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# Service Evaluation

Optimising the Depression  
Pathway Enabled by Novel Digital  
Assessment Technology

## EXECUTIVE SUMMARY

**THIS PROJECT WAS FUNDED BY:**

Innovate UK (project number 104641)

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**PROJECT LED BY:**

P1vital Ltd

**EVALUATED BY:**

Centre for Health Services Studies

**PROJECT PARTNERS:**

P1vital Ltd

NHS Canterbury and Coastal CCG

University of Kent

Maidstone and MidKent Mind

### PROJECT BACKGROUND

In the United Kingdom, one in six people aged 18 or over report symptoms of a common mental health disorder such as anxiety or depression. Despite the growing interest in the quality of care for depression, there has been little evaluation of this in primary care settings. Digital technology, including applications (apps) for mobile phones, tablets and desktops are being created to complement clinical care and more than 13 web applications and 35 smartphone apps are available in the NHS for depression, anxiety or stress.

This summary details findings from the implementation and evaluation of a new service, seeking to optimise the current depression care pathway in a primary care setting. A 'walk-in' service was piloted for one year at GP services (a single primary care network) using a multi-disciplinary team with specialist knowledge of mental health and wellbeing providing a range of therapy options. Built into the service was the use of a novel digital technology, i-spero<sup>®</sup>, designed to assist service users with managing depression and supporting professionals in clinical decision making and management.

### METHODOLOGY

The service evaluation followed a mixed methods, observational feasibility study design to identify changes regarding implementation, impact and resource use, the effects on user outcomes and experiences, plus the experience of healthcare professionals. NICE evidence standards framework for digital health technologies was employed. The study comprised an intervention group of service users (n=109) who received six months' care from the new service, compared to a standard care group (n=48).

Specifically, **the evaluation set out to answer the following questions:**

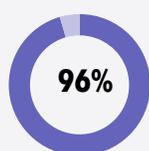
1. What impact has the pathway had on service user experience and outcomes?
2. What are the components of the care delivery model ('active ingredients') that are really making a difference?
3. What are the influencing contextual factors and how have they affected implementation and outcomes?
4. What changes to the use of resources and activity have occurred and how have they impacted costs?

## SERVICE USER EXPERIENCE AND OUTCOMES OF THE NEW CARE PATHWAY

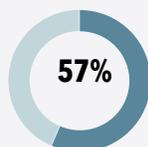
- The intervention group exhibited **lower depression symptoms** when compared to the standard care group after six months of care ( $p=0.47$ ) and significant improvement in symptoms over time ( $p<0.001$ ).
- **Recovery** was observed in 30.2% of participants at the 6-8 week follow up and for 35.4% of participants after six months of care, defined as reduction in symptoms scores (on PHQ-9 and GAD7 measures) to below clinical case levels. Clinically relevant improvement (reduction in PHQ-9 measure by 5 points) was observed in 51.6% of participants at the 6-8 week follow up and in 59.6% of participants after 6 months.
- No difference in **anxiety symptoms** nor **wellbeing** were observed between the groups. Borderline reduction in severity of suicidal ideation for the intervention group was observed after six months.

## SERVICE RESOURCE USE AND COST

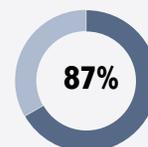
- As with enhanced services, the **average total costs** for the use of health and care services were higher – £591.66 (SD £519.19) for the intervention compared to £230.88 (SD £378.83) for standard care ( $p<0.001$ ).
- Running the clinic was expensive largely due to the additional services provided, overheads and staff costs (especially on a Saturday), sub-optimal and unpredictable service (walk-in nature) which made balancing staff costs difficult. The use of the technology was seen as expensive.
- Costs were expected to reduce over time from reduced appointment times (without the need to consent for the evaluation) and the use of technology at scale. In the longer term, the benefits of addressing mental health needs early, by the right clinicians and with the right access to timely therapies, were expected to result in reduced treatment costs.



96% of people using the new clinic were happy with the care received



57% of people using the new clinic said it exceeded their expectations



87% of people using the new clinic would use i-spero<sup>®</sup> again



two thirds of people experienced improvement in their condition



one third of people recovered from their condition within six months



per-person average total cost of health and care services are higher for those who used the clinic than those who did not

## SERVICE USER COMMENTS

*"I felt that I was getting someone's complete attention who understood the nuances of my condition and had the time to think about it. I think that worked"*

(Service User 20)

*"I can safely say [my improvement] is absolutely down to accessing the clinic because I've now got the tools and the access and the support that I think I need"*

(Service User 45)



## STAFF COMMENTS

*"You just need to look at the scores and you can see people are improving... I think that's actually boosting the confidence of the staff because they can all see that, and it makes them feel proud that they are helping people"*

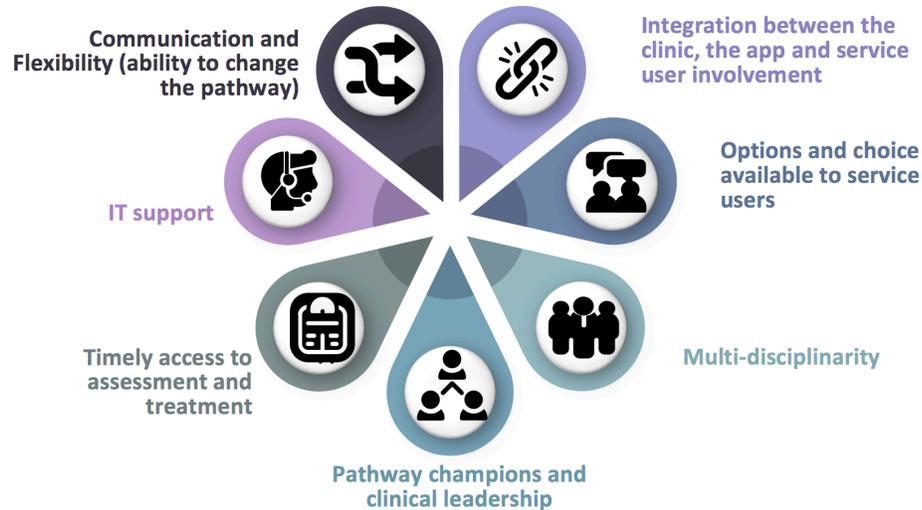
(Operational Staff Focus Group)

*"I would say a majority of the clients that I saw in the clinic that went on to have therapy, probably recovered at a quicker rate... or made some improvements"*

(Clinic Staff Member 06)



## 'ACTIVE INGREDIENTS' SUPPORTING SERVICE PROVISION



## INFLUENCING CONTEXTUAL FACTORS

- **Changes to the local commissioning landscape** emphasised the need for continued commissioner engagement.
- Primary care is experiencing **increasing demand** which impacts on the ability to deliver enhanced services.
- There is **high demand** regionally and nationally for mental health services. This issue of capacity limited the recruitment of mental health practitioners and influenced the presentation of service users who had greater severity of illness than expected.
- **Brexit** continues to create uncertainty in terms of staffing and sustaining services.
- The **COVID-19 pandemic** led to changes in the delivery of the service and impacted on the referral rates.

## WHAT COULD BE IMPROVED, SUSTAINED OR REPLICATED

	Improve (1)	Sustain (2)	Replicate (3)
1.	Widening referral and advertising to increase clinic use	Structured clinic based on triage and integration of services	Professionals in primary care with a special interest/skills in mental health
2.	Integration into standard practice, e.g. admin support	Providing options and choice in one place or dedicated clinic	Taking time with service users to provide holistic care
3.	Reduction of waiting times	Champions and effective leadership	IT support for professionals/services users for i-spero and implementation
4.	Peer support provision to complement services	Team reflection/communication with flexibility to adapt to need	Symptom tracking was seen as key to service user improvement
5.	Other methods of triage outside technology (i-spero) – accessibility	Timely access to treatment, avoiding waiting lists	
6.	Adapting delivery to reduce cost and improve sustainability	Retaining multi-disciplinary skill-mix	
7.	Further aligning delivery to needs of people with severe depression		
8.	Better integration and links to other mental health services, e.g. secondary care, bridging services, voluntary sector		
9.	Improving referral rates from other GP practices in the area		