

PhysioNow[®] in Wales: Evaluation summary

Improving patient access to
much needed care and advice

Innovative digital care project with Welsh Government and NHS Wales Covid-19 Digital Solutions Fund

The Digital Solutions Fund was created as a call to action for new and innovative ways to use digital technology in response to coronavirus and beyond, coordinated by Digital Health Ecosystem Wales, a collaboration between Life Sciences Hub Wales and the NHS Wales Informatics Service (NWIS).

In a move to help support the 887,000 people in Wales (which represents a third of the population) who suffer with musculoskeletal (MSK) conditions such as arthritis and back pain, the Life Sciences Hub Wales and the Welsh Government selected Connect Health to roll-out PhysioNow[®]. This digital triage and support tool was the only MSK technology selected and the feedback following implementation was extremely positive.

The project supported over 1000 patients from August to December 2020. Every Health Board within Wales were approached and almost all indicated a willingness to become involved, resulting in Cwm Taf Morgannwg and Hywel Dda Health Boards being selected to take part in the project. Connect Health, worked alongside partners EQL and PhysioSpace Cardiff, to rapidly provide the PhysioNow[®] technology within NHS environments, with a potential for scaling up across Wales.

Project outcomes summary

- **1/3 of patients** (34%) completed PhysioNow[®] outside 'core' office hours (figure 5)
- **24%** of which had an 'urgent' outcome - it is not inconceivable that they would have sought other forms of emergency help e.g., presented to A&E.
- **81%** positive FFT score (figure 1)
- **Age not a barrier** - More people 65+ used it compared to those aged 18-30 (figure 4)
- **75%** of patients felt it was easy to describe their symptoms using PhysioNow[®] (figure 6)
- **85%** overall satisfaction rates for ease of use (figure 6)
- **69%** felt they received faster access to physio by having PhysioNow[®] in place



The Challenges

Covid-19 has further impacted waiting lists. There have been delays to treatment and an increase in sedentary lifestyles which further impacts health and wellbeing, creating a significant accumulation of demand for MSK physiotherapy care. By delivering and implementing tools such as PhysioNow, there is a significant opportunity to help and support colleagues in general practice and secondary care, to the betterment of patients.

Growing waiting lists	Concerns for patient safety
Pressure on NHS workforce	Mental wellbeing of patients and clinical teams

The Solution

PhysioNow is a clinically led chat-bot providing an agile and remote triage and support tool for musculoskeletal conditions. It is tried and tested and in use across many of Connect Health's MSK services across the UK. Clinically developed and constantly reviewed sophisticated algorithms guide users to the appropriate pathway, enabling the right care, at the right time, from the right person.

PhysioNow is constantly reviewed making it a safe, reliable and proven solution

Compared with other digital health solutions on the market which may only contain up to 10 questions, this tool has been clinically developed to adapt to 3000+ scenarios. Thousands of clinical hours have been invested into developing PhysioNow. It has been rigorously tested by patients with senior clinical input, making it one of the most advanced and comprehensive tools in the field of MSK physiotherapy.

Users can remotely access an initial assessment 24/7 in multiple languages from anywhere – a positive step for many patients who may be apprehensive about accessing face-to-face services due to Covid-19.

PhysioNow is accessible in multiple languages including Welsh



Results – Patient outcomes

PhysioNow matters to people and clearly works

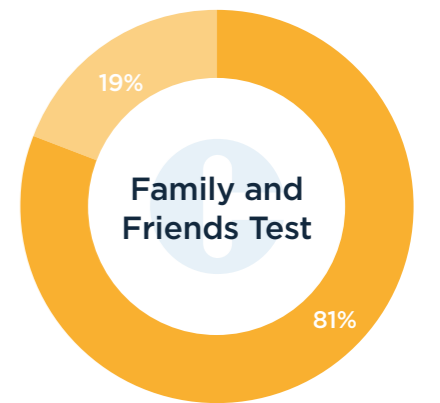
81% positive Friends and Family Test (FFT) score

81% of respondents would recommend PhysioNow to their friends and family. Prior to the project, collection of patient-reported experience measures (PREMS) had been sporadic. Now 100% of patients who completed a PhysioNow consultation received an automatic anonymised questionnaire resulting in 225 patients responding (22%), comparing favourably with typical anonymised survey response rates in healthcare.

Link to Welsh Government policy

By providing all patients with the opportunity to voice their opinions and to assess quality of care aligns with 'A Healthier Wales' which states 'services must get better at measuring what really matters to people'.

Figure 1



Family and Friends would recommend

Patient outcomes – 66% required routine care, 2% urgent care

Figure 2 shows the outcomes generated by PhysioNow based on 1029 completed consultations.

- 66% required a 'routine' physio appointment.
- 2% required urgent medical care, such as cancer, spinal cord compression, acute joint infection and CES (cauda equina syndrome).

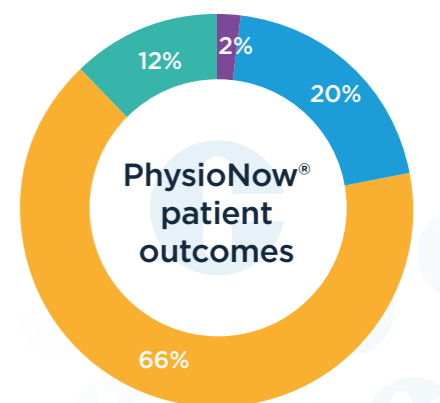
Clinical validation of PhysioNow during the pilot showed 99.9% agreement and accuracy.

20% required urgent physio

PhysioNow prioritises patients, so patients most in need due to severe pain or more complicated presentations, can be easily identified and, within Connect Health services, speak to a physiotherapist in <48 hours. In Wales, urgent patients are seen within 2 weeks and routine within 14 weeks.

By having rapid access to assessment, patient care is not delayed by lengthy waiting lists and patients receive access to the emergency care they need at the necessary time.

Figure 2: PhysioNow outcomes for completed pilot patients



Urgent /111 Urgent physio
Routine physio Self-management

Potential health economy benefits

Health economy benefits

Cost savings and improved capacity management within the Health economy as a direct result of patient self-referral

Cost savings - £1m+ savings pa if PhysioNow® was implemented across Wales

Due to the short term nature of the pilot we were unable to recognise the full benefits of PhysioNow but the potential benefits are described below.

The introduction of PhysioNow® into a small sized Health Board with relatively modest physiotherapy activity has the potential to create efficiency and productivity improvements of **over £300,000 per annum**. If implemented across Wales, the benefit would reach well over £1 million per year.

This is based on significant financial benefits associated with more patients self-referring as opposed to being referred by other healthcare professionals. The average GP appointment 'costs' the health system £30.

59% of patients did not need to see a health professional

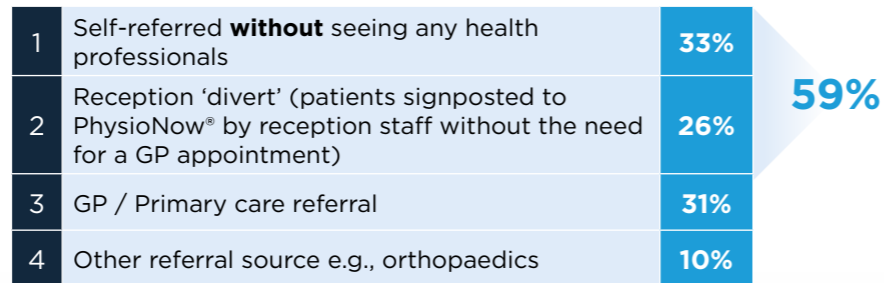
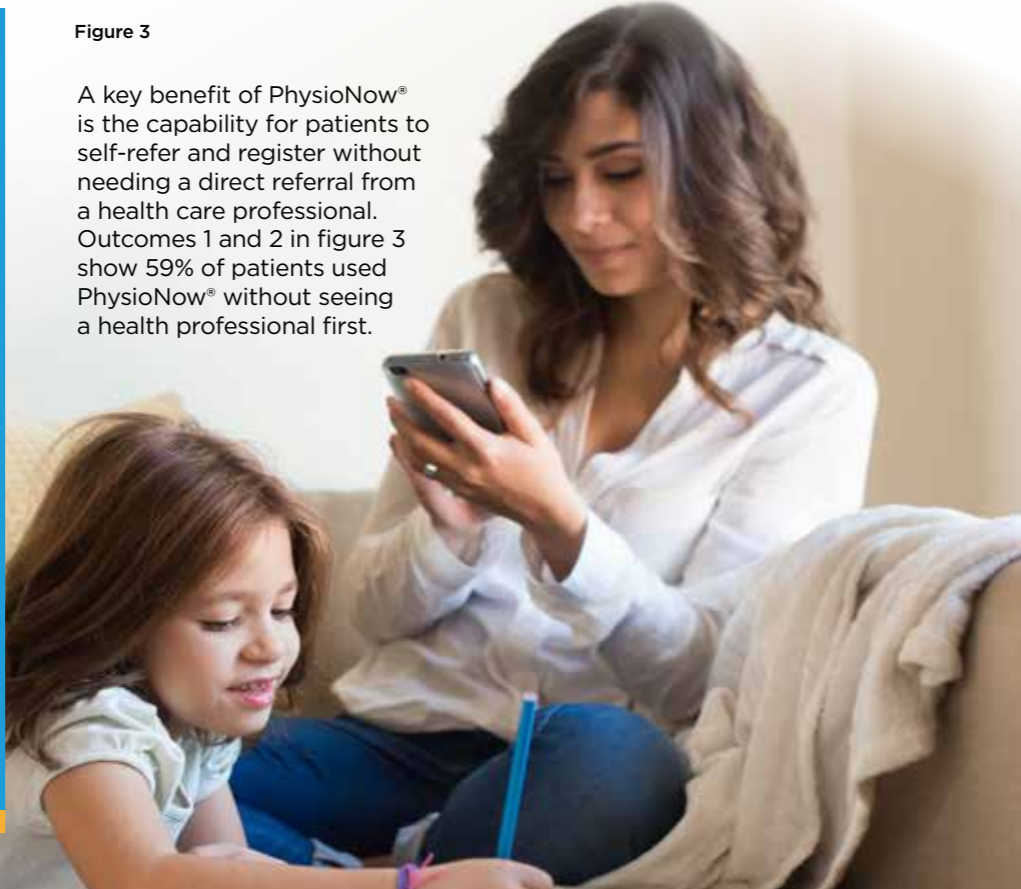


Figure 3

A key benefit of PhysioNow® is the capability for patients to self-refer and register without needing a direct referral from a health care professional. Outcomes 1 and 2 in figure 3 show 59% of patients used PhysioNow® without seeing a health professional first.



Rapid access to care 24/7

PhysioNow® provides 24/7 access to not only self-referral but more importantly assessment and outcome. Some services provide the former and although very beneficial to allow self-referral, it is the **ability to produce a full assessment and outcome that sets PhysioNow® apart**.

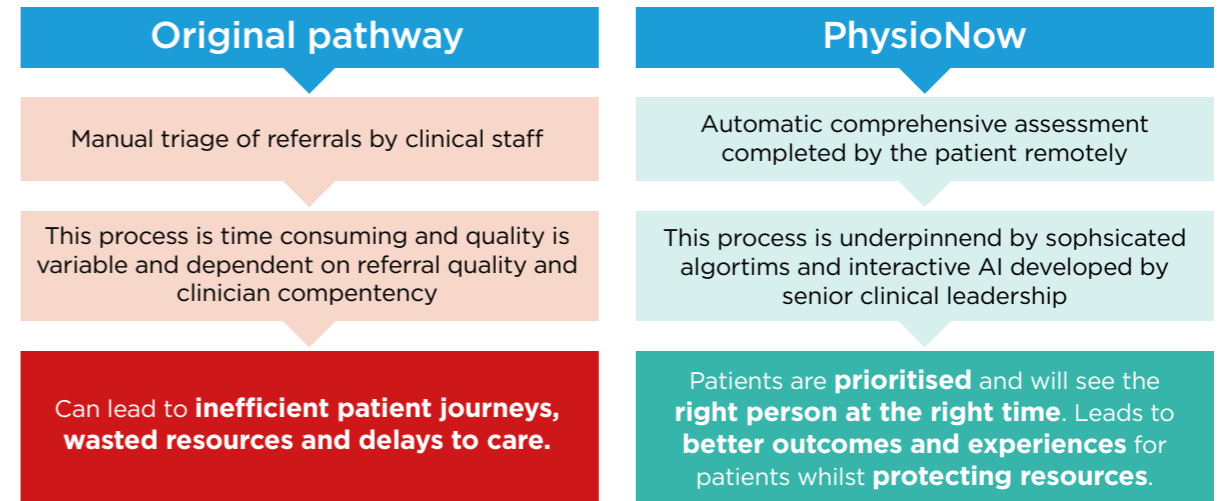
This capability allows PhysioNow® to **stratify patients instantly** upon completion of their consultation. This will filter out these emergency patients and signpost them to the medical services they need. This ensures a **patient's next management step is determined by their clinical need rather than the date** they were referred.

Right person, right care

Saving time, improving capacity

MSK physiotherapy services demand and capacity savings

The introduction of PhysioNow® has the potential to enhance and streamline pathways for patients by helping them see the right person at the right time.



The benefits of streamlined pathways are numerous, and some are outlined in the table:

Benefit	How benefit could be realised
Increased capacity in departments, clinically and administratively	<ul style="list-style-type: none"> Reduction in waiting times for patients. Increased capacity to review patients quicker / more often. Admin staff could focus on other tasks.
Increased time for staff training	<ul style="list-style-type: none"> The more evidence-based and better skilled staff are, the more patients will benefit, leading to better patient outcomes. Reduced error rates for clinical and admin staff.
Recruitment (increased time created would not need to be replaced)	<ul style="list-style-type: none"> There would not be the same pressure to fill vacancies. This would be especially beneficial in geographical areas / Health Boards where this is a constant struggle.
Service development / extension	<ul style="list-style-type: none"> Time created could be used to develop other sections of a service such as CMATS services, Women's Health, Pain etc.

All of which would **improve patient experience and quality whilst simultaneously improving capacity within departments.**

Shifting services out of hospital to communities

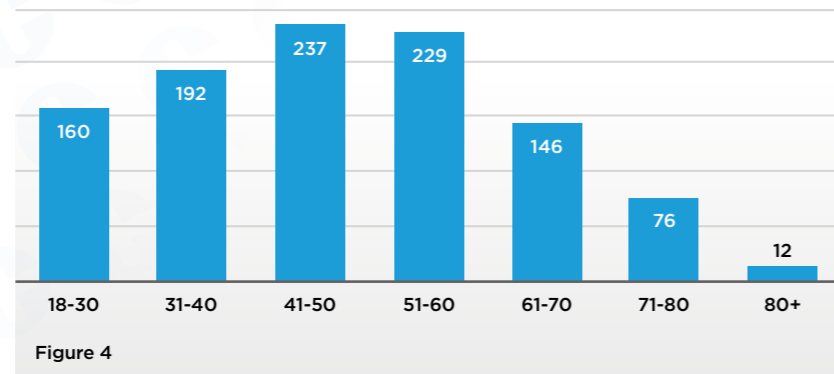
Through the above and by utilising PhysioNow®, services will have the opportunity to meet the aims of 'A Healthier Wales'. The Welsh Government indicate they 'want to shift services out of hospital to communities, and we want more services which stop people getting ill by detecting things earlier or preventing them altogether'. PhysioNow® can help meet these aims and objectives.

Access for all

Age no barrier to digital

More people aged 65+ completed PhysioNow[®] compared to those aged 18-30. Active patient involvement and engagement were fundamental aspects in the development of PhysioNow[®].

Age of patients completing PhysioNow



1 in 3 patients completed PhysioNow outside working hours

24% of these patients needed urgent support

24/7 care available every day of the year

34% of patients completed PhysioNow[®] outside 09:00-17:00 including weekends and Bank holidays when typically MSK physiotherapy appointments are unavailable.

This ability to provide around the clock assessment and guidance to patients has numerous benefits:

- No need to sacrifice work or family time to attend appointments
- Patients benefit from a safety perspective as well as convenience.

Figure 5



Ease of use

PhysioNow[®] clearly provides a platform that patients feel comfortable using to describe their symptoms.

Patient feedback

“It’s brilliant as it’s easy to answer and how to point out where the pain is coming from.”

“I was impressed by the thoroughness of my initial assessment. I felt that someone with knowledge and skills was listening to me.”

“For me it was very positive and helpful. Worth considering as a long term help to ease the pressure in the service.”

Multiple benefits for patients

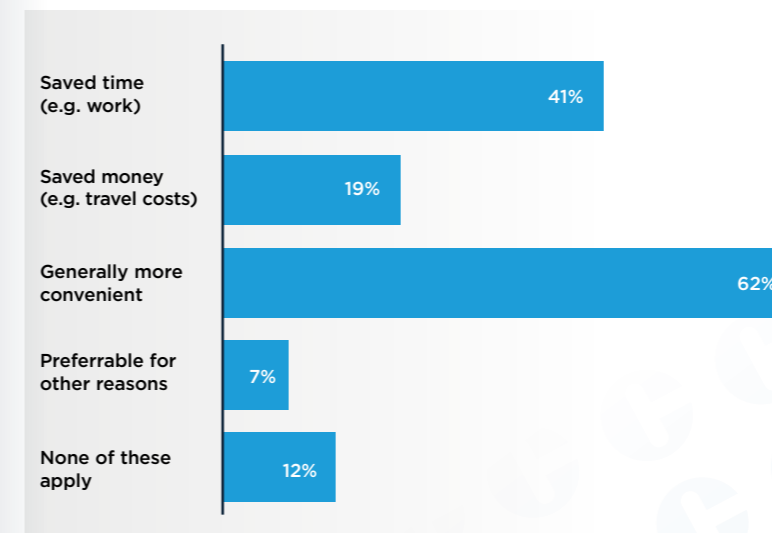


Figure 7 Graph showing some benefits patients attributed to using PhysioNow[®].

75% of patients felt it was easy to articulate their symptoms using PhysioNow

85% felt PhysioNow was easy to use overall

Figure 6

Covid safety

Wales has been continually battling the pandemic and like every country has struggled to cope with the pressures. PhysioNow[®] has provided support in a number of ways.

- Assessments can be completed remotely, without the need to attend an appointment face-to-face.
- PhysioNow[®] has freed up GP capacity. The ability of patients to self-refer for a complete MSK assessment enabled GP appointments to be better utilised.
- Some patients will be reluctant to seek care. PhysioNow[®] has maintained access to services.

“I had to put off going to see my GP so this was an excellent prompt to investigate my pain.”

“I thoroughly applaud your work, very well done. Even if and/or when Covid is no longer an issue this is definitely the way for the future in terms of triage and audio/visual.”

Future developments of PhysioNow®

PhysioNow® is constantly evolving and the ‘self-management’ outcome is one such area Connect Health will be developing extensively in early 2021. This will empower patients to manage their conditions without the need to directly interact with services where appropriate. A comprehensive suite of resources will be provided to guide patients on the road to recovery and be monitored every step of the way.

The technology underpinning PhysioNow® is constantly evolving and a move to a more interventional chatbot experience will be made available. This will enhance the patient experience whilst ensuring PhysioNow® remains at the cutting edge of digital technology.

This evaluation is the result of a partnership between Wales Government, Life Sciences Wales and Connect Health with support from PhysioSpace Cardiff and EQL

- i <https://www.versusarthritis.org/media/14594/state-of-musculoskeletal-health-2019.pdf>
- ii <https://gov.wales/healthier-wales-long-term-plan-health-and-social-care>
- iii <https://www.england.nhs.uk/2019/01/missed-gp-appointments-costing-nhs-millions/>

Feedback from partners

“PhysioNow is a great example of how we can enable patients to access services from a device when and where they wish to. Covid-19 has pushed us all to think differently, and this project has demonstrated the level of impact that can be achieved in a short timeframe.”

Abi Phillips, Head of Innovation – Economy Skills & Natural Resources Group, Welsh Government

“PhysioNow® is bringing benefits to our team of physiotherapists, providing important information about a patient’s condition before they even set foot in the clinic and helping us to streamline our services and treat those patients most in need.”

Zoe Brewster, Assistant Head of Physiotherapy, Cwm Taf Morgannwg Health Board

“At Connect Health we strive to be at the forefront of innovation and have been very active in the use of digital health to support people during these challenging times. PhysioNow® puts patients in the driving seat, empowering them with tools to take ownership of their health.”

Prof Andrew Walton, Group Executive Director, Connect Health