

## CASE STUDY

# Enhanced Supportive Care (ESC) app for people living with cancer; Royal Surrey NHS Foundation Trust and Piota

## SUMMARY



Enhanced Supportive Care (ESC) is a fresh and modern approach to supporting people through cancer treatment. It focuses on providing better access to expertise in managing the adverse effects of cancer and cancer treatments.

The Royal Surrey NHS Foundation Trust's ESC service was set up in September 2019 and has been seeing patients since January 2020. It aims to support all patients with recently diagnosed locally advanced or metastatic cancer who are receiving anti-cancer treatment at St Luke's Cancer Centre, Royal Surrey NHS Foundation Trust (RSFT).

As the coronavirus (COVID-19) pandemic started in 2020, the ESC team approached KSS AHSN to find an innovation solution to enable the clinical team to receive patient reported outcome data, and to provide signposting support for patients.

Based on the options KSS AHSN researched and presented, the ESC team selected a company called Piota (*Put It On The App*) to support them to co-design an app. Using an app focused on remotely obtaining patient reported outcomes was completely new to the ESC team and a departure from traditional working practices.

With the analytics expertise from Unity Insights, KSS AHSN supported a real-world evaluation and budget impact model to review the use of the app and any benefits seen by both patients and clinicians, as well as the wider benefits to the Trust as a whole (e.g. clinician time saved). This analysis has enabled the ESC team to set future goals around the use of the app and the results could be used on a wider, national scale to help inform other NHS ESC services.

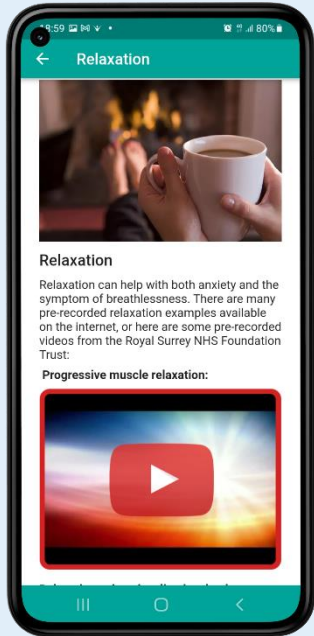
## THE CHALLENGE

Royal Surrey NHS Foundation Trust Enhanced Supportive care (ESC) department utilised a paper-based validated patient symptom assessment tool called the Memorial Symptom Assessment Scale – Short Form (MSAS-SF)<sup>2</sup> during clinic appointments and pre-consultation appointments. The team struggled to provide patients with timely team updates and notifications, along with specific guidance material to help support and improve symptom management.

Patients and clinicians often spent a proportion of outpatient appointments or pre-consultation appointments completing the MSAS-SF, some of which could have been avoidable if the outcome data was collected in advance of the appointment.

At present, NHS patients primarily access key information relating to their care, NHS contacts, and details of alternative services through websites. While the NHS website contains a wealth of information that may be useful to patients, the sheer volume may make it difficult to obtain specific information of relevance to the patient. Furthermore, the volume of information on the internet more broadly can be overwhelming. For example, some websites contain misleading, irrelevant, or wrong information (Abrol et al., 2017). Information found online can be generic and not localised to the particular care pathway of the trust or individualised for the patient.

## OUR APPROACH



- Founded in 2014, Piota (*'Put It On The App'*) was founded in 2014 to create high-quality apps at affordable prices. The company creates applications (apps) to simplify communication and effectively engage with the range of stakeholders.
- Currently, Piota provide apps to 200+ schools in 15 countries and another 130+ organisations in health and social care, as well as clubs, member organisations, charities, small businesses, and more.
- Piota has developed a digital health app for healthcare settings that represents a quickly customised two-way communication portal, allowing clinical units and services to directly communicate with a range of stakeholders through a single channel.
- Royal Surrey NHS Foundation Trust Enhanced Supportive care (ESC) department planned to use a digital health app to support patients with newly diagnosed metastatic cancer.
- The app allows patients to complete a pre-consultant symptom assessment questionnaire (MSAS-SF) using their own digital devices and aims to replace the paper questionnaires. In addition, the app provides updates and notifications along with condition-specific guidance material to help to support ESC patients remotely alongside their appointments.
- The app benefits focus on reducing the amount of time spent in appointments completing the symptom assessment questionnaire so clinicians can focus on what matters most to the patient; helping clinicians to review answers before their consultations; and helping signpost patients to other relevant information or websites.
- Patients do not have to use the app if they feel it is not right for them, or if they do not have access to a digital device. The traditional MSAS-SF is still available for patients to complete with their clinicians if preferred and paper information leaflets are also still available.

*Technology to improve our communication and way of working is one of the key ESC principles and as a team we were keen to embrace this from the start using a bespoke digital platform. Given that we had limited app experience, KSS AHSN were invaluable in helping us to impartially source and review providers that suited our needs. We chose Piota due to their track record with other NHS hospitals, the simple set-up process, ease of use for patients and clinicians and cost-effectiveness. After two years, the app is embedded in our service, and we can see potential to expand its use moving forward.*

*Emma Dillsworth, ESC Project Manager, Royal Surrey NHS Foundation Trust*

## IMPACT AND OUTCOMES

Unity Insights supported KSS AHSN to conduct a real-world evaluation and budget impact model to understand the app and its potential benefits. The analysis was conducted between 1 Jan 2021 – 28 February 2022 (14 months). The evaluation included patient satisfaction scores and patient and staff user feedback. 155 ESC patients were included in the analysis.

According to the breakeven analysis conducted within the model, an increase in uptake to 25% would result in Piota being cost neutral.

(Breakeven analysis)

*'I think the app could potentially save time during clinic sessions'*

*'[the app] allows us to focus on what is important to the patient from the start of the consultation.'*

(Staff feedback)

24% Patients (n=37) were interested in using the app


16% Patients (n=24) registered their device to the app

100% Patients who gave feedback on the app (n=6) would recommend it to other ESC patients

100% Patients who gave feedback on the app (n=6) rated it 'good' or 'great'

(Patient surveys)

- Patient satisfaction scores from self-reported surveys showed both app users and non-app users were largely very satisfied with the ESC service across the six questions.
- General feeling from clinicians is the app should be better integrated into the usual pathway to increase uptake.



100% of patients (n=6) would recommend the app to other ESC patients

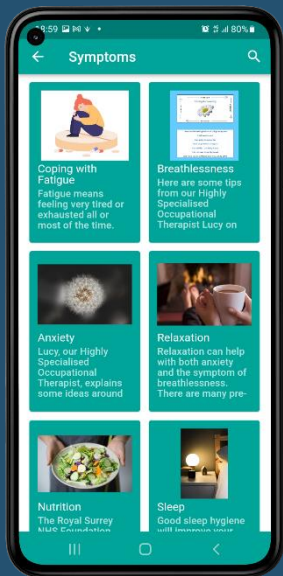
One patient said: *'Can save time and need for a phone call'*

**“ It's great to have an overview of a patient's symptoms and how bothered they have been by them before a consultation. This means we can focus on what is important to the patient - essentially, they set the agenda.**

**Joanne Thompson, ESC Clinical Nurse Manager, Royal Surrey NHS Foundation Trust**

## RECOMMENDATIONS

To produce a more robust model of the cost of the intervention, a larger sample size is recommended. The 14 months of data collection provided a good base for default assumptions, but additional time for the year 0 data would have aided in assessing the app in a post-Covid framework.



**“ We are pleased that the ESC service found the app easy to implement and popular with the patients who used it. It is notable that patients using the app completed 3.1 forms per person compared to 1.3 forms per person using paper. In the next phase when app use is extended to all newly referred patients, if these results are maintained significant cost and time savings will accrue to the ESC service.**

**James Dickson, Piota**

**“ We're delighted to have helped the RSCH clinical team articulate their need, find a well-evidenced solution that matched this need, support a pilot and help them evaluate it over the last 2 years such they can continue to procure and use it to best help their patients.**

**Dr Charlotte Roberts, KSS AHSN**

## NEXT STEPS

- All newly referred outpatients to be offered the ESC app at their first appointment as standard
- All patients who have shown an interest in using the app to be routinely contacted by ESC project manager to help with any queries
- Team to proactively alert app-using patients when MSAS-SF due via the app alert system
- ESC Patient information videos about the service and app uploaded which patients can watch in their own time
- Live Royal Surrey and ESC Twitter account news reel available via the app
- Highly specialised Occupational Therapist continues to upload a new wealth of material to help with difficult to manage symptoms such as coping with fatigue, breathlessness and help with areas such as relaxation
- Continue to collect app activity data

