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# MHPP Evaluation

## e-Advice: Final Report of Findings

Ipsos & National Centre for Sport & Exercise Medicine



# Contents

<b>1</b>	<b>Introduction &amp; Methodology</b>	<b>3</b>
1.1	Overview of the e-Advice intervention	3
1.2	Evaluation objectives	3
1.3	Evaluation methods	4
1.4	Purpose of this report	4
<b>2</b>	<b>Process learnings</b>	<b>5</b>
2.1	The design process	5
2.2	The pilot	6
<b>3</b>	<b>Outcomes</b>	<b>8</b>
3.1	Use of the digital resource	8
3.2	Impact of the digital resource	8
<b>4</b>	<b>Next steps</b>	<b>10</b>
<b>5</b>	<b>Conclusions</b>	<b>12</b>
<b>6</b>	<b>Appendix</b>	<b>13</b>
	e-Advice evaluation logic model	13
	Original evaluation questions	14
	Our standards and accreditations	19

# 1 Introduction & Methodology

## 1.1 Overview of the e-Advice intervention

As part of the Moving Healthcare Professionals Programme (MHPP), Public Health England (now the Office for Health Improvement and Disparities, OHID), alongside Sport England, developed a digital resource to support the delivery of brief advice for physical activity in primary care. The acceptability of the resource was subsequently piloted in one GP practice. The workstream was overseen by the Behavioural Insights (BI) team at OHID.

In Phase One of MHPP, a paper-based clinical advice pad, similar to a prescription, was developed. The aim of this was to increase the likelihood of clinicians advocating physical activity to their patients by providing a prescription template for written guidance to patients. This was subsequently piloted across nine local partnerships for feasibility and acceptability with primary care healthcare professionals (HCPs). The evaluation findings, combined with policy and evidence developments, resulted in the identification of a need for an electronic version of the resource.

Thus the original aim of this MHPP workstream in Phase Two was to develop a resource that will increase the capability of HCPs to deliver high quality brief advice to their patients on the importance of moving more, increasing the quality of these consultations, and the likelihood that the patient will then change their behaviour. This was to involve the development of a digital resource, embedded within existing software for GPs and other HCPs working within primary care to use in their daily practice.

## 1.2 Evaluation objectives

Ipsos and the National Centre for Sport and Exercise Medicine were commissioned to undertake an evaluation of Phase Two of MHPP in 2019. The e-Advice intervention is one of several workstreams within MHPP. The objectives for the evaluation are to:

- **Understand the processes** behind effective delivery. This includes success factors, barriers and learnings, alongside what is required to support scale, spread and sustainability of individual workstreams and the programme overall.
- **Assess the impact** of the programme and its constituent workstreams, overall and on specific outcomes including increasing the capability, opportunity and motivation for HCPs to integrate physical activity as a routine part of clinical care for the prevention and management of long-term conditions. Where possible, measure the effectiveness in increasing patient physical activity levels, reducing sedentary behaviour, and improving health and well-being outcomes.
- **Enable continuous learning and improvement** to inform ongoing delivery and decision-making, including implementing the programme and workstreams effectively at scale.

The pilot of the digital resource was smaller than originally anticipated and thus the evaluation evidence available to answer the above objectives is limited. Instead, the evaluation has focused on issues of acceptability, feasibility, usefulness, perceived impact and scalability.

The logic model and intended evaluation questions (as articulated in the original evaluation plan) are appended to this report.

### 1.3 Evaluation methods

The following evaluation activities were completed:

- Two interviews with representatives of the BI team at OHID were interviewed.
- The lead GP from the one pilot practice was interviewed.

Two nurses with experience of using the digital resource were invited to participate in in-depth interviews as part of the evaluation, though were unresponsive to this invitation. No monitoring data on the use of the digital resource were made available to the evaluation team – it is likely this data was not captured due to the low number of patients the resource was used with.

The evaluation interviews took place in May 2022. They took place by MS Teams and were on average 60 minutes in length. The evaluation received ethical approval from Loughborough University's ethics board.

### 1.4 Purpose of this report

This report concludes the evaluation activities for the e-Advice workstream. It provides reflections from a small number of participants on the acceptability, feasibility, usefulness, perceived impact and scalability of the digital resource.

This report has been co-developed by Ipsos and the National Centre for Sport and Exercise Medicine based on independent evaluation evidence. It has been reviewed by OHID with clarity added where required.

## 2 Process learnings

This chapter examines the processes behind the design and delivery of the digital resource; looking at its conception, evolution and piloting.

### 2.1 The design process

In order to fulfil the original aims of this workstream, OHID's BI team followed the design principles as set out by the Government Digital Service (GDS). This involved a Discovery phase of further research and consultation, with the intention being to progress to the testing of different propositions in the Alpha phase.

During the Discovery phase, the BI team undertook an extensive desk-based evidence review, and conducted field research with HCPs to understand the barriers and enablers to giving brief advice on physical activity, and assess users' needs from a tool to support such conversations. From the Discovery phase, the BI team concluded there was a clear need for a digital tool to support the delivery of brief advice on physical activity.

It was theorised that by providing HCPs with a structured intervention and support material, the digital resource should make it easier for HCPs to have conversations about physical activity with their patients, thus increasing the number and quality of these conversations taking place.

***“It was important for this stream to develop something which would be digital. Because the initial findings and insight, and also some of the evidence base, was that it would actually really help [to help conversations with patients about physical activity] to have a resource that would be integrated with GP software... the aim was to try to translate this physical copy into GP software.”***

*BI representative*

It was hoped the project would then progress to the Alpha phase which would allow for the testing of different solutions to the issues identified in the Discovery phase. However, it was at this point that logistical challenges relating to implementation, particularly concerning timeframes and financial resources, prohibited progression. The main barriers were as follows:

- The BI team were informed that – exacerbated because of the Covid-19 pandemic – any amendments or additions to GP software systems (such as EMIS and SystemOne) would take a minimum of a year to 18 months, which far exceeded the time available for the workstream.

***“We had a meeting with people from procurement at PHE, and they said the waiting list to even find out or do any tool within healthcare systems was about a year wait because of Covid.”***

*BI representative*

- Piloting a digital intervention in multiple GP software systems (as was required given the IT infrastructure in primary care) was prohibitively costly for the available budget.

***“It became very clear that trying to engage those external suppliers who are delivering software for the GP practices, requires enormous budgets, to be honest, really big budgets and a lot of time to develop these [prototypes].”***

*BI representative*

- The expertise to develop and implement different digital prototypes was not held within OHID’s BI team, and it was the view of both BI representatives interviewed that an experienced technical supplier could have been commissioned to undertake such work.

***“Within our behavioural science team, we have quite a broad expertise, but still, it’s within behavioural science.”***

*BI representative*

- The complexity of the software systems in primary care (both the diversity of software programmes used but also the additional GP practice customisation and templates) led the BI team to conclude that a ‘broker’ was required who knew the primary care digital landscape well, and who could be the conduit between the BI team and a technical supplier.

***“Ideally, on this kind of project, we would have a broker, who would be more like a business analyst, who would be really, fully understanding of the software and the supplier landscape and all the procedures, and who would work very closely with us on an ongoing basis.”***

*BI representative*

These barriers resulted in the scale and ambition for the workstream being reduced. In lieu of alternatives, the BI team designed the digital resource themselves. Using the evidence base from the Discovery phase, behavioural change techniques, and in consultation with NICE guidelines and the CMO’s recommendations for physical activity levels, the BI team developed two aspects to the digital resource:

- An e-Prompt for HCPs to encourage them to raise the topic of physical activity with their patient
- A patient facing resource with recommendations about physical activity which the HCP could print or send electronically to their patient

The BI team then needed to find GP practices that were willing, and able, to locally amend their own software to contain the e-Prompt (rather than it being done centrally through software systems such as EMIS and SystemOne).

## 2.2 The pilot

Using links held by the national physical activity team within OHID, nine GP practices were approached to participate in a pilot of the digital resource. No selection criteria were set out given the anticipated challenge of securing involvement and the limited timeframes for a tender/procurement process, thus the recruitment approach was based around known contacts who may be willing to participate in a pilot.

***“We identified one surgery or a few surgeries who were able to actually, internally, on their own, locally make some changes to this [their software].”***

*BI representative*

A number (unspecified) of these practices were interested in the digital resource. The BI team used conversations with these practices to conduct proposition testing, refining the digital resource through this process of engagement.

Further conversations were had with three practices but, despite initial positivity, two of these practices became unresponsive leaving one practice in which the digital resource was piloted. Though it is not known why some of the practices that were initially interested became unresponsive, the BI representatives interviewed speculated that competing demands on time, and a lack of technical abilities to amend local software systems were likely contributors. They did not think that the lack of engagement from practices reflected an inherent rejection of the digital resource concept. They believed that offering financial support and greater flexibility on timings would have helped secure better engagement.

***“It was definitely not the third one you mentioned [inherent rejection of the concept]. And I have evidence for that because during the consultations, they were very enthusiastic. So, these were already people who were bought into the idea of promoting physical activity.”***

*BI representative*

The digital resource was therefore piloted at one GP practice (based in West Yorkshire) for six weeks. Through their consultations with HCPs, the BI team determined that the pilot should be conducted in the COPD pathway. The participating practice serves a patient population of just under 11,000 and has a staff register of eight doctors, three nurses and one healthcare assistant. Their participation was spearheaded by a GP with a particular interest in the benefits of physical activity and preventative medicine.

The lead GP for the participating practice, despite claiming to be ‘not massively computer literate’, embedded the e-Prompt into their software system (EMIS). This required them to write a concept, code it into the system to trigger the e-Prompt when required and link it to the patient facing resource saved on their website.

***“Over the last few years I’ve seen various things on some of the [EMIS] user groups about how to set up your own protocols and concepts and things like that, so I just went back to some of those groups to work out how to write the concept... Once I’d worked out how to write the concept it was just getting the coding that would trigger the pop-up... But I’m certainly not massively computer literate I’ve got to say.”***

*Lead GP (participating practice)*

Once set up, the e-Prompt was triggered whenever a HCP started a COPD review. The lead GP informed the nurses in the practice who complete COPD reviews about the digital resource, though did not undertake specific training in its use or in the delivery of physical activity advice, feeling there was no need for this.

***“I let them know about it and it was very similar information to what they’d used before from various resources like the British Thoracic Society and things like that, so I let them see what the leaflet was going to be and they were quite happy with it, so it didn’t need any specific training at all no.”***

*Lead GP (participating practice)*

## 3 Outcomes

This section of the report focuses on the use and impact of the digital resource in the pilot GP practice.

### 3.1 Use of the digital resource

As far as it was known, the digital resource was used by three members of staff – the lead GP and two nurses – although other members of staff may have encountered the e-Prompt if conducting a COPD review.

The number of patients with whom the digital resource was used was not much greater than nine – it was used three times by the lead GP, six times by one of the nurses and an unknown number of times by the other nurse. Its use was limited as many of the annual COPD reviews had already been completed prior to the pilot given this activity was prioritised by the practice as something that could be done remotely during the Covid-19 pandemic.

***“When this came round there weren’t that many outstanding COPD reviews to be done. Because they’d targeted that group specifically because they could do it remotely.”***

*Lead GP (participating practice)*

Whilst numbers were limited because of this, the digital resource appeared to be well received by the two nurses who predominantly used it.

***“They [nurses] were extremely compliant. No one complained. [The lead GP] just said they implemented it. Everything went well.”***

*BI representative*

From the evaluation evidence available, little is known about how the nurses made use of the patient facing resource. The lead GP suspected that they did not email or text the resource to their patient but rather directed them to where it was hosted on the practice’s website. Given the COPD reviews were all conducted by telephone, the patient facing resource was not printed off for patients, though the lead GP suspected this would have been the case if the appointments were being conducted in person.

***“I think that if the patient was in face to face they might have been able to give some of the leaflets. If they were on the phone, the impression I got was they direct them to websites, but they wouldn’t necessarily email or text them.”***

*Lead GP (participating practice)*

### 3.2 Impact of the digital resource

In the evaluation interviews, the BI representatives acknowledged the simplicity of the digital resource. The resource was designed with time-poor HCPs in mind – thus simplicity was key, recognising that not all HCPs would be able to engage with more intensive training on the topic of physical activity but that an e-Prompt might encourage them to raise the topic, and/or share the patient facing information provided.



***“We knew that health care professionals would not have the time to properly engage with a more elaborate intervention digitally. So, we kept it to the minimum. And then focused on providing support for the patients.”***

*BI representative*

The BI representatives also acknowledged that the desired behaviour (HCPs providing brief advice on physical activity) was complex and would require multiple different interventions to lead to a sustained and widespread change in behaviour, and thus the digital resource could only *contribute* to such a change.

***“This is a very complex problem. And actually, addressing it would require providing healthcare professionals with a number of interventions and support and tools and solutions. If we want to solve it, it would require multiple interventions... an e-Prompt on its own would not really be sufficient... But the focus of the workstream was to try to focus on the digital one.”***

*BI representative*

The lead GP believed that the nurses who predominantly used the digital resource would have been discussing physical activity with their COPD patients as standard. However, they felt the e-Prompt would have encouraged the nurses to bring up the topic of physical activity earlier in the review, and the patient facing resource would have helped patients consolidate the advice given to them.

***“I think it [the patient facing resource] provides some more of the back up information. So they could print out a copy of it directly or just send them the text with the link that they could then look at later as opposed to, ‘here’s some advice on exercise’ and potentially it’s forgotten by the time they’ve walked out of the practice front door.”***

*Lead GP (participating practice)*

It is not possible to conclude the impact of the digital resource on patients themselves. All of the patients that the lead GP spoke to regarding physical activity were amenable to discussing it, although nothing further is known about action subsequently taken (or not taken).

## 4 Next steps

This section of the report gives brief consideration to how the digital resource could be developed further and the options available to scaling it up.

The digital resource will remain live at the pilot GP practice, and thus HCPs will continue to be prompted to discuss physical activity with patients as part of all COPD reviews. The patient facing resources will remain available on the practice's own website.

When reflecting on next steps for the digital resource, it was the view of those interviewed that the digital resource has the potential to:

- **Be used in other pathways:** the lead GP was very positive about the digital resource having value in a number of other pathways including hypertension, osteoarthritis, diabetes, chronic pain, and particularly mental health.

*“I think chronic pain would be a great one to look at... But I think it's got a role in every condition and actually mental health as well, would be one where it would be of definite benefit.”*

*Lead GP (participating practice)*

- **Become more sophisticated:** It was suggested by one BI representative that the e-Prompt could be developed further to ensure HCPs were offering patients tailored advice on physical activity as a result of the collation of some basic data from the patient about their current activity levels.
- **Better link to other MHPP workstreams:** It would be possible for the e-Prompt to link to the patient facing materials on the Moving Medicine website which are condition-specific.

Both of the BI representatives interviewed felt the digital resource had the potential to have a positive impact at the population level if it was delivered at scale.

*“The intervention that ultimately was piloted, developed, it was minimal, but it was in line with evidence based, very brief advice on behavioural change. And the benefit of the brief intervention is, if it's delivered at scale, it can have clinical significance, especially the population level, but it has to be delivered at scale.”*

*BI representative*

*“[The digital resource is] very low friction. It is something that connects, something that is already built in and is embedded within the routine practice but nudges healthcare professionals to advise physical activity in a very easy way. It could potentially be quite effective if rolled out on a large scale. Small effects but rolled out on a large scale.”*

*BI representative*

Were the digital resource to be scaled up (following further piloting), there are two options for how this is done within the constraints of primary care where there is no uniform software system. These are:

- **Multiple software suppliers are engaged in the process of embedding the digital resource centrally:** As this workstream has shown, there are considerable costs and lengthy timeframes associated with this approach, though it would be the most efficient and effective way to scale the digital resource.
- **Local systems are amended on an individual basis:** As shown by this workstream, this approach relies upon the will and technical abilities for amendments to be made to software systems locally. Whilst less costly than a more centralised approach, there would be significant limitations in scale.

*“I think we have confidence that this is definitely something that should be pursued and developed further. But of course, it would require considerable and consolidated further work to actually really put it into more surgeries, just because of how the system of the suppliers work... It's a really challenging field to work in because really the environment in which the GP works, especially the software environment, determines really what kind of intervention can be delivered. And then different surgeries will have different environments, which means standardisation is actually very, yeah, it's very challenging.”*

*BI representative*

*“It does require spending a more extensive amount of time understanding what the needs for this digital product are and how it fits with the potential available solutions.”*

*BI representative*

## 5 Conclusions

Key findings from the evaluation of the e-Advice workstream are as follows:

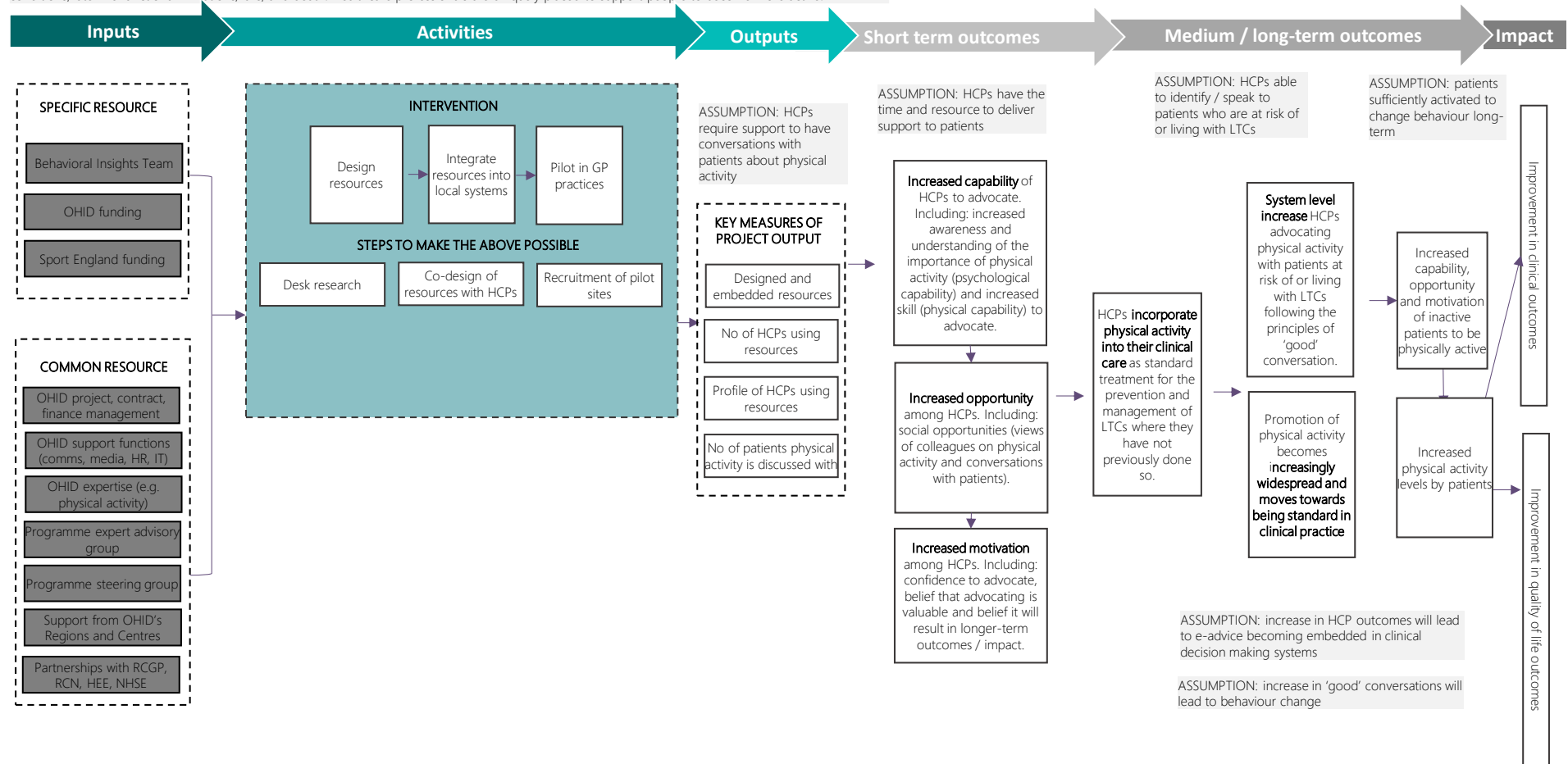
- The evidence review and consultations with HCPs as part of the Discovery phase re-affirmed the need for a digital intervention to help with the promotion of physical activity. Not all HCPs will have the time or interest to engage with the training available through MHPP, and thus an e-Prompt may help these professionals to promote physical activity.
- There is no data to suggest that the digital resource is unacceptable to HCPs who may use it, though the evidence collected through the evaluation with regards to this is limited.
- At this stage there is limited evaluation evidence to conclude the potential impact (and acceptability) of the digital resource. A more expansive pilot would be required, alongside the collation of evaluation evidence, to make a more informed assessment about future investment.
- Standardisation of a digital product is challenging in an environment where GP surgeries use different software systems. This could prove a limiting factor in any future ambitions to scale the intervention. Further work to understand the diversity of the software and local templates used across GP practices, and the costs of implementation, would be an important step in understanding the extent to which this presents a challenge to embedding a digital intervention more broadly.

# 6 Appendix

## e-Advice evaluation logic model

### E-ADVICE

**CASE FOR INVESTMENT:**  
 High levels of inactivity and lower activity levels than the recommended guidelines contributes to many long-term conditions including preventable conditions, later life functional limitations/falls, and death. Healthcare professionals are uniquely placed to support people to become more active.



## Original evaluation questions

### Adoption of the e-advice resource

How appropriate and acceptable is the resource to HCPs?

How feasible/achievable is the implementation of the resource within primary care settings?

How often is the resource used by HCPs?

What is the profile of HCPs using the resource?

What is the profile of patients with whom the tool is used?

What are the enablers and barriers associated with HCPs' use of the resource?

### Impact of e-advice resource on HCPs

Do HCPs who use the resource increase their capability to advocate physical activity to their patients? (knowledge, skills, behavioural regulation)

Does the resource increase HCPs' opportunity to advocate physical activity to their patients? (environmental context and resources, social influences)

Does the resource increase HCPs' motivation to advocate physical activity to their patients? (beliefs about consequences, social/professional role, beliefs about capabilities)

Do HCPs who use the resource believe they have changed their behaviour? (increased frequency/quality of advocating physical activity to patients)?

Does the resource increase the likelihood of signposting/referring patients to other HCPs and/or physical activity services?

What else needs to be in place to make the resource effective (e.g. training, integration with local physical activity services)?

How is the e-advice workstream integrated into the other MHPP workstreams?

### Scalability

Could the resource be embedded at scale across England?

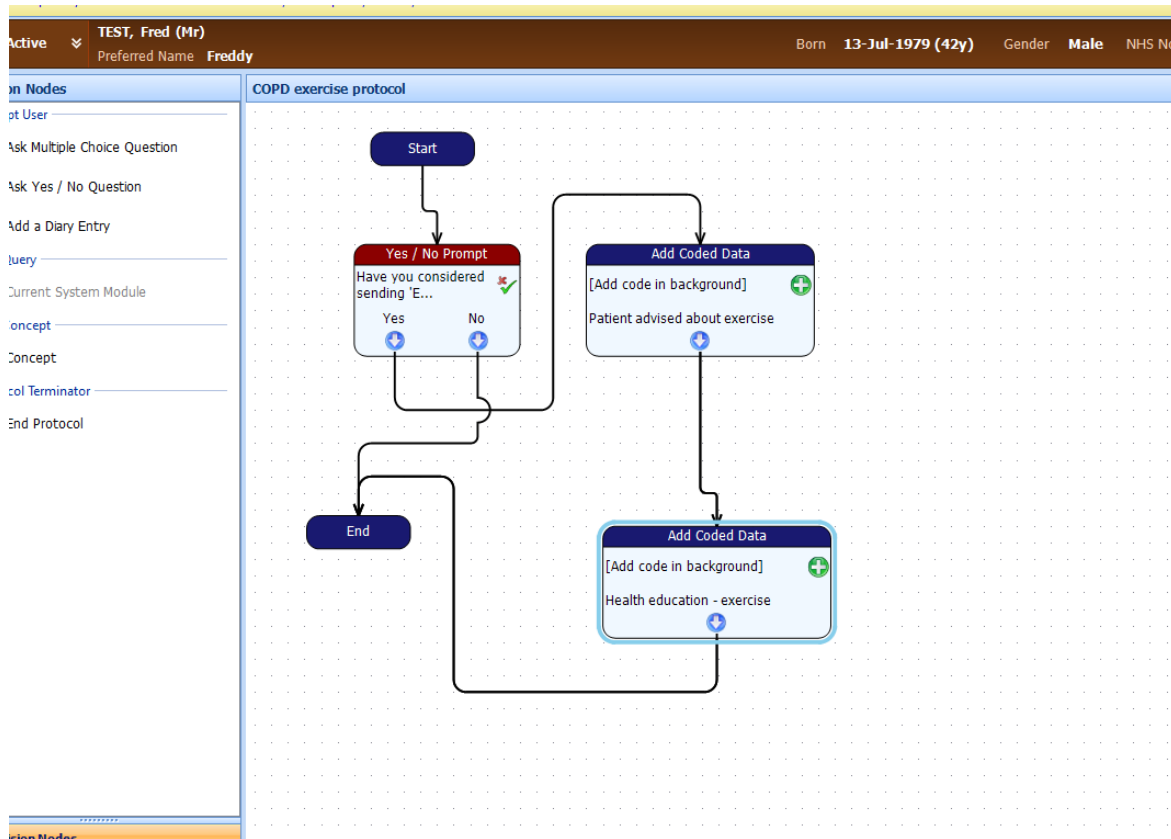
## Overview of e-Advice intervention (as documented by BI team)

The piloted digital intervention (e-Advice 1.0) consists of two components:

- healthcare professional (HCP) facing component – a prompt to action
- healthcare professional +patient facing component – a concise PDF aiming to change patient behaviour and help HCPs to structure a conversation

### Healthcare professional (HCP) facing component – a prompt to action

1. A **concept** is created that gives an instruction to the healthcare professional’s (HCP) Electronic Patient Records to pop-up a message or **prompt** after a certain condition is coded onto the system, after a patient encounter.



2. A variety of relevant condition **codes** are linked to trigger the concept.

3. In a consultation when a healthcare professional enters one of the codes, it will trigger a pop-up. This will prompt the HCP to either use PA e-advice resource in the consultation by printing it off and going through it with the patient / printing it off for the patient to look at later / or sending it to the patient digitally for them to look at later (**Accurx** is a common GP platform to send texts/documents/letters to patients via text or email.)

Imported item

Yes / No Prompt

Have you considered sending 'Exercise in COPD' advice via Accurx?

Yes No

4. Should the patient/HCP choose to send the information digitally, the HCP can then send a template text with the physical activity advice attached.

### Exercise in COPD 1

Dear Mr Test,

Please following the attached link to the practice website with some information about how even small amounts of exercise can help your COPD.

[https://www. \[redacted\] website/B85027/files/Exercising%20with%20COPD.pdf](https://www. [redacted] website/B85027/files/Exercising%20with%20COPD.pdf)

Kindly, [redacted]

[redacted]

Allow response 🕒 Today at 8am

📎 Attach documents and NHS.UK advice

319 characters remaining

↓ Add message



Healthcare professional +patient facing component – a concise PDF aiming to change patient behaviour and help HCPs to structure a conversation

# Exercising with COPD

If you have COPD, exercising regularly can help **improve your breathing, reduce your symptoms and improve your quality of life**. Ready to get started?

Everyone has a starting point - choose activities that suit you and **build up slowly** to a more active life – try walking or chair exercises to start.

Exercise as much as you can, **twice a day** – the amount you can do will of course depend on your individual circumstances.

Exercising until you're **a little breathless** is safe, but do not push yourself too far – if you can say “this activity is going to do me good!” with 2 or 3 stops for breath, you're working at moderate intensity.

## Moderate activity

- Brisk walking
- Dancing or chair dancing
- Housework
- Climbing stairs

+ **Strength**

- Chair exercises
- Heavy gardening
- Carrying shopping bags
- Tai chi or yoga

➔ Turn over for more ideas

## My goal

What goal do you want to achieve?

What will you do next to move towards this goal?

When do you want to achieve it by?

# Exercising with COPD

## Finding the right activity for you

**Exercising in everyday life** Try activities like going for a walk (by yourself, with a dog or with a friend), getting off the bus one stop earlier, climbing the stairs, doing heavy gardening or housework, playing with children or grandchildren.

**Exercising from a chair** Try activities like chair dancing, lifting weights (or bottles of water/food cans), using a pedal exerciser, seated stretches, seated Tai Chi – if you can, look for online videos for chair-based exercises.

**Group exercise and classes** Try activities like walking groups, walking sports (e.g., walking netball) and yoga or Tai Chi classes. Some people with COPD find that singing groups also help improve their lung capacity.

**Exercising on oxygen** You can still do some exercises whilst on oxygen treatment – you may find it helpful to use longer tubing on your oxygen tank for more freedom to move around when exercising.

### Knowing when to slow down

When exercising, if you experience a big increase in breathlessness, new or worsening chest pain, a sudden onset of rapid palpitations, dizziness, a change in vision, or a reduction in exercise capacity, **stop and seek medical review.**

## Our standards and accreditations

Ipsos' standards and accreditations provide our clients with the peace of mind that they can always depend on us to deliver reliable, sustainable findings. Our focus on quality and continuous improvement means we have embedded a "right first time" approach throughout our organisation.



### ISO 20252

This is the international market research specific standard that supersedes BS 7911/MRQSA and incorporates IQCS (Interviewer Quality Control Scheme). It covers the five stages of a Market Research project. Ipsos was the first company in the world to gain this accreditation.



### Market Research Society (MRS) Company Partnership

By being an MRS Company Partner, Ipsos endorses and supports the core MRS brand values of professionalism, research excellence and business effectiveness, and commits to comply with the MRS Code of Conduct throughout the organisation. We were the first company to sign up to the requirements and self-regulation of the MRS Code. More than 350 companies have followed our lead.



### ISO 9001

This is the international general company standard with a focus on continual improvement through quality management systems. In 1994, we became one of the early adopters of the ISO 9001 business standard.



### ISO 27001

This is the international standard for information security, designed to ensure the selection of adequate and proportionate security controls. Ipsos was the first research company in the UK to be awarded this in August 2008.



### The UK General Data Protection Regulation (GDPR) and the UK Data Protection Act (DPA) 2018

Ipsos is required to comply with the UK GDPR and the UK DPA. It covers the processing of personal data and the protection of privacy.



### HMG Cyber Essentials

This is a government-backed scheme and a key deliverable of the UK's National Cyber Security Programme. Ipsos was assessment-validated for Cyber Essentials certification in 2016. Cyber Essentials defines a set of controls which, when properly implemented, provide organisations with basic protection from the most prevalent forms of threat coming from the internet.



### Fair Data

Ipsos is signed up as a "Fair Data" company, agreeing to adhere to 10 core principles. The principles support and complement other standards such as ISOs, and the requirements of Data Protection legislation.

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