Impact of Technological Innovation on Health and Social Care Provision

The potential for technological innovation to have a transformative impact on health and social care provision has been recognised in a range of areas, including mental health services (Barak and Grohol, 2011), substance addiction (Schoech et al, 2013) and supporting people with disabilities (Mintz et al, 2012; Dunst et al, 2013). Juxtaposed alongside this recognition has been an increasing concern surrounding the ethical, privacy and social justice ramifications of these technological innovations (Social Care Institute for Excellence [SCIE], 2014). This essay explores both the opportunities and challenges related to the increased use of technology in these settings. Initially, some of the key challenges will be outlined, followed by an attempt to reframe these challenges and look at the potential that technology has to revolutionise many areas of health and social care delivery. In order to explore these issues in depth, a specific and particularly divisive issue will then be considered in depth: surveillance. This will include an exploration of the dominant discourses that exist around surveillance technology in health and social care. It will be shown that while there are undoubtedly challenges in this area, technology itself is only a tool, one that can be used either transformatively or oppressively.

One of the most fundamental challenges related to technological innovation in health and social care relates to staff ability, training and motivation (Liddell et al, 2008; Gillingham, 2015). Health and social care provision has traditionally relied on face to face interactions as the fundamental remit for practice (Berzine et al, 2015). Therefore, any erosion of this interpersonal focus is likely to be challenged by the status quo, and those professionals who fear their skills may no longer apply to these shifting contexts (Liddell et al, 2008). Unsurprisingly, then, health and social care sectors have been shown to be markedly slow in the uptake of new technological innovations, in particular when compared to private sector organisations (Zorn et al, 2011).

Alongside these practical issues, there are a range of ethical concerns related to the use of technology in these settings. Chief amongst these is a concern that technology is leading to an exacerbation of some of the key issues that health and social care professionals deal with on a regular basis. For example, research has shown that over use of technology is leading to an increase in depression and a worsening of depressive symptoms (Tong Mok et al, 2014). This is particularly concerning for children, where the

younger a person is when they start using technological devices on a regular basis, the more likely they are to experience mental health difficulties related to this (Augner and Hacker, 2012). The use of technology is also linked to an increase in childhood obesity, which is a significant public health concern in contemporary society (Rosen et al, 2013). Other concerns commonly raised include cyber bullying (Office of Communications, 2015), internet addiction (King et al, 2012) and online grooming practices (Palmer, 2015).

It is important, however, that these concerns do not lead to an irrational proclivity towards technological scepticism at the expense of the benefits that new technologies could provide service users and patients. Welsh et al (2003) prominently noted that new technologies are themselves morally neutral, and it is the use to which they are put that raises ethical concerns. Mirroring this perspective, Greenfield (2014) discusses that the impact of any technological innovation depends on how it is utilised, and stresses that it is naïve to consider any technology as intrinsically positive or negative. For example, while it was noted above that technology brings with it particular risks for younger people, it is also important to recognise that technology provides an opportunity to engage with younger people, in particular young men, a demographic that health and social care agencies have traditionally struggled to engage (Ellis et al, 2012). It has also been shown that some traditional interpersonal interventions, such as person centred counselling, can be effectively provided through new technological mediums (Vossler, 2010).

To give greater substance to this discussion it is beneficial to look at one particular area in depth, that of surveillance. Health and social care services are increasingly concerned with issues around privacy, and there are competing priorities in these settings that provide a key challenge in managing these concerns (Zwijsen et al, 2011; Mortenson et al, 2015). On the one hand, the legislative and policy framework that provides the broader context for health and social care delivery stresses the importance of sharing information with other professionals. For example, section 6 of the Care Act 2014 outlines that local authorities, the NHS and other organisations involved in the provision of health and social care services must co-operate in the sharing of information as required. Other legislation in this area places similar duties on agencies to co-operate in this way, including the Children Act 2004 and the Health and Social Care Act 2012. However, these requirements to share information exist alongside the fundamental right to family and private life, outlined under section 8 of the Human Rights Act 1998. Concerns around the sharing of information have been exacerbated by the newly implemented General Data Protection Regulation 2016, which came into force in the UK in May 2018. This has placed substantial responsibilities on governmental and

non-governmental agencies when it comes to confidentially storing, processing and sharing personal data.

Alongside these competing priorities, it is undoubtedly the case that contemporary society is more concerned with surveillance than ever, and this has extended to health and social care settings (Mortenson et al, 2015). Welsh et al (2003) argued that within these health and social care settings, concerns are gradually shifting, moving from concerns about being under surveillance towards being concerned if people are not under surveillance, and these issues have only intensified due to the wider availability of technology to provide unceasing surveillance (Perry et al, 2010). The types of technological advances that allow for more consistent surveillance in health and social care include telecare sensors, GPS devices, cameras and smart health recording devices (Mortenson et al, 2015). The fact that the Care Quality Commission (CQC, 2015) and the SCIE (2014) have both provided explicit guidance on using surveillance technology in health and social care settings demonstrates how prevalent surveillance technology has become in health and social care.

It is vital to recognise that surveillance technologies can have substantial benefits for individuals making use of health and social care services. For example, older adults who wish to remain in their own homes have been shown to value the use of surveillance technology to facilitate this and prevent a premature move to a care home (Perry et al, 2010; Andruszkiewicz and Fike, 2015). Furthermore, surveillance technology has been successful in recent years in uncovering some of the most egregious abuses in health and social care services, most notably in Winterbourne View Hospital, where traditional whistleblowing and inspections had failed (Flynn, 2012). However, alongside a consideration of these benefits there is minimal consideration of the ethical ramifications of these new surveillance technologies (Perry et al, 2010; Gillingham, 2015). This point is significant because research shows that managers, practitioners and patients often have vastly differing perspectives on the risks related to these new surveillance technologies (Essen and Conrick, 2008; Mortenson et al, 2015).

In order to comprehensively analyse these issues, it is helpful to look at the discourse that is used in this area. Foucault (1980: 93) defines discourse as "historically variable ways to specify knowledge and truth". There are key discourses around surveillance that typify the debate in this area, in particular the technical discourse, or what the technological systems actually do, and the discourse on rights, or the acceptability of the technology systems to these settings (SCIE, 2014). In relation to the discourse on rights, a movement has begun based on the principle of "no information about me without me", related to a desire for health and social care agencies to not store or use information about service users without explicit consent and user involvement (Cantor,

2006: 49). Alongside this is a recognition that the concepts of privacy and surveillance are inextricably linked to consent and capacity as defined under the Mental Capacity Act 2005 (SCIE, 2014). The technical discourse, while valuable for innovation and development, does not provide space for these types of discussions, and so it is crucial to not lose sight of the 'rights' discourse alongside this (SCIE, 2014). Technological innovation in health and social care has the capacity to transform service provision; however, technology alone is not a guarantee of enhanced social justice or service provision, which should be the ultimate goal of professionals and organisation in this area (Goldkind and Wolf, 2015).

This essay has shown that there are clear challenges and opportunities for technological innovation in health and social care settings, and that it is the practitioners, managers and policy makers in this area who will shape the impact that these new technological innovations have. This essay has covered some of the commonly noted challenges that technology presents in this area and has considered the opportunities that exist alongside these concerns. The concept of surveillance was then considered in depth, in particular around how discourse impacts on how technology is perceived in these settings. This discussion around discourse should remain central to technological engagement in these settings, and there is potential for technological innovation to be driven not by what is best for service users and patients, but instead by a desire to save money and promote perceived efficiency (Norrie et al, 2014). Keeping the discourse of rights at the centre of all discussions in this area will play a key role in mitigating these issues, and ensure that the vast opportunities presented by these new technological innovations are realised.

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Legislation

Care Act 2014

Children Act 2004

General Data Protection Regulation 2016

Health and Social Care Act 2012

Human Rights Act 1998