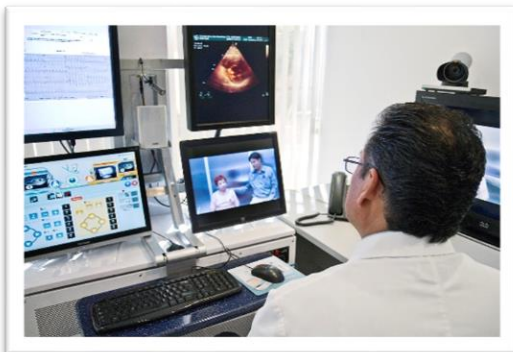
Ongoing ….

Using Virtual/Augmented reality smartphone apps for upskilling care home staff in hand hygiene (PhD student Norina Gasteiger)

Evaluation of implementation of a predictive model to reduce out-patient no-shows at Manchester University NHS Foundation Trust

Review

Predictive model-based interventions to reduce outpatient no-shows: a rapid systematic review

Theodora Oikonomidi [1,2], Gill Norman [2,3], Laura McGarrigle [2,4], Jonathan Stokes [5,6], Sabine N. van der Veer [1,2], and Dawn Dowding [2,3]
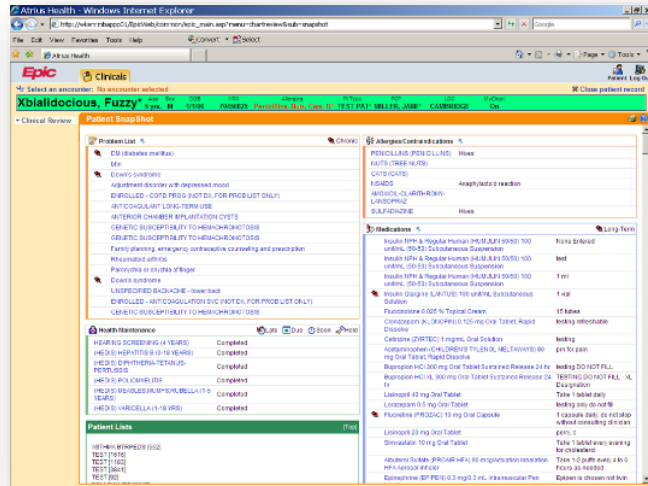

Evaluation of roll out of virtual wards across Greater Manchester
Collaboration with the NIHR ARC GM Organising Care Theme

Digital Health Inequities

Health inequities caused or exacerbated by introducing digital technology in health and social care settings

- Prioritisation of research topics (3 workshops)

- Monthly seminar series

- Number of research initiatives including:
    - Developing methods for conducting digital health inequity impact assessments for digital health technologies
    - Manchester Digital Pain Manikin
    - Studies exploring how to support hypertension self-management for people from ethnic minority groups using text messaging service (Florence)
    - How to build trust in digital health technologies and research in Muslim communities
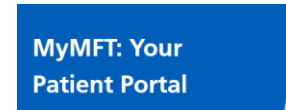
Future Plans…

Collaboration with Manchester University NHS Foundation Trust – how has the implementation of a system wide EHR impacted on:
- Patient outcomes/quality of care
- Staff experience/time

Prioritisation phase

Personal Health Records
- Proliferation of different patient portals/personal health records
- What are they trying to achieve?
- What impact will they have on patient care?

Availability of data across GM – use for research and clinical care