

Digital Wellbeing

Using Technology Well

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Digital should not replace paper – it should re-imagine it!

Professor Julia Adler-Milstein, 2018¹

Technology as a Cause of Burnout or an Enabler for Better Health and of Wellness

Technology can both distress and impress us. It has become ubiquitous and for most people an intrinsic part of their lives. It is rare for most people to leave the house without a smartphone, for example. But pause for a moment and think about how you would feel if you looked at your mobile phone right now and saw the battery life was at 1%. Or if you could not find your phone at all? In just a couple of decades electronic communications, mobile phones and other smart devices have gone from being luxuries to an essential part of our everyday lives. On the one hand, a smartphone can replace multiple devices, improving portability and allowing end-user customisation, but that same range of features builds a dependence which can be challenging for many to manage.

Many proposed solutions for digital wellness rely on setting limits on our use of technology. However, when we return to our devices, systems or networks, we find others have not taken the same break that we have and now we have even more to deal with, engendering a fear of missing out (FOMO). A typical example of this is a clinician's email inbox, filled when they return from their holiday despite having an out-of-office reply in place. From copy-paste to reply-all emails, digital makes creating and sharing information almost *too* easy. Setting limits may temporarily manage the symptoms but fails to address the cause of the distress. A similar transition from the focus of healthcare from treating illness to enhancing wellness is needed for our approach to technology.

With many competing pressures, wellbeing can be an add-on when it comes to digital products. An argument could be made that user experience should be the priority as it is so critical to ensuring the success of digital healthcare. The 2017 Mental Health Atlas found that globally there is one psychiatrist and only 0.25 occupational therapists across most income groups per 100,000 of the population.² With the widening workforce crises across mental health globally and increasing clinician burnout in the face of a global pandemic it is more important than ever that digital enhances our wellbeing. This cannot happen if digital processes simply replicate paper ones.

Smartphones have been used to begin to reimagine healthcare. Examples of this include using apps for mindfulness; video calls with hospital specialists; viewing your medical

record online and ordering medication to be delivered to your local pharmacy. The ability to empower citizens to manage their health through virtual health assistants or ambient monitoring technology has become science fact not science fiction.

Harnessing digital more widely in healthcare means transforming it but progress can be made by having a digital process replace or improve multiple paper or manual processes. This can include robotic process automation freeing us up to do clinical work by using natural language processing to code diagnoses and treatment. However, an internet search for the phrase 'clinician burnout' will bring up multiple articles on the electronic patient record. Atul Gawande's reflections on clinicians and their computers in the United States makes for sobering reading.³ As clinical staff are asked to increasingly undertake administrative tasks as opposed to direct patient care, their career satisfaction decreases and their risk of burnout increases.⁴ For true citizen and clinician engagement, wellbeing should be a focus at the start of any digital change and must remain at the heart of it.

We can promote wellbeing in digital by engaging with it, using digital to improve upon paper processes and always keeping our knowledge of digital systems current with regular training. It is not enough to treat the symptoms of anxiety and burnout when it comes to digital. It is better to not only prevent them, but to actively promote wellness instead. The rest of this chapter details some of the research behind this and practical steps you can take. Digital must be evidence based and appropriately tested but we must also evolve our idea of what evidence we use. Look to podcasts, blogs and other media and evaluate the ideas shared for yourself. Digital change is rapid change. We need to adapt to keep us and our patients from being left behind. If we engage effectively with digital transformation, we can get amazing outcomes for our patients and ourselves.

This chapter will look in more detail at some of the emerging challenges digital brings to our wellbeing. Practical solutions to address the causes of burnout rather than the symptoms will be the focus. Digital research is constantly evolving and by the time a paper is published there can already be new evidence available. A digital product can have evolved over several lifecycles into something completely different by the time the evaluation of the original product is complete. We live in an unprecedented time for creating data. The challenge is using this data proactively to improve quality and safety whilst reducing the burden on us all.

Why Care about Digital Distress?

The distress which digital systems in health cause is not trivial, leading to safety concerns and major issues in the workforce, often considered under the term 'burnout'. Burnout is formally described as a state of constant exhaustion, usually relating to work stress.⁵ The impact of burnout on the medical profession in particular is a global crisis,⁶ which has not spared mental health services. In some studies it has been found to affect more than half of all psychiatrists worldwide.⁷⁻⁹ Digital tools are often cited as a cause, and you can see the face validity of this by looking at the faces of your colleagues when someone mentions a new digital system. One approach to preventing burnout is to enhance staff engagement and 'Joy in Work'.¹⁰ Pause for a moment and think about this. Do you feel joy when you think about your work? If you do – what aspects enhance that joy and what aspects wear it down? Where did technology feature in your reflections?

The most widely used models of burnout consist of three factors: 'depersonalization, exhaustion and a decreased sense of effectiveness' (p. 898).¹¹ Focusing only on the

exhaustion domain, 80% of doctors and medical students in the UK have been found to have high or very high risk of burnout in a large online survey.¹² In the United States, studies have consistently demonstrated high rates of burnout,^{13,14} citing Electronic Health Records (EHRs) and electronic prescribing as major contributors.¹⁵ The focus on records for compliance and billing contributes to a particularly high impact due to the requirement to make records which are not meaningful for the clinicians.¹⁶ Automated notifications have also been associated with increased burnout.

The NHS Long Term Plan emphasises the role of digital technology as an enabler in the future of healthcare and in making the NHS ‘a more satisfying place . . . to work’ (p. 94),¹⁷ but mentions technology as a negative contributor to wellbeing. This approach reinforces the concept that digital cannot alleviate burden if people feel it is done to them rather than developed with them. Any digital innovation is likely to suffer from non-adoption or abandonment without considering its effects on the people using it.¹⁸

The NHS Staff and Learners’ Mental Wellbeing Commission report from February 2019 looks at technology as being both a cause for and a solution to mental distress.¹⁹ However, except for ‘exploring’ the use of technology to connect remote staff, the report does not explore technology and distress in any further detail. A review of trainee and trainer morale in the annual surveys from Health Education England focuses on issues like workload and supervision.²⁰ Technology can be a major cause of increased workload through numerous systems that do not communicate with each other (such as a prescribing system and a patient record) or having to log in to dozens of systems to carry out simple tasks. It can also alleviate burden by enabling remote teaching through social media journal clubs or virtual reality laboratories.

These issues are not restricted to the United States and UK. A Global Health Observatory report noted a 46% global increase in the use of electronic health systems.²¹ In higher-income countries, more than 50% used digital systems in healthcare compared to 15–30% in low- and middle-income countries, respectively, but as these systems become more ubiquitous in health settings so too does their impact.

A systematic review and meta-analysis reports that burnout ‘frequently associates with poor quality of care’ (p. 555) with the caveat of publication bias.²² Despite limitations such as the heterogeneity of burnout definitions in over 120 analysed publications, there is increasing evidence that there is an association between burnout and poorer quality of care.

Are We Always Anxious?

As we look to digital to ease our work it can instead be a source of increasing complexity, frustration and anxiety. As more records become digital, staff are spending more time entering data than engaging with their patients. A typical assessment appointment may last an hour but give rise to two or three hours of administrative tasks undertaken by the clinician. A group of mental health Chief Clinical Information Officers in the United Kingdom speak of ‘DataMHageddon’ – the potential for the collapse of healthcare because of the increasing burden of data collection on healthcare staff.²³ NHS sickness data from August 2020 indicates a sickness rate of 3.9%.²⁴ Despite the Covid-19 pandemic the most common causes cited are anxiety, depression and other psychiatric illnesses. Almost half a million days of work were lost as a result.

Anxiety disorders have been described in the literature for over 400 years,²⁵ and they affect around one-third of us during our lifetimes. From podcasts to open access journals

there is now an almost constant barrage of information which our brains are incapable of absorbing. As information becomes always accessible, people are too. Clinicians can be praised as supportive and dedicated if they are always willing to answer a phone call or an email, regardless of the day or hour, but this constant level of alert takes a toll. What is your first thought when you hear a ringtone or notification from your phone?

With the developments in technology, perhaps it is inevitable that illness will follow. There is a strong correlation with anxiety and social media in young women,²⁶ and there is an ongoing debate between scientists around the role of technology on mental health in adolescents.²⁷ Women are reported to have more depression and anxiety disorders than men do and there are many theories about this, including the way men and women access health services. The rise of depression and anxiety is a complex issue made even more challenging by the various instabilities in the world today, including financial insecurity, a global pandemic, and the ability of social media to spread both positive information and disinformation.

Many antidotes to modern life seem to focus on regression. We are often told to turn our phones off, create technology-free spaces and spend time away from our technology. This cannot truly alleviate the anxiety that the volumes of information and expectation overload creates. Distraction and time-outs do not deal with the fundamental problem. If we keep using digital in the same way that we use paper it can never enhance our lives or those of our patients. Digital must transform culture and enable new processes that focus on the person not the technology. It needs to be the best supporting player in our work – enabling but invisible. This means challenging people to practise in completely new ways. One example of this is the rise of dictation (human or artificial) in the background of a clinical consultation. The more data is required from clinicians, the more inventive we need to become to provide it.

The Rise of Social Media and Our Fears of Missing Out

No chapter on digital wellbeing would be complete without addressing the juggernaut of social media. From the early days of MySpace and Twitter to Instagram and TikTok, the reach and influence of social media cannot be denied. If we want to engage our service users and our future workforce, it is clear that we must engage in some way with social media. However, one of the many prices paid for increased connectivity is how amplified the consequences of our actions can become. A misplaced comment in person can cause momentary embarrassment, but an ill-timed Tweet or post can lead to death threats and the loss of a career. The world is getting smaller as our digital reach gets longer, bringing envy of lives lived on social media. If ignorance is bliss, then Instagram is insecurity.

The fear of missing out (FOMO) was first explored in the literature almost a decade ago.²⁸ Being connected helps us see what is out there and can inspire change, global movements and even revolution, but if we constantly wonder about the next great thing we can never truly live in the moment and enjoy what we have. Paul Dolan in his book *Happiness by Design* suggests that the things we choose to pay attention to define our happiness.²⁹ By this logic, if we spend our time constantly scrolling, we never focus on any one thing and will always be chasing happiness.

Positive initiatives have arisen through social media, including ‘15 seconds 30 minutes’, using quality improvement (QI) methodology to improve the experience of work.³⁰ The concept is to take 15 seconds to do something that can save a colleague half an hour in the

future. Other movements facilitated by social media include improving civility at work³¹ and introducing ourselves to our patients with the simple phrase ‘Hello, My Name Is . . .’.³²

The key part of this social activism is that information was shared to allow people to act together. Media in isolation simply fosters more isolation. Using social media as a way of sharing our interests or finding new ones can be healthy when done in moderation. It is important to remember that with social media we are the product. Allowing social media platforms to guide our content choices can make us forget that we are ultimately in control. If we constantly wonder about the next great thing we can never truly live in the moment and enjoy what we have. One way to start taking control of your social media is to examine your feeds. The people and topics you follow say a lot about what you find important. The data we consume is as important to our health as the food we eat. By curating our social media more rigorously we can keep our minds a healthier space to inhabit.

The Discomfort of Going Digital

Change can bring anxiety and managing this anxiety is a large part of making a digital project a success. When we look at successful transformations there are almost always a few constant enthusiasts who drive the change and contain the fears of other colleagues. However, with high staff turnover, the team that started a digital project may not be the team that completes it and the enthusiasm can be lost. This can cause delays or even derail a project completely so the potential benefits are never realised.

Clinical engagement (or more specifically the lack of it) is a critical issue when it comes to change with digital. Using the Pareto principle, 80% of the concern may come from around 20% of your users. Perspective is key here and focusing on the early adopters may help create enough momentum to bring the laggards and sceptics along.³³ This will especially be the case if the benefits to service users and staff can be spelled out clearly, early and repeatedly.

The global coronavirus pandemic saw a sudden and sometimes dramatic uptake of digital tools by necessity. Concepts such as patient-initiated follow-up and reducing our carbon footprint had been discussed for some time. Suddenly healthcare systems around the world scrambled to provide digital alternatives to face-to-face care which had continued as the norm in most regions. The transformation varied from innovative ways of conducting eye examinations remotely to the more mundane video call appointments. If you pause to reflect, the idea of someone driving into hospital to discuss results of routine tests with a hospital specialist seems nonsensical now when this conversation could be held by telephone or video call. Resistance to changing practice had been maintained by a variety of factors, including financial; the payment to a hospital for providing a face-to-face consultation far exceeded the payment for providing a remote consultation.

It is impossible to consider digital wellbeing without thinking about digital inclusion and exclusion. For our patients to embrace digital (as we have with booking flights or shopping) it must be easy to use, convenient and, crucially, accessible. If your website is confusing and overloaded, it will add to patient anxiety in a time of crisis rather than smoothing access. Digital systems can work 24 hours a day, 7 days a week without any additional cost, making virtual therapy options markedly more convenient than those constrained to a particular time and day each week. From chatbots to user-centred design to influencing stakeholders to fund training and access (such as virtual consultation hubs at GP practices), digital wellbeing needs a whole-systems approach to work, acknowledging

that even with the best intentions and design it is not for everyone. There will always be people and situations for which digital systems are not suitable, so alternatives must always be prominently presented. Choice is vital.

It is also important to avoid the fallacy of sunken costs; the notion that once time and resource has been invested in a project to deliver a new digital system, it must be seen through to completion. Some projects are just not viable, but their imposition can have both immediate negative effects and undermine trust in any future digital systems. Organisations need the courage to halt projects rather than foisting changes on clinicians. When mistakes happen (and they will) it is important to be clear, take responsibility and address it. Reflective practice can be really helpful, but avoid dwelling on what could have been; or 'if it's not going to matter in five years, don't spend more than five minutes being upset by it'.³⁴

Digital without the Despair

Now we have seen what digital transformation should not be, we can consider a few aspects of how it should be. Before beginning any digital project, the leads need to think about how it will enhance whatever is being replaced. In many cases, this may mean an improvement in quality and safety but an increase in time. If this is the case, it is important to be transparent about this from the start and explain why the increased quality or safety makes the new process of benefit overall.

Digital gives a chance to reimagine work. Using simple, free online tools you can start mapping current processes and then explore how digital can simplify, enhance or entirely transform them. Getting patients and clinical staff involved early is key as the mapping will rely heavily on their input. It is also an opportunity to start the change management that is an inevitable part of any transformation. Some of these agendas will be explicit such as reassurance that a patient can still see a care professional when they need to. Other agendas will be more subtle and can include the fear of technology itself or that it will lead to redundancy.

To have true patient and staff buy-in, there needs to be a clear narrative of benefit to all those using the system that is regularly and clearly communicated. Framing projects in this way can often help share the vision of why the digital system is being considered in the first place. A lot of this will depend on the culture of the organisation you work in. Using proxy measures for culture and digital maturity (such as an overall Care Quality Commission rating or a Digital Maturity Assessment level) can give you a rough idea of the challenges you may face.

Good training is key to building clinician satisfaction with digital systems.³⁵ Clinicians may struggle to see the benefits of learning to engage with electronic patient records if this is demonstrated to them as an administrative function rather than a clinical tool to enhance safe, high-quality care. It may seem incomprehensible that clinicians would seek further training when upgrading their smartphone but not do so for the digital tools they use daily. A common refrain is that our clinical tools need to be as intuitive as those we buy in our private lives. There is a strong argument for improving user interfaces and enhancing user-led design.

Another important issue to consider is diversity. From seatbelts to medication, many things we use today have been tested for men rather than women. In her book *Invisible Women: Exposing Data Bias in a World Designed for Men*,³⁶ author Caroline Criado Perez

looks at how this affects everyday life and the knock-on effects as a result. In just one example from Sweden, the way roads were cleared disproportionately disadvantaged women who were more likely to use walkways and public transportation and therefore were more likely to slip as these areas had not been cleared. This resulted in more injuries for women with more serious injuries and more hospital visits. From gaming headsets to phone sizes, design favours men and this cannot be healthy, especially when designing for the whole workforce. Along with patient involvement and diversity, there are various ways to consider how people will use the new product. Considerations for people who have learning and communication needs, dyslexia, colour-blindness and more are so important to improve access and can be easily facilitated using modern systems. If done well, technology can improve inclusion by offering a flexibility that traditional services could not.

What Actually Works?

Joy in Work has been adopted as an approach to mental health workforce issues in the UK by the Royal College of Psychiatrists.³⁷ Despite the increasing use of digital in UK mental health services, we are many years behind our colleagues in the United States and primary care where electronic systems are well established and research on alleviating the negative impacts has progressed further. One study in the United States relating to Joy in Work looked at 23 high-performing general practices.³⁸ Given the premise of this chapter, it will come as no surprise to learn that these practices did best with high administrative support for clinicians, better verbal communication, non-physician scribing and co-location of teams. In other words, focusing on the person rather than the technology. Although this is one way to approach digital transformation it does not actually leverage the power that digital can bring.

Another study in primary care in the United States is the Healthy Work Place trial,³⁹ which found that improvements in quality and reduction in error rates lagged behind improvements in clinician satisfaction and reduced clinical burnout. In other words, to get the quality and safety improvements required burnout and satisfaction to be addressed first. This is an exciting way to look at research in this area as it suggests focusing attention on improving joy and satisfaction at work, rather than focusing on the end product of burnout.

Popular media is full of ideas for improving our wellbeing. Each new article recycles the same themes – set boundaries for yourself, spend time with people/nature and try to have time away from technology. Whilst a hike in nature or turning off your notifications will provide respite, these ideas do not deal with the underlying problem. If you work in an organisation where ‘reply all’ is commonplace, your email inbox will always be heaving. Addressing these issues needs to start from the core.

Digital Wellbeing in the Workplace

There are two key elements to reducing your digital distress at work:

1. Engagement – from national surveys and with the added pressure of a pandemic time is in shorter supply than ever. Investing some time in a digital project will lead to more work in the short term but can reap dividends with reduced workload or improved quality and safety in the longer term. The ideal project will manage all three.

2. Education – digital cannot be a one-time experience. Digital products evolve and new products are regularly brought to the market. Surgeons would never use new kit for an operation without familiarising themselves with it first. However, many clinicians still balk at the idea of attending training for clinical systems which can cause harm or benefit on a much wider scale.

Clinical engagement with digital projects is key to their success. There is no one solution here – but the Global Digital Health partnership in their international overview report on barriers and enablers provides an excellent summary.⁴⁰ In essence, clinical engagement must be sought from the outset, clinicians must have meaningful input and the process should be focused on clinical aspects rather than administrative ones. The report also showcases the importance of digital workflows enhancing the proportion of clinician time spent on patient care rather than reducing this.

An example of this is electronic prescribing and medicines administration (ePMA). Electronic prescribing can take more time than writing a paper prescription. However, the digital version is legible, always accessible, allows for decision support and can be easily monitored across sites by a pharmacist. The benefits of ePMA in terms of improving safety from medication-related errors made it a focus for the NHS. A challenge to this is the use of agency staff in the NHS. Using electronic systems usually requires training and access credentials which may not be available to temporary staff the first time they take a shift in a ward. As well as addressing the practical issues, defaulting to paper can be made less appealing by demonstrating the value that the electronic process brings.

Digital Wellbeing at Home

Tablets, smartphones, smart speakers, smart heating and lighting – the list of technology we may have in our homes keeps growing. If you start with the idea that technology should enhance your life rather than complicate it, you are on the first step to achieving a healthy equilibrium with technology. There are genuine health conditions associated with technology excess such as a gaming addiction. These illnesses need early recognition and treatment. Video games have been around since the 1950s, but gaming addiction only found its way into the international classifications of disease in 2018.

The key thing to remember is that any time away from digital does not stop it being an issue when you return to your phone or turn your Wi-Fi back on. You need to examine your relationship with digital in a brutally honest way. There are ways to measure your online activity using your devices and ways to use them to set limits for yourself. This should not take away from the benefits technology at home brings you from simpler shopping, entertainment and connecting with those you love.

A new complication in recent years is the blurring of the boundaries between home and work. Digital allows a lot of work, even clinical work, to be carried out from home. With the rise of video calls, it can be tempting to book meetings or consultations back-to-back, especially with longer and longer waiting lists. As we become better at recognising illness, we often need to manage this clinical disease burden with dwindling resources. With digital, stretching yourself can be easier than ever and booking in rest periods into our digital calendar is not a familiar feeling.

Rather than having a break from technology, it may be more sensible to consider how you want to engage with it. During the Covid-19 pandemic lockdowns, society saw an increase in online gambling and domestic violence. The same technology that lets you

gamble can also provide you with information and resources to recognise and escape from an abusive environment.

Take Control: From Helplessness to Wellness!

Prevention

Across healthcare it is now well recognised that rather than treat symptoms it is better to prevent them or actively promote wellness instead. Over 10% of the gross domestic product of the UK is already spent on treating mental illness.⁴¹ Trends suggest these increasing costs are unsustainable and healthcare costs are expected to double by 2050. Prevention does not just promote wellness; it can save money and resources too. For example, research into prevention in children and adolescents shows enormous financial returns on investment.⁴² For every £1 spent on group cognitive behaviour therapy for depressive symptoms there is an estimated return of £32 in benefit.

For clinicians and patients, prevention is applicable to digital contexts too. By working with other stakeholders, such as local authorities and charities, you can impact patient lives in ways that support digital engagement. This can include providing low-cost kit to help someone access video consultations or funding internet access to reduce digital exclusion. Supporting patients with sensors and wearable technology can promote active self-management. Patients can become a vibrant peer-support network from the comfort of their homes.

One of the programmes to advance digital in the National Health Service was the now abandoned Global Digital Exemplar programme. Global Digital Exemplars and Digital Aspirants were expected to produce digital blueprints as part of their funding. Blueprints cannot, by themselves, help address resource and cultural issues in other organisations. By looking more closely at the challenges in other organisations (sometimes described as ‘redprinting’⁴³) you can try and mitigate problems before they arise. Try this for the next digital project you have in mind, however grand in scale. Talk to other organisations who have implemented the product and look at their clinical safety cases, hazard logs, checklists and workarounds. Could any of these issues crop up in your organisation? Would the solutions your peers tried work for you?

Reinvention/Redesign

For a digital process to succeed, it must be better than the paper or digital process it replaces. A new project is a wonderful opportunity to look at current processes with a fresh lens. Involving clinicians and patients early may help with engagement. A great way to get clinicians on board is to show the benefits realisation from the outset. This may mean streamlining a bulky process or making the new process more patient led. Any digital process or product needs to be tested, embedded and then scaled up. An evidence-based framework for doing this has been proposed.¹⁸ The framework considers adoption in terms of systems. These include the staff, patients and carers using the product but also the organisation deploying it and wider system pressures including government directives.

For example, SNOMED-CT coding and electronic prescribing have both been identified nationally for implementation in UK healthcare with benefits including better information sharing, resource planning and improving patient safety. Diagnosis and prescribing are complex processes – but they do not need to be complicated. To get wider adoption there

must be a value proposition that benefits staff and patients. An example of this might be the use of natural language processing to scour clinical entries and suggest codes to clinicians as they write their notes. Robotic process automation, used for years in the insurance industry, has the potential to automate mundane tasks and free up clinical time for patient care. Leveraging digital in this way optimises its use and makes adoption much more likely.

User-Centred Design

It can be very tempting to come to design meetings with the final product in mind. In some cases, this feels like good preparation and in others a way to ‘just do it’. Some projects can go through entire teams before clinicians and patients are brought in at the end to test what is essentially the final version of the product to see if they can tolerate it.

But do not aim for ‘tolerable’ as your satisfaction measure – aim for ‘liberating’. New digital processes need to free up clinicians and patients, not burden them further. If there is meaningful input so staff and patients can see their ideas being implemented, there is much more of a chance this process will be embedded and scalable. In mental health, interpretation is the way to collaborate with someone and express their thoughts and feelings in a framework that is meaningful to them. It relies to some extent on the clinician and the patient being curious – with neither being an expert but going on a journey together. This is also a great way to look at user-centred design. It is vital not to come to the digital team with a product in mind but rather with a question. Be curious and encourage the curiosity of others. The phrase ‘the art of the possible’ might be replaced with ‘the vision of the impossible’. Something might not be possible right now, but it may be in the short to medium term with a little thinking through.

User-centred design also carries responsibilities. It is incredible that as of 2021 there was still no standardised admission, care plan or discharge process in mental health services. If we all hold tight to our preferred processes, we cannot enact meaningful change. Compromise with customisation may be a palatable alternative.

Leadership

When we discuss wellbeing, many factors come into play. Resilience and autonomy are just two factors associated with wellness. Healthy people cannot thrive in toxic organisations. Leadership may feel like something associated with seniority but every clinician and patient is a leader and has the ability to positively influence digital, their wellbeing and the health of others. One way to think of digital leadership is the coach and star player model. When someone is first appointed as a clinical lead for digital or Chief Clinical Information Officer in an organisation, the temptation to be the ‘star player’ and always have an answer can be overwhelming. With all the jargon in digital it can be quite easy, especially if you have gone on additional training, to feel like the expert in a room. True digital leadership develops this potential in those around you. If everyone in your organisation feels that digital is ‘done’ by a particular person or team, they will never fully appreciate the role they play in its success. By approaching situations as a coach and developing your team as coaches, they will eventually mature to inspire the next ‘generation’ of coaches and so on across the organisation.

Linked to this is the idea of ‘imposter syndrome’. At its core, imposter syndrome refers to an individual feeling they do not deserve a position due to perceived lack of expertise. Although not a recognised diagnosis, it is popular in the media and the subject of an

Box 9.1 Top 10 digital wellbeing tips

1. Set clear boundaries for *why* you use technology – not just *how* and *when*.
2. Stay connected with people – people before technology!
3. Think about the person not the process – user-centred design.
4. Explore service users' perspectives – avoid assumptions.
5. Be kind to your digital calendar – book in breaks as well as meetings.
7. Consider mentalisation – see things from the perspectives of others.
8. Get involved – make the technology work for you by taking an active role.
9. Keep learning – systems evolve and the way we work with them should too.
10. Always consider digital exclusion/inclusion and diversity.
11. Use these free tools to assess your relationship with technology and manage it differently: <https://experiments.withgoogle.com/collection/digitalwellbeing>.

international systematic review.⁴⁴ This includes everyone from adolescents to senior leaders. The researchers found it was particularly prevalent in ethnic minorities but present across all levels of experience and age. Imposter syndrome is associated with anxiety, impaired job performance and burnout. There is now progress in professionalising the role of digital technologists and clinicians, including having professional bodies such as the Federation of Informatics Professionals (FedIP) and the Faculty of Clinical Informatics (FCI).

It is key to remember that improving the health of our patients is why we come to work each day. Framing our work in this way can remind us of what our priorities need to be when we look at digital and wellbeing. These wellbeing tips (Box 9.1) summarise this section of the chapter.

The Future of Wellbeing in a Post-Digital Age

Despite its challenges, it is generally accepted that digital technology is here to stay. The frontiers of medicine in our digital world are shifting at pace. As sensors and wearables become cheaper and more accurate, the possibility for proactive healthcare improves. Social media provides a unique way to gain insight into our patients and social media giants are looking at ways to monitor this data to allow for earlier interventions if someone is at risk of self-harm or suicide. Some predictions and case studies of how technology can help in mental health services can be seen in this recent report on the digital future of mental healthcare and its workforce.⁴⁵

As technology becomes more embedded in our lives it needs to serve as an enabler rather than an additional burden. In a world of measuring, we need to separate the signal from the noise. As regional shared care records mature and as we get better at extracting data from our siloed systems, we will have an opportunity for preventative medicine and population health management on an unprecedented scale. To do this well, we need to bring our clinicians, patients and citizens along with us and that takes a significant amount of trust. Being clear about the benefits to all; being transparent about the challenges; and being flexible in providing support can all boost wellbeing and improve the chances of success.

Box 9.2 Key learning points

1. Digital should reimagine paper, not just replace it – we must consider *why* we engage with technology and the value it can bring.
2. Boundaries around technology – both physical and emotional – are more important than simply taking breaks from it.
3. Education should be continuous – as technology evolves so must we, in order to keep leveraging its benefits.
4. Social interactions remain key – technology will not replace the deeper connections we foster with others – society functions best when we are compassionate to each other and ourselves.

Ultimately, we are responsible for our wellbeing and this needs to be one of the first things we consider when we look at digital, not the last. The key learning points in Box 9.2 summarise this chapter.

References

1. Adler-Milstein, J. NHS Digital Academy. 2018. Residential lecture to the first cohort of the NHS Digital academy. Permission provided by personal correspondence.
2. World Health Organization. *Mental Health Atlas 2017*. Geneva: World Health Organization. 2018.
3. Gawande, A. Why doctors hate their computers. *The New Yorker Magazine*, 5 November 2018. Available at: www.newyorker.com/magazine/2018/11/12/why-doctors-hate-their-computers (accessed 23 June 2023).
4. Rao, S. K., Kimball, A. B., Lehrhoff, S. R. et al. The impact of administrative burden on academic physicians: results of a hospital-wide physician survey. *Acad. Med.* 2017;92: 237–43.
5. Freudenberger, H. J. Staff burn-out. *J. Soc. Issues.* 1974;30: 159–65.
6. The Lancet. Physician burnout: a global crisis. *Lancet.* 2019;394: 93.
7. Summers, R. F., Gorrindo, T., Hwang, S., Aggarwal, R., Guille, C. Well-being, burnout, and depression among North American psychiatrists: the state of our profession. *Am. J. Psychiatry.* 2020;177: 955–64.
8. Nuss, P., Tessier, C., Masson, M. et al. Factors associated with a higher score of burnout in a population of 860 French psychiatrists. *Front. Psychiatry.* 2020;11: 1.
9. Sarma, P. G. Burnout in Indian psychiatrists. *Indian J. Psychol. Med.* 2018;40: 156–60.
10. Perlo, J., Balik, B., Swenson, S. et al. IHI framework for improving joy in work. *IHI White Pap.* 2017;42: 8–21.
11. Summers, R. F. The elephant in the room: what burnout is and what it is not. *Am. J. Psychiatry.* 2020;177: 898–9.
12. Bhugra, D., Sauerteig, S. O., Bland, D. et al. A descriptive study of mental health and wellbeing of doctors and medical students in the UK. *Int. Rev. Psychiatry.* 2019;31: 563–8.
13. Shanafelt, T. D., West, C. P., Sinsky, C. et al. Changes in burnout and satisfaction with work-life integration in physicians and the general US working population between 2011 and 2017. *Mayo Clin. Proc.* 2019;94: 1681–94.
14. Locke, T. Medscape Global physicians' burnout and lifestyle comparisons. *Medscape.* 2019. Available at: www.medscape.com/slideshow/2019-global-

- burnout-comparison-6011180%233 (accessed 12 December 2020).
15. Shanafelt, T. D., Dyrbye, L. N., Sinsky, C. et al. Relationship between clerical burden and characteristics of the electronic environment with physician burnout and professional satisfaction. *Mayo Clin. Proc.* 2016;91: 836–48.
 16. Downing, N. L., Bates, D. W., Longhurst, C. A. Physician burnout in the electronic health record era: are we ignoring the real cause? *Ann. Intern. Med.* 2018;169(1): 50–1. <https://doi.org/7326/M18-0139>.
 17. NHS England. *The NHS Long Term Plan*. 2019. Available at: www.longtermplan.nhs.uk/ (accessed 23 June 2023).
 18. Greenhalgh, T., Wherton, J., Papoutsi, C. et al. Beyond adoption: a new framework for theorizing and evaluating nonadoption, abandonment, and challenges to the scale-up, spread, and sustainability of health and care technologies. *J. Med. Internet. Res.* 2017;19(11): e367.
 19. Health Education England. NHS Staff and Learners' Mental Wellbeing Commission. *Heal. Educ. Engl.* 2019; 1–96. Available at: www.hee.nhs.uk/our-work/mental-wellbeing-report (accessed 23 June 2023).
 20. Health Education England. The National Education and Training Survey. 2020. Available at: www.hee.nhs.uk/our-work/quality/national-education-training-survey (accessed 28 March 2021).
 21. World Health Organization. Electronic health records. 2016. Available at: www.who.int/gho/goe/electronic%5Fhealth%5Frecords/en/ (accessed 30 March 2021).
 22. Tawfik, D. S., Scheid, A., Profit, J. et al. Evidence relating health care provider burnout and quality of care a systematic review and meta-analysis. *Ann. Intern. Med.* 2019;171: 555–67.
 23. Lovell, M. Chief Clinical Information Officer discussion group. 2019.
 24. NHS Digital. NHS sickness absence rates August 2020. 2020. Available at: <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates/august-2020> (accessed: 23 March 2021).
 25. Bandelow, B., Michaelis, S. Epidemiology of anxiety disorders in the 21st century. *Dialogues Clin. Neurosci.* 2015;17: 327–35.
 26. Haidt, J., Twenge, J. Is there an increase in adolescent mood disorders, self-harm, and suicide since 2010 in the USA and UK? A review. 2021. Available at: <https://docs.google.com/document/d/1diMvsMeRphUH7E6D1d%5FJ7R6WbDdgnzFHDHPx9HXzR5o/edit> (accessed 22 March 2021).
 27. Haidt, J., Allen, N. Scrutinizing the effects of digital technology on mental health. *Nature.* 2020;578: 226–7.
 28. Przybylski, A. K., Murayama, K., Dehaan, C. R., Gladwell, V. Motivational, emotional, and behavioral correlates of fear of missing out. *Comput. Human Behav.* 2013;29: 1841–8.
 29. Dolan, P. *Happiness by Design: Finding Pleasure and Purpose in Everyday Life*. London: Penguin. 2014.
 30. Pilling, R., Wadsworth, D. Creating joy in work is the only way to save the NHS. *BMJ Opin.* 2018. Available at: <https://blogs.bmj.com/bmj/2018/10/12/creating-joy-in-work-is-the-only-way-to-save-the-nhs/> (accessed 21 December 2020).
 31. Civility Saves Lives. n.d. Available at: www.civilitysaveslives.com/ (accessed 28 March 2021).
 32. Granger, K. Hello My Name Is: a campaign for more compassionate care. *Hellomynameis.Org.Uk.* 2013. Available at: www.hellomynameis.org.uk/ (accessed 28 March 2021).
 33. B2U. Crossing the chasm in technology adoption life cycle. 2020. Available at: www.business-to-you.com/crossing-the-chasm-technology-adoption-life-cycle/ (accessed 23 March 2021).
 34. Hammond, R. 'If it's not going to matter in 5 years. . .' *Nursing Times*, 24 October 2017. Available at: www.nursingtimes.net/students/if-its-not-going-to-matter-in-5-years-24-10-2017/ (accessed: 23 March 2021).

35. Longhurst, C. A., Davis, T., Maneker, A. et al. Local investment in training drives electronic health record user satisfaction. *Appl. Clin. Inform.* 2019;10: 331–5.
36. Criado-Perez, C. *Invisible Women: Exposing Data Bias in a World Designed for Men*. London: Vintage Publishing. 2019.
37. RCPsych. *RCPsych Workforce Strategy 2020–2023*. 2020. Available at: www.rcpsych.ac.uk/docs/default-source/improving-care/workforce/rcpsych-workforce-strategic-plan-2020-2023.pdf (accessed 20 September 2020).
38. Sinsky, C. A. Willard-Grace, R., Schutzbank, A. M. et al. In search of joy in practice: a report of 23 high-functioning primary care practices. *Ann. Fam. Med.* 2013;11: 272–8.
39. Linzer, M., Sinsky, C. A., Poplau, S. et al. Joy in medical practice: clinician satisfaction in the healthy work place trial. *Health Aff.* 2017;36: 1808–14.
40. Global Digital Health Partnership. *Clinical Engagement in Digital Health: An International Overview of Enablers and Barriers*. 2019. Available at: <https://s3-ap-southeast-2.amazonaws.com/ehq-production-australia/53772b23aabfdac950fe9e0e217592030439c3b2/documents/attachments/000/102/275/original/GDHP%5FClinConEngage%5F2.06.pdf> (accessed 23 June 2023).
41. World Health Organization. *The Case for Investing in Public Health*. 2014. Available at <https://apps.who.int/iris/handle/10665/170471> (accessed 20 June 2023).
42. Khan, L., Parsonage, M., Stubbs, J. Investing in children’s mental health: a review of evidence on the costs and benefits of increased service provision. *Cent. Ment. Heal.* January 2015: 1–24. Available at: www.researchgate.net/publication/308084274_Investing_in_childrens_mental_health_a_review_of_evidence_on_the_costs_and_benefits_of_increased_service_provision (accessed 23 June 2023).
43. Thomas, T. Difficult journeys to digital maturity: why learning what not to do with a redprint could be your best route to successful transformation. In *Healthcare Efficiency Through Technology*. Expo 2021.
44. Bravata, D. M., Watts, S. A., Keefer, A. L. et al. Prevalence, predictors, and treatment of impostor syndrome: a systematic review. *J. Gen. Intern. Med.* 2020;35: 1252–75.
45. Foley, T., Woollard, J. *The Digital Future of Mental Healthcare and Its Workforce: A Report on a Mental Health Stakeholder Engagement to Inform the Topol Review*. 2019. Available at <https://topol.hee.nhs.uk/downloads/digital-future-of-mental-healthcare-report/> (accessed 23 June 2023).