

Digital

Health and care



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Digital Technology in
Health and Social Care,
Opportunity Knocks or
Strictly Pointless?





A LITTLE BIT
ABOUT
me...





International Healthcare challenges with regional variations





Ageing in Place

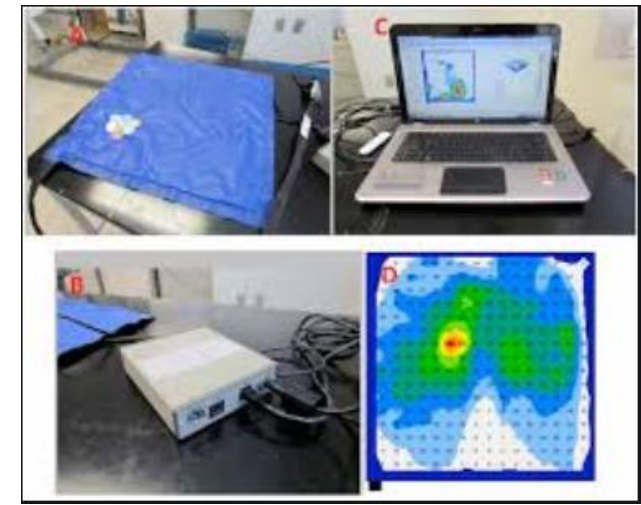


Environmental Factors - Home Space & Technology - Environmental Control Systems & Alternative and Augmentative communication devices

Enabling Technologies



Clinical Decision Making



Established therapy onto novel technologies

Reality orientation



Reminisce therapy





Southern Health and Social Care Trust



Northern
Periphery
Programme
2007-2013

Innovatively investing
in Europe's Northern
Periphery for a sustainable
and prosperous future





South Eastern Health
and Social Care Trust



Muscab, H, Kernohan, WG, Wallace, JG, Harper, R & Martin, S 2017, 'Self-Management of Diabetes Mellitus with Remote Monitoring: A Retrospective Review of 214 Cases', *International Journal of E-Health and Medical Communications*, vol. 8(1), pp. 52-61.

Hayat, M., Kernohan, G., Nevill, A. & Martin, S., 14 Dec 2016 'Remote Monitoring to Achieve Self-Management of Type 2 Diabetes Mellitus: A Prospective Study.' In *Current Trends in Biomedical Engineering and Biosciences*. 1, 1, p. 1-15

Muscab, H, KERNOHAN, WG, Wallace, JG, Harper, R & Martin, S 2015, 'The Journey towards Successful Research in a Diabetes Clinic: Expectations vs. Reality', *Journal of Health and Medical Informatics*, vol. 6:5.

Mushcab, H, Kernohan, WG, Wallace, J & Martin, S 2015, 'Web-Based Remote Monitoring Systems for Self-Managing Type 2 Diabetes: A Systematic Review', *Diabetes Technology and Therapeutics*, vol. 17, no. 7.





 Belfast Health and
Social Care Trust

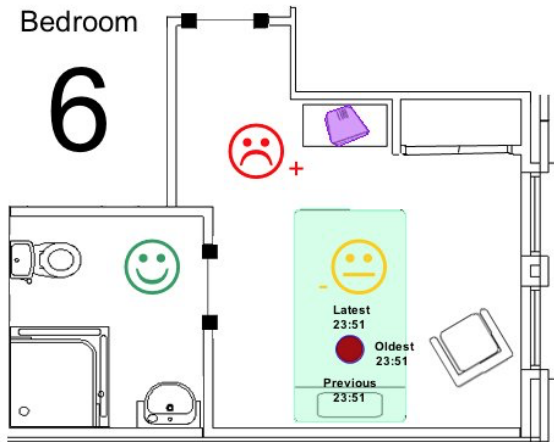


Pervasive Space – Lifestyle Monitoring 2005 – Pathologic – Willowfield and Sydenham Court

Date 15/06/2005

Time 23:53

Tenant: John Martin



Time Water Currently Running

00:00:00.00

Total Duration Water Last Turned On For

00:00:43.99

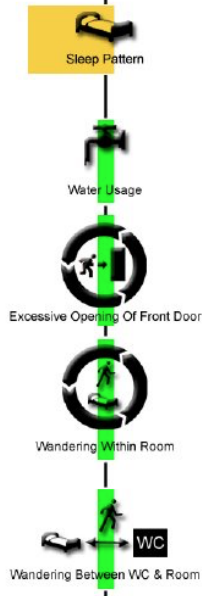
Fall Estimator Timer

00:00:00.00

Less

Normal

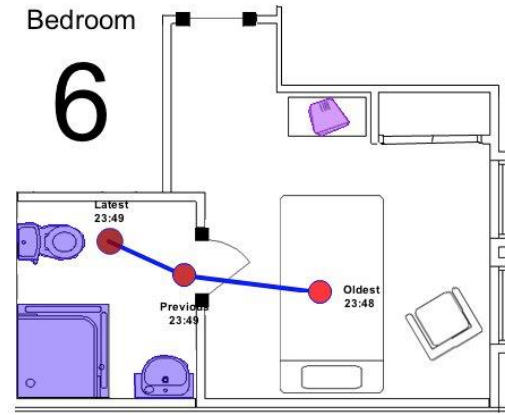
More



Date 15/06/2005

Time 23:49

Tenant: John Martin



Time Water Currently Running

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Total Duration Water Last Turned On For

00:00:00.00



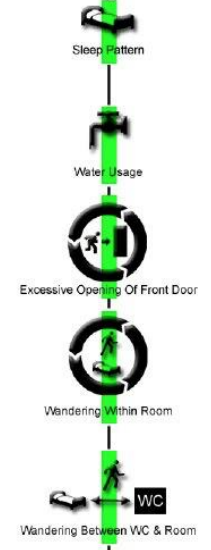
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Less

Normal

More



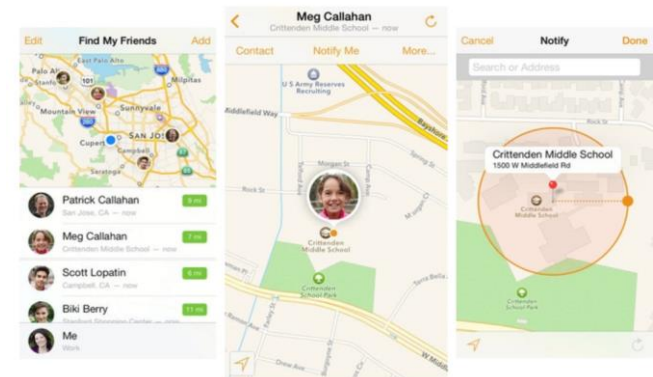


Device Design & System Development (Brain Computer Interfaces - BCI)





Everyday Digital Technologies – Everyday Lives



Beyond BYOD to BYOX

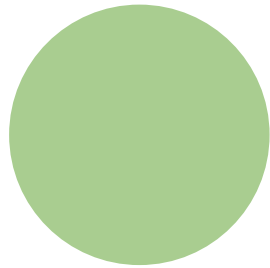
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Social Isolation



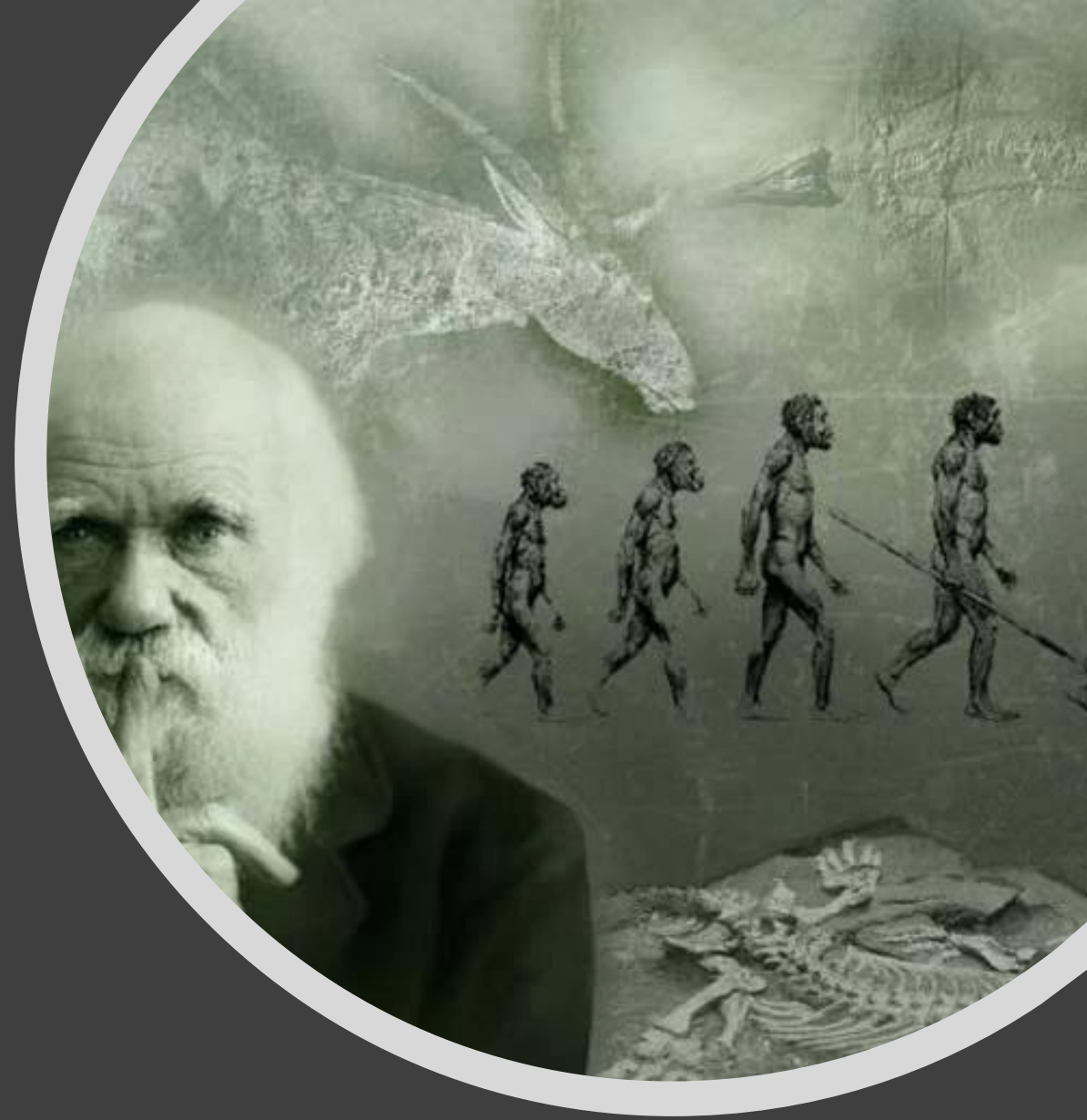
Ethics – Research and Implementation are Different

- Ethics
- Privacy
- Consent
- Security
- Legal issues



“It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change.”

Charles Darwin





**World Health
Organization**

Definition of Wellness

Wellness is the optimal state of health of individuals and groups. There are two focal concerns: the realisation of the fullest potential of an individual physically, psychologically, socially, spiritually and economically, and the fulfilment of one's role expectations in the family, community, place of worship, workplace and other settings.



THE SUNDAY TIMES *magazine*

OCTOBER 27 2013



**Alas, poor
humans**

Supercomputers are already taking our jobs. Has mankind made itself obsolete, asks Berkeley's Professor Stuart Russell





Opportunity Knocks or Strictly Pointless?





References

- Image on opening slide: Health and Social Care Alliance Scotland. Digital health and care review. Available from <https://www.alliance-scotland.org.uk/blog/news/digital-health-and-care-review-of-2018/> accessed 22/02/2020
- Preamble to the Constitution of WHO as adopted by the International Health Conference, New York, 19 June - 22 July 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of WHO, no. 2, p. 100) and entered into force on 7 April 1948. The definition has not been amended since 1948.
- Memel, D. (2008) Assessing functional ability is important. *British Journal of General Practice*. 58 (557): 835-836. **DOI:** 10.3399/bjgp08X376159