

Oxford AHSN Case Study

Date: Q3 2122

Theme/Patient pathway: Strategic and Industry Partnerships

Title: Collaboration develops environmentally-friendly product addressing urinary incontinence

Summary

The Oxford AHSN is working with Binding Sciences and Buckinghamshire Healthcare NHS Trust to develop an environmentally-friendly alternative to continence pads. This initiative is funded by a £230,000 Innovate UK Sustainable Innovation Fund grant.

Binding Sciences wanted to understand the clinical utility and possible advantages of its urinary continence management device – Releaf Seated – for people who normally use absorbent pads, in particular for those with poor mobility or dexterity. This product enables users who have some degree of voluntary control to urinate unaided when seated, standing or crouching without their skin coming into contact with urine.

The Oxford AHSN conducted qualitative research with health and social care professionals and a developed a health economics model.

The intention is that future versions of Releaf Seated will be fully biodegradable and compostable in 12 months compared to 40 years for an absorbent pad. An environmental impact assessment found that widespread use of the product could significantly reduce the carbon footprint associated with urinary incontinence and make a significant contribution towards the NHS Net Zero ambition. An estimated 36 tonnes CO₂eq of greenhouse gases could be saved due to fewer hospital admissions linked to urinary tract infections or falls on the way to the toilet.

What did we do?

The Oxford AHSN was a key partner in securing an Innovate UK Research and Innovation Sustainable Innovation Fund grant totalling over £200,000 in October 2020, working in partnership with Buckinghamshire Healthcare NHS Trust and Binding Sciences, the company behind Releaf Seated.

The Oxford AHSN team carried out qualitative research speaking to key stakeholders along the care pathway to gain opinions on the utility of the device. This showed that the potential benefits of the product include improved independence and dignity, reduced need for carer visits, less risk of contracting urinary tract infections, fewer falls going to and from the toilet, improved fluid intake and easing the burden on the healthcare system.

The team also developed a health economics model to evaluate the potential budget impact and cost effectiveness of Releaf Seated. The hypothetical model identified potential cost savings of over £230 million to the healthcare system if adopted across Great Britain.

The Oxford AHSN is providing ongoing support to Binding Sciences. Future grant funding applications are planned to undertake a real world evaluation of Releaf Seated.

Contact

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What has been achieved?

The Oxford AHSN helped Binding Sciences generate early evidence for their new product and provided crucial insight into the opinions of healthcare stakeholders. This work also helped the company design a small clinical trial involving 100 patients at Buckinghamshire Healthcare NHS Trust and elsewhere. The Oxford AHSN is providing ongoing support exploring possible routes to market.

Feedback

"We have been both gratified and truly delighted with the support we have received from the Oxford AHSN team. The Oxford AHSN was instrumental in securing the Innovate UK Sustainable Innovation Fund support along with support from Buckinghamshire Healthcare. The funding has supported the development and clinical trial of the device, and the health economic assessment and sustainability evaluation. The HE and sustainability assessments have provided valuable insights into Releaf's potential benefits to the health and social care system."

Keith Binding, Managing Director, Binding Sciences Limited

"I found the device easy to use after a short practice. As a retired healthcare professional, I can visualise how this device would provide a welcome degree of independence for many less able people."

"This little device has been very effective for me. My fluid intake and episodes of incontinence have improved dramatically. My skin issues are not as bad as they were before I started the trial. Here's hoping that this little life changing device can be approved to be prescribed on the NHS."

"Having Releaf 2 available at any time of the day means less walks to the toilet and therefore not wetting my panties. This improves my quality of life. Basically the best female urinal I have ever come across."

"Releaf 2 improves my quality of life. I have always had a brilliant quality of life but my bladder issues have begun to affect my confidence when I am any distance from toilet facilities. Releaf 2 has led to a big reduction in anxiety with regard to not having close access to toilet facilities. It is not easy to contemplate being without Releaf 2."

Service users

"Releaf Seated has the potential to improve patient experience and outcomes as well as delivering environmental benefits. We have been happy to help Binding Sciences build up an evidence base and work with the NHS to carry out the first utility study for Releaf Seated."

Julie Hart, Director of Strategic and Industry Partnerships, Oxford AHSN

Next steps

The Oxford AHSN will look to provide support for further grant applications focusing on real world evaluation – timescales will be dependent on the availability of grants. We will be looking for more partners from across our region to take part in real world evaluation.

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