



REDUCING URGENT CARE PRESSURES WITH DIGITAL HEALTH

How can digital health, across an integrated care system, prevent admissions in A&E?

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Introduction

The four-hour accident and emergency waiting time target is a pledge set out in the handbook to the NHS constitution. It's the target all NHS trusts strive for, as it is understood long waits can adversely affect patients in terms of longer inpatient stays, higher mortality rates, and an increase in the costs of care.¹

But funding restrictions across the NHS and social services, together with an increase in demand for services, has meant the standard has been missed every month since July 2015.² Faced with COVID-19 and flu, and on top of tackling the backlog caused by the pandemic and strep A, this winter has seen wait times lengthen further, with some hospitals in England experiencing more than half of their patients having to wait more than four hours.³

Faced with this challenge, the NHS is looking to identify what can be done differently. £250m has been invested and six national 'Discharge Frontrunners' will lead the way to explore new long-term initiatives to free up hospital beds, including the use of technology.⁴ Virtual wards are a great example of how technology has been introduced to speed discharge and treat patients in their own homes, with growing evidence that these are a safe and efficient alternative to hospital care.⁵

So where else can technology offer substantial benefit in terms of reducing pressure?

In this report we look at another of the five factors identified by the NHS Confederation to reimagine urgent and emergency care – preventable admissions; developing a system that deals with need earlier and so avoiding admissions.⁶

An area with significant opportunity as Steve Barclay states: "Up to 20% of hospital admissions are avoidable with the right care in place."

This report looks to identify:

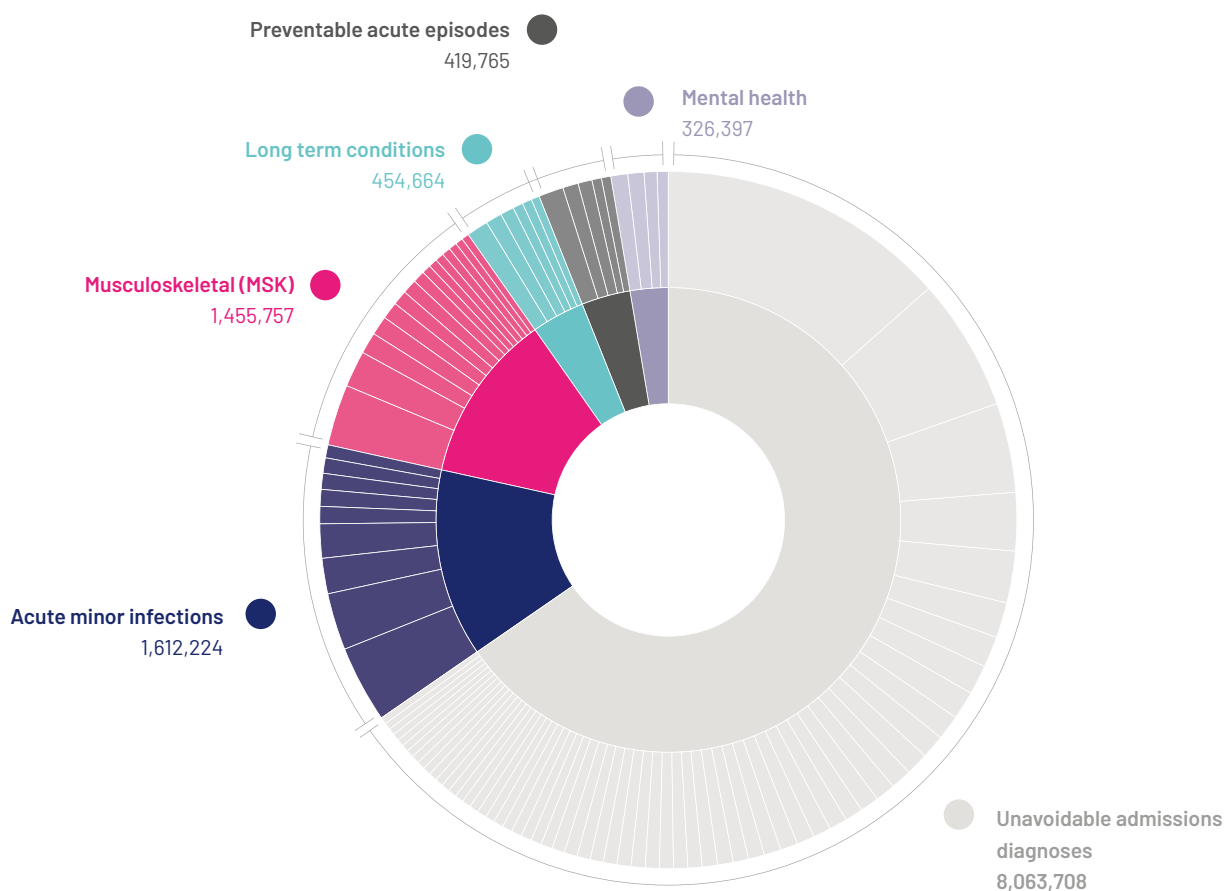
1. Which A&E attendances can be avoided with digital health?
2. What digital health tools exist for these conditions and are they safe?
3. How likely are people to use digital health and to what extent do health and care professionals recommend it now?
4. What does an admission avoidance pathway look like with digital health?
5. What best practice exists today?
6. What is the estimated impact in terms of admissions and cost savings?
7. What can health systems and commissioners do?

The following sections share the key findings, and our recommendations.

1. Which A&E attendances can be avoided with digital health?

To help identify the most relevant patient cohorts who could be prevented from attending A&E, we looked at the top 100 most common SNOMED-CT diagnoses for urgent and emergency care admissions in 2021-22.⁷ While many of these were unavoidable and unpredictable, such as wounds and fractures, others were grouped into areas where digital health can be used as a supporting measure to relieve pressure on these pathways.

Chart: The top 100 most common SNOMED-CT diagnoses for A&E admissions in 2021-22, highlighting five groups where digital health can offer support to reduce pressure.



This helps us identify five areas where digital health can make a real impact: acute minor infections, MSK, long-term conditions, preventable acute episodes, and mental health. (Appendix 1) Together these five condition area clusters represent 35% of diagnoses from the top 100 most common SNOMED-CT diagnoses for A&E attendance in 2021/22. Whilst digital health alone is not going to prevent most of these attendances, integrating it into wider pathways can make an impact and reduce some of the pressures on urgent care.

Bringing digital health support into patient pathways can help to support some patients before an urgent care visit becomes necessary, as well as helping to assess, diagnose, and treat patients during an urgent and emergency care visit. It can also provide wider support post-discharge, helping people to manage their conditions better at home.

2. What digital health tools exist for these conditions and are they safe?

Driven to change the lives of people, the world's health and care professionals, together with technology developers, have created over 350,000 digital health products.

But not all products have been created equally. At ORCHA, we assess products to identify whether they meet the standards needed across professional assurance, data security and usability. We do this so that health and care organisations can pinpoint the products that are clinically effective and will do no harm.


Across the five prevention area clusters, we have identified that whilst there are huge numbers of products, many of which are of poor quality, there are clinically effective products that will make a difference. In some of these areas, digital health may be able to prevent admissions to urgent and emergency care. In others, digital health may be able to provide wider support to a patient on a pathway – helping to improve their health, mitigate or better manage symptoms before or after their visit.

The below information highlights the market landscape across the five condition areas. We also highlight an example of a good health app with evidence that can provide some level of support for a condition in each area.


Musculoskeletal (MSK)

Approximately **89%** of apps on the market that can support in this area do not meet digital health standards.

Looking at a specific condition in this area, lower back pain, an example digital health product that can provide support is Pathway Through Pain:



Pathway Through Pain

Platform: Web-based 

Cost: Paid

Description: Pathway through Pain is the only clinically proven, chronic pain management digital therapeutic that delivers all the elements of an intensive Pain Management Programme (PMP).


OBR Score: 89% DTAC Approved

Research conducted with the chronic pain service of Buckinghamshire Healthcare NHS Trust measured the outcomes for chronic pain patients enrolled on the Pathway through Pain online course. The results indicated significantly improved outcomes for chronic pain patients, including a 24% reduction of daily problems for the patient, and a £240 cost saving per patient for the system.⁸



Long-term conditions

Approximately **89%** of apps on the market that can support in this area do not meet digital health standards.

Looking at a specific condition in this area, COPD, an example digital health product that can provide support is myCOPD, part of the mymhealth suite of products:



mymhealth

Platform: iOS  Android 

Cost: Paid

Description: Comprehensive education, rehabilitation, and self-management for long-term conditions, including Asthma, COPD, Diabetes and Heart Disease.


OBR Score: 88%

90% of patients with COPD are unable to use their inhalers correctly. MyCOPD has inhaler videos to help tackle this, and research shows that the odds of ≥ 1 critical inhaler error are 70% lower for those using myCOPD.⁸ Only 12.8% of people admitted to urgent and emergency care with COPD are getting access to pulmonary rehab due to staffing issues. myCOPD cuts re-admission rates by 50% and provides 100% access to pulmonary rehab - with no need for additional staffing.⁹



Mental health

Approximately **87%** of apps on the market that can support in this area do not meet digital health standards.

Looking at a specific condition in this area, depression, an example digital health product that can provide support is Wysa:



Wysa

Platform: iOS  Android 

Cost: In-App Purchases

Description: Wysa has an artificially intelligent chatbot, guides and exercises to improve sleep and support you with stress or depression.

OBR Score: 90%

Research found a significant reduction in PHQ-9 Depression Test Questionnaire scores in Wysa users. These findings support recent studies suggesting that a therapeutic relationship can be established between humans and conversational agents in the context of mental health.¹⁰

Preventable acute episodes

Approximately **85%** of apps on the market that can support in this area do not meet digital health standards.

Looking at a specific condition in this area, myocardial infarction (MI), an example digital health product that can provide support is Second Nature. It is important to note that in this example, as with all of the examples in this report, we are looking at one example evidence-backed product that could provide additional support either before admission, helping to keep someone healthier for longer, or post-admission, as just one part of a recovery plan. We do not intend for this point recommendation to support all potential causes of MI, such as hypertension, familial issues or cholesterol.

Research published in JMIR Diabetes showed that those using Second Nature lost 7kg over 6 months, maintaining a 6kg weight loss at 12 months.¹¹



Second Nature

Platform: iOS  Android 

Cost: In-App Purchases

Description: Second Nature is a digital programme designed to support long-term healthy habits and improve overall health.

OBR Score: 83%

Acute minor infections

Approximately **85%** of apps on the market that can support in this area do not meet digital health standards.

Looking at a specific condition in this area, acute respiratory infections, an example digital health product that can provide wider support on this pathway through remote patient monitoring is MIR Spirobank:



MIR Spirobank

Platform: iOS  Android 

Cost: Paid

Description: Ideal for remote patient monitoring, MIR Spirobank is a powerful app to perform spirometry and oximetry tests in real-time, directly on a smartphone.

OBR Score: 80%

While our research did not uncover any evidence to directly support digital health products that could help to prevent admissions for acute respiratory infections, digital technology can enable ongoing monitoring, for example in ARI virtual wards.¹² This would be most relevant for those who have COPD or ongoing lung conditions who may struggle with an acute respiratory infection, so it is a small patient cohort, but one where pressure on the system can be relieved with at-home monitoring.

3. How likely are people to use digital health and to what extent do health and care professionals recommend it now?

The appetite amongst the public for the NHS to recommend digital health, including health apps is also there. When asked, 62% of people believe in the benefit of digital health alleviating the burden on the NHS. Yet amongst the people who have used an app, around half (55%) today are recommended it by a health and care professional.¹³

So there appears to be a huge opportunity – people want to use digital health, and not everyone today receives a recommendation from their NHS service. But appetite and recommendations vary. In this section, we explore the opportunity gap for each condition.

It should be noted that these are approximations, applying average patient figures, not granular.

Musculoskeletal (MSK)

According to the National Institute for Health and Care Excellence, 3-4% of adults below 45 years of age have chronic low back pain, with this figure rising to 5-7% for those over the age of 45.¹⁴

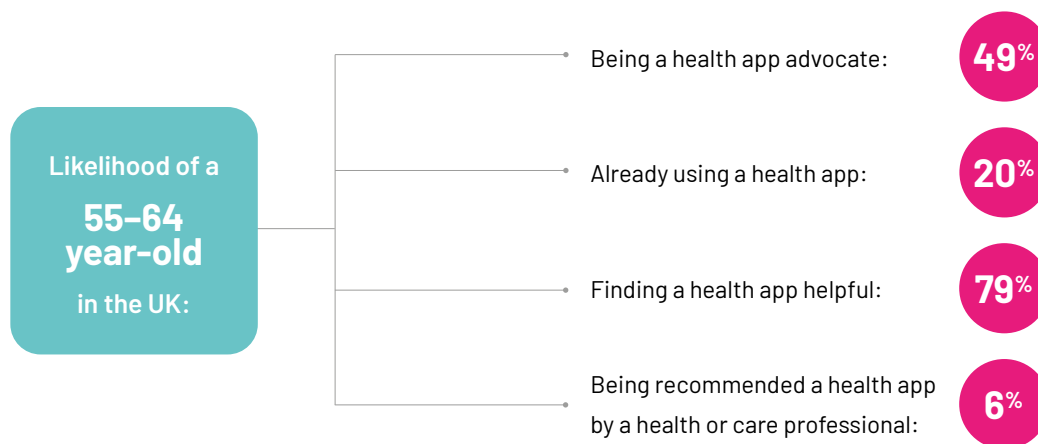
Taking the example of a 32-year-old female, research confirms a significant opportunity gap of 36% when looking at the numbers of people who are health app advocates compared to the number who have been recommended a health app by a health or care professional. When we apply this percentage to the total number of MSK-related admissions in our urgent care sample, this gives us an estimated figure of 524,073 more people that digital health could help in this cohort.



Long-term conditions

Asthma and COPD are the most common causes of admission to A&E from this group. COPD is usually diagnosed in individuals older than 60 years, and 80% of COPD patients have one or more comorbidity.¹⁵

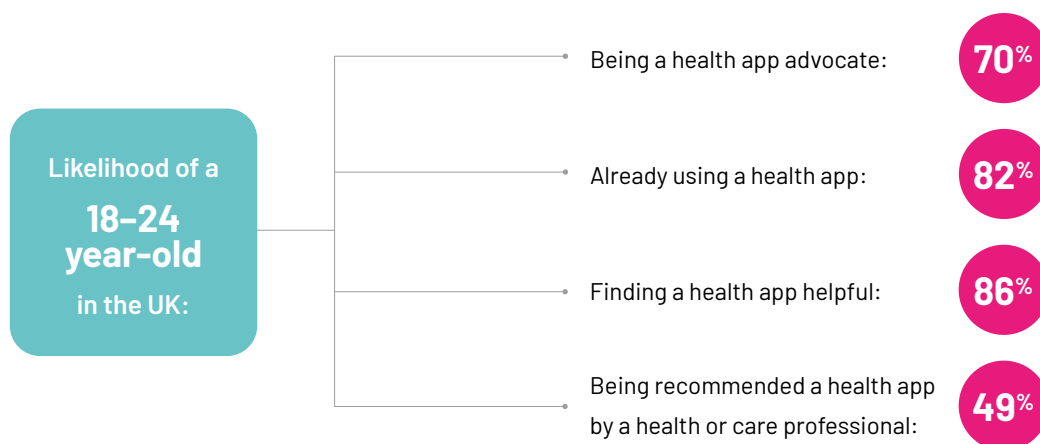
Taking the example of a 62-year-old male, we know from our research that they are very unlikely to be recommended an app, and so display an opportunity gap of 43%. When we apply this percentage to the total number of long-term condition-related admissions in our urgent care sample, this gives us an estimated figure of 195,506 more people that digital health could help in this cohort.



Mental health

Globally, it is estimated that 5% of adults suffer from depression, with more women affected than men.¹⁶

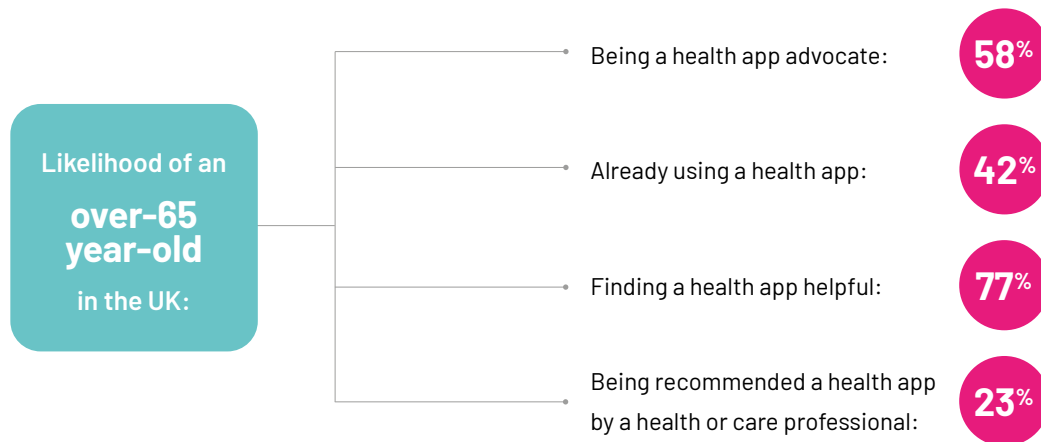
Taking the example of a 23-year-old female, we know from our research that they are amongst the highest advocates and recipients of recommendations for digital health, but there is still an opportunity gap of 21%, representing around 68,543 people that could benefit from a digital health recommendation.



Preventable acute episodes

The British Heart Foundation (BHF) states that in the UK as many as 100,000 hospital admissions each year are due to heart attacks; that's 260 admissions each day or 1 every 5 minutes.¹⁷ Statistics from the American Heart Association (AHA) state the average age of a person at the time of their first heart attack in the United States is 65.5 years for males and 72 years for females.¹⁸

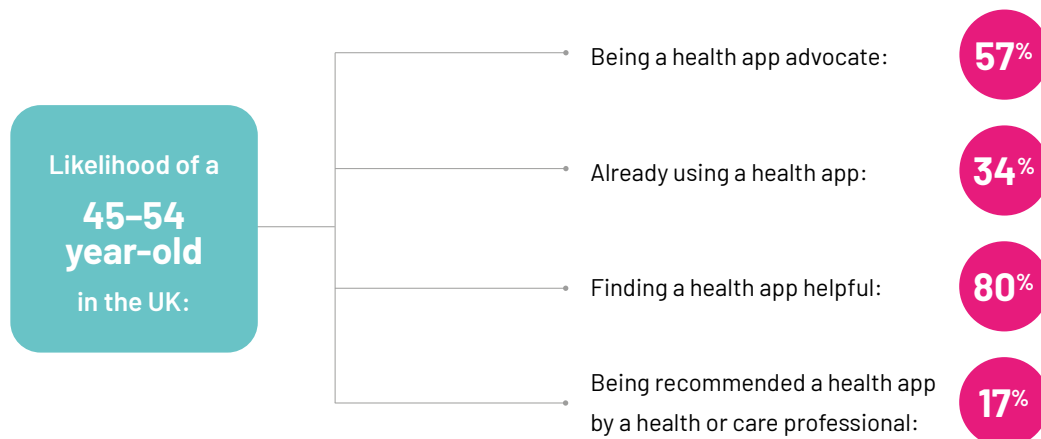
Taking the example of a 66-year-old male, we know from our research, again there is a 35% gap between their appetite to use digital health and the frequency of recommendation of a digital health product. As discussed, while digital health cannot prevent a heart attack from happening, there are opportunities to use digital health to support this patient cohort with lifestyle changes post-discharge. Applying the same approximation, this indicates that digital health can help a further 146,918 people.



Acute minor infections

The majority of the infections in this area are acute respiratory infections (ARIs), including COVID-19, which form a significant proportion of urgent care, general practice attendances and hospital admissions.¹²

Taking the example of a 48-year-old female, we know from our research that they are advocates of digital health, yet are not recommended it. The opportunity gap here is 40%, which when applied to the A&E data set estimates that a further 644,889 people could benefit from a digital health recommendation in this cohort.



4. What does an admission avoidance pathway look like with digital health?

For the five high-impact areas identified, we have reviewed either pathways or point incidences where digital health could have an impact by providing support to reduce pressures. To bring these to life, they are accompanied by illustrations based on research-led patient profile data.

For all of these areas, a whole-system approach is required, with action in primary and elective care that will have a positive downstream benefit on urgent care. Engagement with digital health at the point of an urgent care visit can then also help post-discharge to support patients and prevent readmissions.

ORCHA can advise on which digital health products can help at which points, not just for the pathways below but across the wider system. Please get in touch to learn how to integrate clinically evidenced technologies along these pathways.

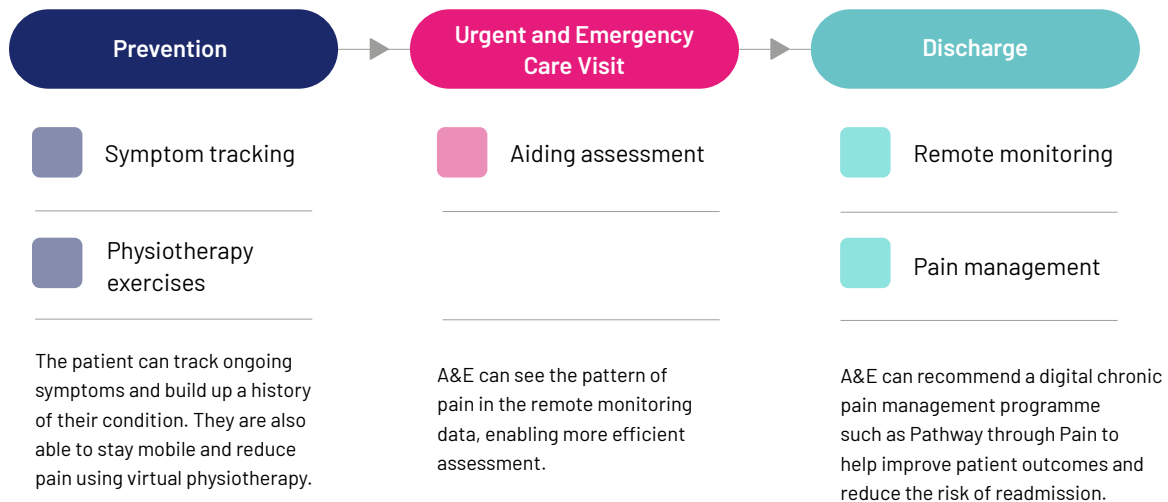
Long-term conditions



David, 68, male, a smoker, had a COPD flare-up with more coughing than usual. He made an appointment with his practice nurse, but the symptoms then escalated to a tight chest and coughing up green sputum. He called NHS111 and was advised to visit A&E. After being assessed in A&E, David is sent home with new rescue pack medication in case of another flare-up, and with a plan for what to do next time. He is also recommended the myCOPD app.

Impact of using a health app: David uses the myCOPD pulmonary rehab videos instead of travelling to an in-person session. He also uses the app to manage his medication and inhaler technique. The app helps to answer a lot of questions that he otherwise would have needed a face-to-face appointment to talk through. The COPD checklist helps him to reduce his risk of long-term complications, even helping to prevent flare-ups that could lead to another A&E visit.

Musculoskeletal (MSK)



Rebecca is a 32-year old woman who was in a minor car accident five years ago and suffers from long-term back pain. She has had on and off flare ups of back pain since her accident 5 years ago. She has low mood because she's had to give up playing netball, and frequently has to take time off work due to the pain. She takes co-codamol and naproxen for flares, but there is always background pain. She uses an app to keep on top of her physio exercises and monitor symptom severity and frequency. Using this continuous monitoring and management, Rebecca has avoided urgent and emergency care visits in the past as she has been able to manage her back pain with the app and over-the-counter medicines. When it gets worse, she usually goes to her pharmacist for advice, or her GP and gives a comprehensive description of what's been happening lately.

Rebecca has a flare that's worse than usual and her painkillers don't touch it. The pain means she finds it difficult to sleep, so she goes into A&E.

Impact of using a health app: Rebecca's history of using a health app has helped her to avoid preventable urgent and emergency care visits in the past. In this case where she has needed urgent care, her monitoring helps the A&E staff to better diagnose and treat her pain, and she is recommended a pain management app to help her post-discharge.

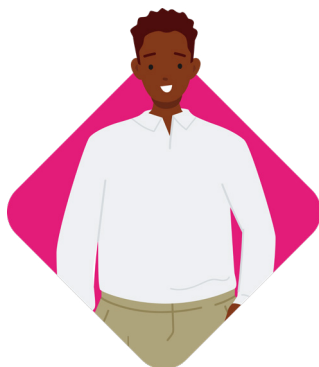
Mental Health



Clara, 23, female, suffered with minor mental health issues. She has been on an IAPT waiting list for 6 months and has recently had time off work due to depression. Her friend brings her in to A&E when she is having a mental health crisis.

Impact of using a health app: The community mental health team recommends Wysa to provide clinically validated AI as the first step of care, and human coaches if needed, to support Clara while she is on the IAPT waiting list.

Preventable acute episodes



Mo, a 56-year-old male, takes statins daily for high cholesterol and medicines to lower his blood pressure as he has a family history of heart disease. He is overweight with a diagnosis of type 2 diabetes and has an emergency glyceryl trinitrate (GTN) spray for pain in his chest, but the one in his pocket is expired. He did not sleep much last night as he was stressed and decides to run and try to catch a train. The caffeine, lack of sleep, stress and running brought on a sudden heart attack. Another passenger rings the emergency bell on the train and someone at the station calls an ambulance which arrives after 20 minutes.

Impact of using a health app: Having access to relevant health apps, Mo feels more supported throughout his recovery and making lifestyle changes to stay as healthy as he can moving forward.

Acute minor infections

Taking the example of acute respiratory infection discussed earlier in the report, this illustration looks at a single recommendation instance for remote patient monitoring.



Emily, 48, suffers badly with asthma and was recently diagnosed with an acute respiratory infection by her GP, who required her to continue monitoring her oxygen saturation as a precautionary measure. So that she could do this from home, her doctor recommended the use of MIR Spirobank.

Impact of using a health app: Using this tool meant that Emily could monitor her situation from home, only visiting her GP or urgent care if her situation worsened.

5. What best practice exists today?



Case study: Best For You



[Video: CW+ and ORCHA](#)



Best For You is a new initiative from leading NHS organisations that is transforming mental health services for children and young people. The project is led by CW+, the official charity of Chelsea and Westminster Hospital NHS Foundation Trust, and is a coalition of NHS organisations including Chelsea and Westminster Hospital NHS Foundation Trust, Central North West London NHS Foundation Trust, West London NHS Trust and Imperial College.

Best For You works across the existing services provided by the partners as well as the broader health and social care and third sector to introduce new innovative models and partnerships to provide support for as much of the largest health population in the country as possible. The service uses next-generation therapeutic interventions and digital tools to provide the best possible care for patients – including the use of digitally and clinically assured digital health solutions from their ORCHA digital app library.

This new integrated approach working across partners and the wider ecosystem is in response to the public health crisis surrounding children and young people's need for mental health support. A [survey](#) commissioned by NHS Digital found that the number of children and young people with clinically significant mental health conditions was 50% higher post-COVID-19 than the previous survey three years earlier. New [data](#) shows that referrals to child and adolescent mental health services in March 2021 were more than double those in March 2020. Best For You helps to tackle this issue through tailored, holistic care which seamlessly integrates mental health services, physical health service, community services and partnerships and digital tools.

Solution:

Best For You worked with ORCHA to develop a Digital Health Library designed to support children and young people struggling with their mental health, and their families and carers, to access safe, accredited health apps to support them.

The site includes thousands of assessed health apps, including around 300 mental health apps, which have been reviewed against 350+ criteria across clinical effectiveness, data security and accessibility. ORCHA's review process for health apps incorporates nationally recognised digital health standards and regulations, including an adapted version of the NICE Evidence Standards Framework.

By including compliant digital therapies in its care pathways through the ORCHA partnership, Best For You is addressing the rising levels of children and young people facing serious mental health difficulties, while safeguarding them from any harmful digital health solutions. The Best For You ORCHA Library can be accessed at bestforyou.orchaco.uk/, and is the UK's first dedicated App Library for children and young people in need of mental health support. The main Best For You digital platform can be viewed at bestforyou.org.uk/.

Results:

The Best For You Library launched in November 2021, and has already had almost 2,000 page sessions and over 2,300 searches for apps to help with mental health conditions such as anxiety, low mood, eating disorders and sleep.

“This is something that people were looking for. Having that trusted and validated one-stop-shop for digital health tools for young people is something that clearly service users and clinicians are starting to tap into.

From our perspective at CW+ and Chelsea and Westminster, working with ORCHA was really the only option to create the kind of App Library we wanted to deliver. Ultimately, this is about keeping people as people and stopping them from becoming patients in the first place.”

Chris Chaney, Chief Executive of CW+



6. What is the estimated impact in terms of admissions and cost savings?

Working with Dr Simon Leigh, Health Economist and researcher at Warwick University, we have conservatively calculated what introducing safe and effective digital health for long-term conditions – a fraction of the conditions included in our clusters – can achieve across the NHS.

These topics are only a sample of the A&E target group, the tip of the iceberg. The figures give a good indication of the scale of impact digital health can make.

This work pinpoints that digital health can reduce pressure on the NHS and prevent annual attendances in:



**General practice by
5.9M**



**Amulance journeys by
120,000**



**A&E by
600,000**



**Unplanned admissions by
127,000**

By removing these pressures, each year the NHS could gain 106,000 surgical procedures in secondary care and the avoided GP appointments are the equivalent of recruiting 590 more GPs – a good move towards the target 5,000 more needed.



These avoided attendances would save the NHS around £553M annually.

For more information on these headline calculations, please see Appendix 3.

7. What can health systems and commissioners do?

While digital health products are by no means a replacement for face-to-face care, they can offer a lot of support on areas of pressure in the system, freeing up resources for urgent and emergency care admissions that are unpredictable or truly unpreventable.

So how can health systems start to implement this support? The key barriers to implementing digital health are:

1. The first barrier is awareness; citizens, patients and health and care professionals aren't aware of what is available.
2. The second and biggest barrier is trust. People are unsure if a digital health technology is clinically safe or effective, is data secure or suitable to use. This fear is well founded, as our research has found that only 20% meet the quality criteria needed.
3. The third barrier is access. Health and care professionals have no source to find safe digital health technologies, or filter to choose the most suitable for a patient's specific needs; they also have no tools or training to confidently dispense the digital health technology.
4. This leads to the final barrier; managing governance and future risk. How can digital health technologies be safety recommended, reimbursed and recalled if a concern is found in the future? This is especially important, as digital health technologies update and change regularly, and potential litigation is a concern.

To overcome these barriers, we need to establish quality assurance procedures long followed by other areas of medical practice and implement a consistent system to manage and distribute digital health.



Build a digital health core infrastructure for the whole system

How can you make digital health work in primary and secondary care to reduce pressures on urgent and emergency care?

We're here to help health and care systems to introduce digital health safely.

We can work with you to build a core digital health infrastructure to reduce pressures on your priority areas, such as urgent and emergency care.

For example, this could include:

- A Digital Health Formulary
- Digital health insights and guidance
- An implementation plan to pinpoint the best products to reduce system pressures

If you would like to learn more about any of our core digital health products, or work with us to build an estimated return on investment plan, please get in touch at hello@orchahealth.com.



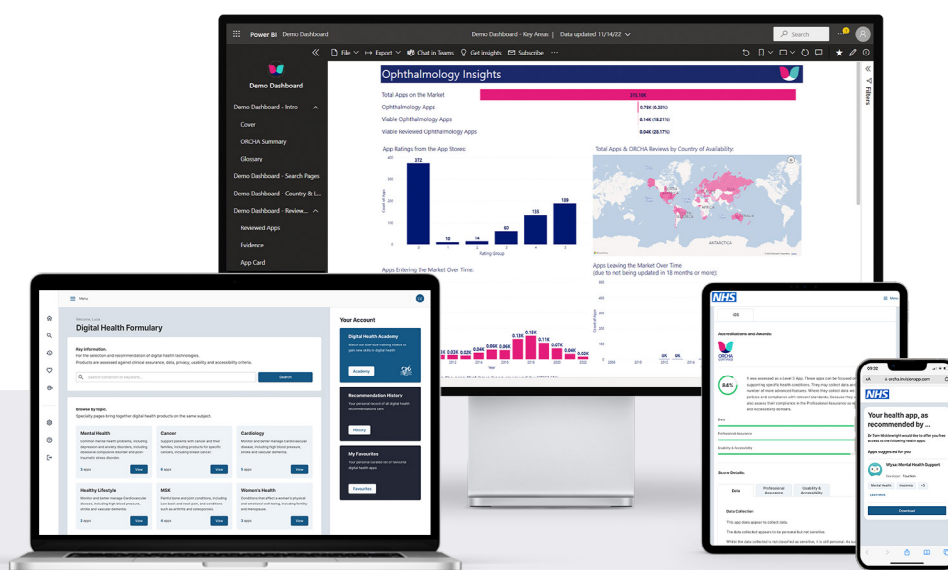
Our cloud-based digital health assessment platform allows assessment teams to conduct accurate reviews of digital health technologies at scale and at pace.



ORCHA activate provides you with infrastructure to enable awareness, distribution and activation tools so you can search for, find, recommend and govern digital health in a coordinated safe way.



ORCHA continuously scan the digital health technology market on a global basis and hold the world's largest live database of compliance data to produce unique insight reports or dashboards.



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19. Reducing Urgent Care Pressures with Digital Health in the UK

Appendices

Appendix 1: How were the five preventable condition areas identified?

Data was taken from the NHS' published Hospital Accident & Emergency Activity 2020-21.⁷ The specific dataset used is Table 24 from the Hospital Accident and Emergency Activity, 2020-21; Tables document.

We reviewed the top 100 SNOMED-CT Descriptions for admissions to A&E in this data set. We then selected conditions from the top 100 where we believed digital health could help to either prevent A&E attendance, support assessment, diagnosis and treatment during A&E attendance, or support recovery post-A&E attendance. These conditions were then grouped into five clusters, MSK, Acute Minor Infections, Long Term Conditions, Preventable Acute Episodes, and Mental Health.

SNOMED-CT Descriptions contributing to each cluster:

Acute minor infection cluster: 1,612,224 total diagnoses

- Upper respiratory infection (disorder)
- Urinary tract infectious disease (disorder)
- Infectious gastroenteritis (disorder)
- Tonsillitis (disorder)
- Viral wheeze (disorder)
- Coronavirus disease 19 caused by severe acute respiratory syndrome coronavirus 2 (disorder)
- Bronchiolitis (disorder)
- Otitis media (disorder)
- Croup (disorder)

MSK cluster: 1,455,757 total diagnoses

- Sprain of ankle (disorder)
- Sprain of knee (disorder)
- Sprain of wrist (disorder)
- Sprain of foot (disorder)
- Superficial injury of foot (disorder)
- Superficial injury of knee (disorder)

- Sprain of shoulder (disorder)
- Sciatica (disorder)
- Injury of muscle of lower back (disorder)
- Lumbar sprain (disorder)
- Sprain of ligament of finger (disorder)
- Superficial injury of ankle (disorder)
- Neck sprain (disorder)
- Strain of neck muscle (disorder)
- Osteoarthritis (disorder)

Long-term condition cluster: 454,664 total diagnoses

- Asthma (disorder)
- Chronic obstructive lung disease (disorder)
- Migraine (disorder)
- Hypertensive disorder, systemic arterial (disorder)
- Congestive heart failure (disorder)
- Stable angina (disorder)

Preventable acute episodes cluster: 419,765 total diagnoses

- Acute coronary syndrome (disorder)
- Cerebrovascular accident (disorder)
- Atrial fibrillation (disorder)
- Transient ischemic attack (disorder)
- Social problem (finding)

Mental health cluster: 326,397 total diagnoses

- Anxiety disorder (disorder)
- Depressive disorder (disorder)
- Alcohol intoxication (disorder)
- Acetaminophen overdose (disorder)

Total diagnoses from all top 100 SNOMED-CT Descriptions for admissions to A&E: 12,332,515

Unavoidable admissions diagnoses: 8,063,708

Preventable admissions diagnoses: 4,268,807

Percentage of admissions that are preventable: 35%

Appendix 2: Health App marketplace data workings for each cluster

Product quality in each area: ORCHA-assessed products

To give an approximation of digital health product quality in each area, we mapped the clusters in Appendix 1 to ORCHA library categories where possible.

MSK and Mental Health were mapped directly on to ORCHA library parent categories.

Musculoskeletal:

137 assessed against OBR V6, 65 have passed

Mental Health:

807 assessed against OBR V6, 430 have passed

For the conditions assigned to each of the remaining, outstanding 3 clusters and which we were able to map to our ORCHA categories, please see below:

Preventable acute episodes:

- Atrial fibrillation - reviewed: 11 / passed: 3
- Transient ischemic attack - reviewed: 74 / passed: 50

Long term condition cluster:

- Asthma - reviewed: 59 / passed: 32
- Chronic obstructive lung disease - reviewed: 39 / passed: 21
- Migraine - reviewed: 22 / passed: 3
- Hypertensive disorder, systemic arterial - reviewed: 40 / passed: 16
- Stable angina - reviewed: 6 / passed: 4

Acute minor infection cluster:

- Infectious gastroenteritis - reviewed: 10 / passed: 2
- Coronavirus disease 19 caused by severe acute respiratory syndrome coronavirus 2 - reviewed: 87 / passed: 59
- Croup - reviewed: 0 / passed: 0

So, in total:

- Preventable acute episodes - assessed against OBR V6: 85 / passed: 53
- Long term condition cluster - assessed against OBR V6: 166 / passed: 76
- Acute minor infection cluster - assessed against OBR V6: 97 / passed: 61

Product quality in each area: total marketplace calculation

Approximately 76% of apps on marketplaces are out of date. These apps fall into the category of not meeting standards, and ORCHA does not assess apps that are out of date for this reason.

To estimate the total percentage of apps that do not meet standards for each condition area, we assumed that the 76% of apps not meeting standards figure is valid when applied to each segment.

The percentages of apps not meeting standards on the market was calculated as:

$(24\% \text{ of the marketplace that is up to date}) \times (\text{X\% of a given segment that we have reviewed do not meet standards}) = \text{Y\%}$. This represents the apps we have assessed that don't meet standards, as a percentage of the overall market.

$\text{Y\%} + 76\% = \text{Estimated total percentage of the market that does not meet standards for this given segment.}$

Appendix 3: The Activation Blueprint

Time and cost-saving calculations have been conducted in our Activation Blueprint. For information on how this has been calculated, or to discuss similar calculations for your area, please email:

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