Definition Health: improving support for pre-operative patients

Summary

Definition Health has created LifeBox, a digital tool which supports pre-operative patient assessment, hospital decision-making and personalised patient care.

It was developed by Dr Sandeep Chauhan and Dr Rosie Scott, both consultants at University Hospital Sussex NHS FT, who founded Definition Health to put the patient in the centre of their care. Their goals are to empower and engage patients from pre-assessment and throughout their hospital journey, offer a platform for clinician led digitally enabled care, work towards a more sustainable healthcare industry and realise huge cost saving benefits to hospitals and clinics in the process.

They lead a team of 10 NHS consultants, supported by software developers, who built Definition Health's surgery platform. The platform consists of a secure virtual clinic, ePOA and educational system, outcomes capture and recovery module which monitors patients after they leave hospital.

Sandeep was selected an NHS Innovation Accelerator Fellow for 2021 to support the further growth of Definition Health's solutions, including a digital assist programme aimed at reducing health and digital inequalities. It was specifically chosen to help hospitals recover from COVID.

The challenge

Surgical patients often experience unnecessary appointments, cancellations of surgery and failures in follow up care. This diminishes the patient experience and is inefficient for the healthcare provider.

Around 9 million patients need a pre-operative assessment before surgery in UK every year, with pre-assessment costs for the NHS ranging between £35-72 per patient. Annually around 1.4 million planned NHS procedures are cancelled. There is currently a backlog of 5.2m patients awaiting surgery and this is expected to rise to 13m within the next year.

Traditional pathways require patients to attend hospital to complete their pre-operative assessment using a paper based system. LifeBox enables patients to complete their assessment from the comfort of their own home and at a time convenient to them.

The solution

LifeBox is a web based digital pre-operative assessment (ePOA) app – accessible on phone, tablet or computer – that intelligently guides the patient to provide information that supports their entire hospital journey.

It offers patients a platform to complete part of their pre-operative assessment in their own time, at their own pace. The information provided is then available for clinicians to securely access, allowing for early triage and risk stratification which streamline workflows and support personalised patient care.

With a user friendly interface, LifeBox makes data inputting simple and stress-free for patients, allowing part of their pre-operative assessment to be completed at a time and place convenient to them.

When the COVID-19 pandemic caused widespread lockdown in 2020, LifeBox supported hospitals to continue working remotely and support patients while unable to treat them face to face.

Impact

Definition Health was chosen for the NHS Innovation Accelerator 2021 as 'one of the companies that will deliver high impact innovations to help the NHS out of the COVID-19 crisis'.

Deployed in 10 UK hospitals with 50,000 patients registered, the system has been shown in 5 scientific presentations to validate improved patient experience, education, cost saving and better preparation of patients.

It has improved efficiency, leading to a 60% reduction in face-to-face assessments, 3,060 OP appointments avoided and an average time saving of 1.92 hours per patient. Lifebox has shown £150k in hospital savings in one year and a reduction in on the day cancellations and missed appointments.

Contact

For more information

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