Digital nursing 2: maintaining nursing values in the digital age

In 2019, a landmark review on preparing the health workforce to deliver the digital future concluded that deep fears were misplaced: digital technologies would not replace health professionals but enhance or “augment” them; they would be positive for patients, improving outcomes and their participation in their own care (Health Education England (HEE), 2019).

However, the report also contained a stark warning that mechanisms must be put in place to ensure that advanced technology does not dehumanise care: “while automation will improve efficiency, it should not replace human interaction” (HEE, 2019). It stated that a guiding principle, supporting the deployment of digital technologies in the NHS, should be “the gift of time” for staff; where possible, new technologies should give staff more time to care, encouraging deeper interaction with patients (HEE, 2019).

Nurses’ resistance to digital technologies often reflects concern that it will intrude into hands-on care and undermine the therapeutic relationship (Booth et al, 2021; Robichaux et al, 2019). Indeed, these technologies are sometimes viewed as incompatible with traditional nursing values, such as compassionate care (Booth et al, 2021). The wide-ranging Topol Review (HEE, 2019), which highlighted the enormous potential benefits of digital technology for patients and healthcare staff, has been criticised for having little nursing input (Leary and Dix, 2018). Nursing-specific reports, while acknowledging the technologies’ potential, have found the real-world experience for some nurses is less time to care and interactions with patients which are more superficial.

Contributors to a Queen’s Nursing Institute (QNI) (2018) report felt the implementation of electronic records was limiting their time to care, and coming between them and their patients. One commented: “I am an advocate of mobile working and the use of telehealth, but have been disappointed by the reality of using mobile working technology. The tick-box only mentality does not reflect the holism of the individual being cared for... Care has become task focused” (QNI, 2018). Another said: “New technology has caused many of us professionals to want to leave nursing because it is taking us away from what we do best, and that is providing care for people.”

The Department of Health and Social Care (DHSC) and NHS England (NHSE)’s
(2022) plan for digital health and social care seeks to capitalise on the huge progress achieved during the Covid-19 pandemic and ease concerns about the risks digital technologies pose to traditional caring values. Directed at leaders in health, social care and technology sectors, it suggests that making the right decisions on digital now will equip the system to “personalise health and social care and reduce health disparities” and “improve the experience and impact of people providing services” (DHSC and NHSE, 2022).

Digital channels, such as the NHS app, will put services “in people’s pockets” – but only if they want them there: “Digital transformation that focuses on building trust with people and their families will enhance, but not entirely replace, the health and social care system’s offer. For those who cannot, or prefer not to, access digital services, traditional services will remain” (DHSC and NHSE, 2022).

A virtual shift

During the pandemic, a huge shift towards telephone and video consultations in primary care, and trials of virtual wards in community settings, reduced face-to-face interactions between healthcare staff and patients. It is not known how much of this will be retained after the pandemic, and the impact of the new technologies on nursing values and nurses’ relationships with patients is not yet clear.

Case studies published by NHSE during the pandemic – namely, (NHSE, nd) – suggest the technology can support more person-centred care. For example, among one benefit of a virtual-ward approach to supporting vulnerable and at-risk people in the community by County Durham and Darlington NHS Foundation Trust is that it encourages “individualised patient care”; nurses have welcomed the approach, which ensures vulnerable people remain at the centre of their care (Morgan, nd).

Traditional nursing care is threatened by remote or virtually delivered care on the assumption that traditional approaches are better. However, Booth et al’s (2021) review on how nurses should adapt for a digital future called for the profession to “reframe how nurses interact with and care for patients in a digital world”; it stated that many “consumers” are enthusiastically adopting digital technologies – from ‘do-it-yourself’ health and wellness apps to telemedicine and virtual consultations – to give them more control over their healthcare. The authors stated that: “All this may seem antithetical toward the traditionally espoused nursing role – therapeutic relationships in physical interactions – but patients are increasingly empowered, connected to the internet and demanding personalised or self-management healthcare models that fit their busy and varied lifestyles.” They suggested that digital care approaches should be:

- Co-designed by healthcare teams, patients and carers;
- Made available when patients want them, “ideally in both physical and digital realms” (Booth et al, 2021).

They also emphasised that the “increasing digitalisation of nurse–patient relationships” would need to be “thoroughly explored” (Booth et al, 2021).

Adaptations needed

During the Covid-19 pandemic, many people made video a vital, daily method of communication, paving the way for greater acceptance of remote communication in clinical situations (Barrett, 2020). Nurses will have to adapt how they work so they can carry out, remotely, the fundamentals of nursing, which includes:

- Assessing patients;
- Identifying needs;
- Prescribing;
- Delivering evidence-based care;
- Evaluating effectiveness (Barrett, 2020).

They need to do so while demonstrating compassion – to be “present” while being remote (Barrett, 2020).

Research conducted long before the Covid-19 pandemic suggested nurses who triage patients via telephone can make up for the lack of visual cues by paying close attention to indicators such as tone of voice and breathing sounds (Pettinari and Jessop, 2001). A range of mechanisms can improve how nurses communicate with patients via video, such as asking:

- A third party (who is physically present with the patient, such as a relative or carer) to provide hands-on assistance when necessary;
- The patient to move the camera when a specific view is required (Barrett, 2017).

A study of virtual palliative care undertaken by Chua et al (2020) during the pandemic revealed how clinicians can use verbal and non-verbal “webside manner” skills to maintain human connection. With common empathic gestures (such as placing a hand on the patient’s shoulder) not being possible, verbal responses to emotion (such as “Take your time. I am here”) become even more important (Chua et al, 2020). Helpful non-verbal gestures include leaning in to signal intentional listening or placing one’s hand on one’s chest to indicate empathy and understanding (Chua et al, 2020). Box 1 summarises some of the recommendations.

There is evidence that, in certain situations, patients prefer virtual to in-person consultations, with technology aiding the empathic process. Sperandeo et al’s (2021) study found that patients receiving psychotherapy perceived their therapists as significantly more empathic and supportive in video sessions than in person. Face-to-face sessions used masks and plexiglass dividers, which may partly explain patients’ preference for video. However, the authors also noted that, in a video consultation, the practitioner can observe her/himself as well as the patient, making the therapist more aware of their behaviours and expressions, and perhaps increasing their ability to be “supportive, compassionate and empathic.”

Box 1. ‘Webside’ manner in video consultations

**Proper set up**
- Assume a neutral, relaxed posture
- Maintain eye contact, with the camera positioned at eye level
- Wave hello at the start to establish rapport and put the patient at ease

**Acquainting the participant and maintaining conversation rhythm**
- Check in: ask if there is anything you can do to make this experience better, such as speaking louder or softer, or adjusting the position of the camera
- Use verbal reflections to paraphrase/restate the patient’s words or feelings – for example: “I hear how very sad all of this is”
- Use non-verbal responses – lean in slightly, nod gently, place your hand on your chest to indicate empathy

**Closing the visit**
- Summarise the discussion, verify understanding and outline next steps in the care plan
- Thank participants for their time and for discussing personal issues virtually

Source: Chua et al (2020)
Artificial intelligence (AI)

Buchanan et al’s (2020) review looked at how emerging health technologies powered by AI are likely to influence compassionate nursing care, and the roles and functions of nurses, over the next 10 years. The results showed that AI health technologies (AIHTs) are already changing the nurse-patient relationship and could enhance nursing practice. Several articles predicted that using robots to help with care activities would give nurses more time to get to know patients and build stronger therapeutic relationships. There was also some evidence that using socially assistive robots with residents in long-term care settings may lead to deeper relationships and increased rapport between health professionals and residents. Articles also suggested AIHTs could have negative effects, with residents becoming agitated or distressed when robots were removed. Zafirani and Nimrod (2019) suggested that using robotic devices to monitor treatment adherence could anger or embarrass patients, weakening their relationship with health professionals. There was also concern that using robots is deceptive for patients who cannot recognize that they are not real, infantilises older adults and may lead to culturally insensitive care that could weaken the therapeutic relationship.

Buchanan et al (2020) concluded that nurses have a responsibility to influence how AI is integrated into the health system to ensure it is done ethically and aligns with core nursing values, such as compassionate care. They stated: “nurses must advocate for patient and nursing involvement in all aspects of the design, implementation and evaluation of these technologies”.

Wachter (2015) also highlighted how the flawed introduction of technology can damage the relationship between healthcare staff and patients by:
- Reducing the time practitioners spend listening to, and engaging with, patients;
- Directing staff’s attention away from the person and towards devices – as an example, in a child’s drawing of a visit to hospital, the health professional is shown at a computer, inputting data, with their back to the young patient and her family, who are across the room.

Supporting nursing values

Digital technology could either undermine or support practitioner–service user relationships, and case studies illustrate when technology has helped give more control to patients and created genuine partnerships with professionals (Collins, 2020). As an example, the Patients Know Best (PKB) platform (with more than one million patients using it in 2021) allows patients to securely add and access information about their condition, and communicate with their healthcare team. Its creator, Mohammad Al-Ubaydli, says it allows clinicians to develop closer relationships with patients than infrequent face-to-face appointments (Collins, 2020).

Similarly, with the TeleCare North project in Denmark for people with chronic obstructive pulmonary disease (COPD), patients have more-frequent contact with healthcare staff and report a greater sense of security and control over their condition than pre-project implementation, despite having less face-to-face time with staff (Collins, 2020). The project developed after a district nurse’s PhD studies in telemedicine highlighted the poor coordination of traditional COPD services and the heavy burden of repeated hospitalisations.

These examples show that innovators should perhaps “consciously engineer a bias towards relationships” when designing and implementing new systems (Collins, 2020); features that support a shift in the power balance between service users and professionals, such as ensuring patients can access their medical records or letting them decide who can access their data (Collins, 2020), could be included. Questions to ask when designing new technology are given in Box 2.

Conclusion

Nurses play a key role in identifying when technology may be inappropriate; that used to communicate with patients remotely, for example, should always be a means to an end, not an end in itself. To ensure digital technologies support core nursing values and prevent unintended consequences, nurses must influence those technologies, and be alert to how they may affect staff and their relationships with patients.

Box 2. Questions to ask about new technology

- Does it create closer relationships – for example, does it support easier communication between service users and their healthcare team?
- Does it increase patients’ control over their care, such as access to their data, who sees that and how it is used?
- Will it help create greater trust and give service users confidence that data can be safely shared with health services?
- Will it allow more holistic care that addresses the psychological and social aspects? Or will it encourage health professionals to focus narrowly on the biomedical aspects of care?
- How might it impact on social groups that may be excluded, such as people from minority ethnic backgrounds, those living in deprivation or who are homeless, or older people? What steps could ensure these groups benefit from a combination of online and face-to-face services?
- As new services become embedded, are there opportunities for more radical thinking on future care delivery?

Source: Collins (2020)

References