Data
Saves
Lives

10 **THINGS** YOU MAY NOT KNOW ABOUT HEALTH DATA

Fact sheet *to share with your networks*

1. **The first electronic health record (EHR) was created in 1969.**[1]
   Before the worldwide phenomenon that is computer technology became widely known and used, Dr Lawrence Weed developed the first rudimentary EHR system, called the Problem-Oriented Medical Information System. Although revolutionary at the time, it would take some time before the EHR was adopted by nearly all hospitals throughout the UK.

2. **80% of health data is 'unstructured'** – stored in its native or raw form, in hundreds of formats such as lab results, images and medical transcripts.[2]

3. **In 2020, it is estimated that the digital universe reached 40 zettabytes of data** – that is equal to 5,200 gigabytes (GB) of data for every person in the world.[3] Considering most modern smartphones hold 64 GB of data – that is the equivalent of 81 full phones for every person in the world!

4. **The use of Big Data analytics** (massive volumes of information created by digital technology that collect patient records) **could reduce pharmaceutical R&D costs by as much as $70 billion.**[4]

   Data analytics lower administrative costs to the hospital and reduces the cost to the patient. Statistical data shows that administration currently contributes to 25% of healthcare costs, as humans are required to perform administrative tasks.

5. **Health data can help to facilitate medical diagnoses.**[5]
   Electronic health records can help healthcare professionals make informed clinical decisions, making all prescribed medicine, lab test reports and the medical history of a patient accessible through a single screen. This can help these professionals see the full picture of a patient's condition, allowing them to give more accurate diagnoses and better care.

6. **Health data sharing can help make health systems more responsive and sustainable.**[6] Digital health technologies can improve access to health services, reduce costs, improve quality of care and make health systems more efficient, while allowing patients to care for themselves. For example, remote monitoring devices like smart watches can help people to better manage their own health, thereby reducing the burden on health systems and increasing their sustainability.

7. **Digital health data can help to reduce inequalities in health.**[7]
Digital healthcare can offer remote medical services, serving people who live in isolated areas by providing access to medical services that may not otherwise be available or affordable. Digital health systems can promote health literacy by educating the public on how to maintain healthy habits, thus promoting healthy behaviours and providing access to support networks for patients, helping to reduce health inequalities throughout the world.

8. **The quantity of health data has grown at an explosive rate of 878% since 2016** and is continuing to grow exponentially, according to statistics compiled from Dell EMC.[8]

9. **Digital health data can reveal information about health factors outside of those measured in a clinical setting**, such as data concerning diet and happiness levels.[9] This data can help to fill the gaps in current research and provide valuable information outside that gathered in clinical trials, thus improving the quality of research.

10. **Health data collection can help to monitor your stress levels.**[10]
Some smart watches come with an electrodermal activity (EDA) sensor that measures electrical activity in the skin, which can be used to compute your stress levels. Apps can also be used to encourage regular deep breathing and meditation that can decrease stress levels and improve the quality of your sleep.

References
1. The Evolution of Healthcare Data: 5 Little Known Facts - ReadWrite
2. Big Data and Healthcare: Facts and Figures – MedTech Engine
3. Big Data and Healthcare: Facts and Figures – MedTech Engine
4. Cool Facts About Big Data in Healthcare - HealthWorksCollective
5. Top 10 Reasons Why Data Analytics is Good for Healthcare Industry - LoginWorks
6. What you need to know about digital health systems - WHO
7. What you need to know about digital health systems - WHO
8. Organizations See 878% Health Data Growth Rate Since 2016 – Hit Infrastructure
9. 4 uses for Patient Care Data – University of Illinois Chicago
10. Six health conditions a smartwatch can detect before you can – Popular Science