

19.01.2022 – 12:51 Uhr

## ALDER HEY AND NEEDLESMART PARTNERSHIP AIMS TO REDUCE 100,000 NEEDLESTICK INJURIES TO NHS HEALTHCARE WORKERS



Liverpool, United Kingdom (ots) -

--News Direct--

BRITISH SMART MEDTECH COMPANY INVENTS WORLD'S FIRST

END-TO-END SAFE NEEDLE DESTRUCTION TECHNOLOGY

TECH AIMS TO REDUCE 3 MILLION GLOBAL NEEDLESTICK INJURIES

In a recent survey\*, it was reported that a staggering 94 per cent of practising surgeons in the UK have either been personally affected by a needlestick injury (NSI) or have seen a colleague experience one. The Royal College Of Nursing also reported last year that the pressures of the pandemic and lack of training accounted for a 50% rise in sharps injuries.

UK based smart med-tech innovator NeedleSmart aim to change this statistic. NeedleSmart has designed the world's first end-to-end vaccination and safe needle destruction system aimed at reducing the 100,000 needlestick injuries (NSI) to NHS workers in the UK each year and **3 million globally**.

Of the 100,000 reported cases of NSI\*\*, NHS healthcare workers in the UK are the most affected profession, with 500,000 NSI in Germany and more than 1 million NSI in the USA. They are estimated to cost each NHS trust £500,000 each year\*\*\* and an estimated £127 million across England \*\*\*\*. This is not to mention the impact it has on staff absenteeism, the cost of bringing in replacement staff and legal litigation to NHS trusts, which are already under increased pressure with the pandemic.

To achieve this the Knowsley-based MedTech disruptor have entered into an exciting new innovation partnership with the world-renowned **Alder Hey Children's NHS Foundation Trust**, one of Europe's leading paediatric healthcare institutions with a unique dedicated innovation centre focused on solving real world problems faced day to day. The first phase of that innovation partnership will work on a safety and needlestick injuries (NSI) reduction programme as part of its clinician and patient safety enhancement. The project aims to impact, reduce and eventually prevent the **100,000 NSI** that occur every year to NHS healthcare staff.

In its wider remit, NeedleSmart is also working with 15 NHS trusts across the UK as part of the nationwide pilot, where its focus is shared between safety enhancement, carbon reduction and sustainability. This programme is breaking new ground on the art of the possible with regards to medical waste disposal resulting in direct carbon savings as part of the NHS sustainability initiative.

Alder Hey is widely recognised for its cocreation and adoption of new innovative technologies and boasts the largest hospital-

based Innovation Centre in the UK with 25+ full time innovation experts working out of a 1000sqm Innovation Hub in the heart of the hospital. Through this alliance, Alder Hey will work directly with NeedleSmart as it brings its multi-faceted hardware and software solutions to the healthcare markets.

Alder Hey will work shoulder-to-shoulder with the team at NeedleSmart in a co-development plan that consists of three phases:

- Clinician and patient safety enhancement
- Sustainability to recycling pilot
- Clinical workflow and data transactions

NeedleSmart, working in conjunction with British engineering solutions company CAL International, has designed and innovated a patented needle destruction system. Not only does this destroy the hypodermic needle, but also provides a full audit trail of each needle, charting the journey from its initial deployment, through to its assignment to healthcare staff, injection to patient and ultimately its safe destruction.

The NeedleSmart Pro device destroys the contaminated needle in a sealed chamber in just six seconds, effectively minimising post-procedural NSI. The NeedleSmart device heats the needles inserted into the chamber to 1,300 degrees Celsius, which will kill potential harmful pathogens, viruses and bacteria adhering to the needle. Within seconds the needle is compressed into a tiny ball and released from the NeedleSmart device as a safe sphere of metal at the tip of the syringe.

NeedleSmart have recently achieved FDA approval as a Class II medical device, making NeedleSmart the first UK company to achieve FDA 510(k) approval (Class II for Sharps Needle Destruction Device (NDD)), allowing the MedTech disruptor to expand into the US market and other global territories.

Commenting on the new safety partnership with Alder Hey Children's NHS Foundation Trust, **NeedleSmart CEO and smart MedTech disruptor, Cliff Kirby**, said:

*"We are absolutely delighted to be working with Alder Hey Children's NHS Foundation Trust on this unique innovation partnership, with its first phase aimed at clinician and staff safety around needlestick injuries (NSI). There is a massive issue for the NHS around the safety of healthcare staff. The wider implications of NSI include the costs of medical treatment for the injured healthcare worker, the costs of substitute staff and costly litigation, all while the NHS is under immense pressure dealing with the pandemic."*

**Claire Liddy, Managing Director of Innovation at Alder Hey Children's NHS Foundation Trust**, said:

*"At Alder Hey, we want to ensure that we are always standing at the leading edge of clinical innovation and safety. NeedleSmart's product solution offers a number of innovation drivers to build from starting with clinician and patient safety around the major issue of needlestick injuries, carbon reduction and data transactions. Working alongside the team at NeedleSmart, we are constantly challenging conventional thinking around sharps disposal and what benefits could be achieved at that moment."*

*We want to work with businesses that have the potential to make a real difference. At the heart of Alder Hey is a commitment to innovate – we dare to think differently, We build areas of technical strength and excellence and scan the horizon for cutting-edge technology that can positively impact healthcare, we work with a select number of partners that share our drive and vision – and NeedleSmart is one such business. At a time when co-worker safety, sustainability and innovation are so important, disruptive technologies have a critical role to play. We have been assessing the viability of NeedleSmart in the background during our first Covid-19 vaccination programme – and we are delighted to be working together with NeedleSmart to reduce the occurrence and impact of needlestick injuries across the NHS as we work through the daily challenges presented by the pandemic."*

**NeedleSmart's Cliff Kirby** added:

*"Coming from a product development background, I know all too well that any product only succeeds with the blessing and input of the end user. This ethos sits at the centre of the Alder Hey Innovation Centre and we are really excited to work with the team on a co-development strategy that could have such a huge and positive impact in the medical environment. Having watched the team at Alder Hey deliver the first rounds of Covid-19 vaccinations, it is an absolute privilege to be associated with an organisation that quite clearly takes a challenge head on and delivers a solution in a way that is second to none. The development work with Alder Hey provides critical use case information to support the national level programme targeting sustainable carbon reduction in this space to the wider NHS sustainability target of carbon net zero by 2040 within the NHS."*

ENDS

For all press and media enquiries, please contact

Head Of Global PR & Communications - Gerard Franklin @i5 Media

e: [gerard@i5media.co.uk](mailto:gerard@i5media.co.uk) m: 07791 039636

For more information on NeedleSmart, visit [www.needlesmart.com](http://www.needlesmart.com)

[www.digitalvaccination.com](http://www.digitalvaccination.com)

The NeedleSmart process explainer

<https://youtu.be/C968RkWtSi8>

The NeedleSmart DVS explainer

<https://www.youtube.com/watch?v=nIAzsMwyBDc>

## NOTES TO EDITORS

### ABOUT NEEDLESMART

NeedleSmart is a market leading, British patented needle destruction technology engineered in the UK with offices in Knowsley, and Pittsburgh, Pennsylvania. Their award-winning NeedleSmart PRO needle destruction device has achieved FDA approval as a Class II medical device, being the first UK company to achieve FDA 510(k) approval (Class II for Sharps Needle Destruction Device (NDD)).

As well as contributing to the reduction of needlestick injuries and their consequential costs, the NeedleSmart process has the potential to reduce the cost and increase efficiency of used needle disposal. NeedleSmart's innovative technology also offers the opportunity to move hypodermic needles, syringes and consumables associated with the injection/vaccination process, away from conventional sharps bins to a solution that allows recycling to become a possibility.

NeedleSmart technology compresses the needle, significantly reducing the needle footprint leading to a minimum of 50% increase in needle count per sharps bin. After the unexpected Covid-19 pandemic and the mass vaccination programme that followed, NeedleSmart's DVS (Digital Vaccination System) was created to support mass vaccination programmes, digitalising the vaccination process with every detail being automatically recorded in the cloud. DVS delivers a single solution that can coordinate every individual vaccination initiative into a single, coherent vaccination programme

### ABOUT ALDER HEY INNOVATION CENTRE – Today's Child, Tomorrow's Healthier Adult

Alder Hey Innovation is the largest, dedicated, purpose built, hospital led innovation centre in the UK. Alder Hey Children's NHS Trust has a proud history of innovation spanning over a hundred years.

Today we continue that legacy pioneering the use of cutting-edge technology and innovating to save lives and improve the life chances of today's child. Our ambition is to be the world leader in advancing child health with innovation, utilising our unique hospital-based innovation centre, disrupting, discovering and disseminating to have real impact.

Our mission is to solve the real-world healthcare problems children and young people face today, creating fair access to care and enabling a healthier future for all.

Our unique strengths lie in our experience to innovate and disrupt, with a strong track record of rapid problem solving, creating an end-to-end pipeline and process from problem identification and solutions through to commercial income.

Our strategy is fueled by a bespoke open innovation system, to rapidly identify real-world problems and bring the right partners together to solve those with innovative and disruptive technology. Our co creation approach involves scouting and partnering with local and international industry and academia, bringing the most innovative technology and solutions to Alder Hey, where we strive for excellence and breakthroughs in healthcare.

[www.alderheyinnovation.com](http://www.alderheyinnovation.com)

### ABOUT ALDER HEY

Alder Hey Children's NHS Foundation Trust provides care for over 330,000 children and young people every year. Alder Hey delivers clinical excellence for all children, for routine illnesses as well as very complex and rare conditions.

One of four stand-alone children's hospitals in the UK, it is a national centre for neuro and craniofacial surgery, a regional centre for burns injuries and a Centre of Excellence for children with cancer, heart, spinal and brain disease. Alder Hey as an NIHR funded Clinical Research Facility (CRF) that specialises in the design, and delivery, of early phase drug trials in children with a wide range of conditions.

The Trust is one of only four epilepsy surgical centres in the UK and one of only two accredited major trauma centres in the North West. Alder Hey is also a respiratory Extracorporeal Membrane Oxygenation (ECMO) surge centre and is the referral centre for the treatment of congenital heart defects in North West England, North Wales and Isle of Man. It became the first UK Centre of Excellence for Childhood Lupus in 2010.

Alder Hey is the first accredited Investing in Children hospital in the UK. It has a dedicated patient experience programme which includes the award-winning Alder Hey Arts involving music therapy, dance programmes, storytelling and animation projects. It is also one of a few hospitals to have a Children and Young Person's Forum.

Alder Hey opened a new hospital 'Alder Hey in the Park' in 2015. Europe's first hospital in a park, the new facility provides a purpose-built, unique and world class healing environment for children and young people.

Alder Hey is supported by The Alder Hey Children's Charity which aims to raise vital funds for lifesaving equipment, research projects and patient experience initiatives.

For more information visit [www.alderhey.nhs.uk](http://www.alderhey.nhs.uk) and [www.alderheycharity.org](http://www.alderheycharity.org)

### Reference Points

\*Survey conducted by SERMO. 510 actively practicing UK, US, German, Swedish, Japanese and Australian surgeons responded to

a survey on the importance of surgical gloves. April 2019.

\*\* A review of sharps injuries and preventative strategies, Journal of Hospital Infection, 2003

\*\*\* Needlestick Injury in 2008, Royal College of Nursing, 2008

\*\*\*\* NHS statistics, facts and figures. July 2017. <http://www.nhsconfed.org/resources/key-statistics-on-the-nhs>. There are 254 NHS Trusts in the UK, so the estimated cost is calculated to be £127m (£500,000 x 254)

## Contact Details

### i5 Media

Gerard Franklin

+44 7791 039636

[gerard@i5media.co.uk](mailto:gerard@i5media.co.uk)

View source version on newsdirect.com: <https://newsdirect.com/news/alder-hey-and-needlesmart-partnership-aims-to-reduce-100-000-needlestick-injuries-to-nhs-healthcare-workers-795443039>

2022 News Direct Corp.

## Medieninhalte



--News Direct--BRITISH SMART MEDTECH COMPANY INVENTS WORLD'S FIRST END-TO-END SAFE NEEDLE DESTRUCTION TECHNOLOGY TECH AIMS TO REDUCE 3 MILLION GLOBAL NEEDLESTICK INJURIES In a recent survey\*, it was reported that a staggering 94 per cent of practising surgeons in the UK have either been personally affected by a needlestick injury (NSI) or have seen a colleague experience one. The Royal College Of Nursing also reported last year that the pressures of the pandemic and lack of training accounted for a 50% rise in sharps injuries. UK based smart med-tech innovator NeedleSmart aim to change this statistic. NeedleSmart has designed the world's first end-to-end vaccination and safe needle destruction system aimed at reducing the 100,000 needlestick injuries (NSI) to NHS workers in the UK each year and 3 million globally. Of the 100,000 reported cases of NSI\*\*, NHS healthcare workers in the UK are the most affected profession, with 500,000 NSI in Germany and more than 1 million NSI in the USA. They are estimated to cost each NHS trust £500,000 each year\*\*\* and an estimated £127 million across England \*\*\*\*. This is not to mention the impact it has on staff absenteeism, the cost of bringing in replacement staff and legal litigation to NHS trusts, which are already under increased pressure with the pandemic. To achieve this the Knowsley-based MedTech disruptor have entered into an exciting new innovation partnership with the world-renowned Alder Hey Children's NHS Foundation Trust, one of Europe's leading paediatric healthcare institutions with a unique dedicated innovation centre focused on solving real world problems faced day to day. The first phase of that innovation partnership will work on a safety and needlestick injuries (NSI) reduction programme as part of its clinician and patient safety enhancement. The project aims to impact, reduce and eventually prevent the 100,000 NSI that occur every year to NHS healthcare staff. In its wider remit, NeedleSmart is also working with 15 NHS trusts across the UK as part of the nationwide pilot, where its focus is shared between safety enhancement, carbon reduction and sustainability. This programme is breaking new ground on the art of the possible with regards to medical waste disposal resulting in direct carbon savings as part of the NHS sustainability initiative. Alder Hey is widely recognised for its cocreation and adoption of new innovative technologies and boasts the largest hospital-based Innovation Centre in the UK with 25+ full time innovation experts working out of a 1000sqm Innovation Hub in the heart of the hospital. Through this alliance, Alder Hey will work directly with NeedleSmart as it brings its multi-faceted hardware and software solutions to the healthcare markets. Alder Hey will work shoulder-to-shoulder with the team at NeedleSmart in a co-development plan that consists of three phases: NeedleSmart, working in conjunction with British engineering solutions company CAL International, has designed and innovated a patented needle destruction system. Not only does this destroy the hypodermic needle, but also provides a full audit trail of each needle, charting the journey from its initial deployment, through to its assignment to healthcare staff, injection to patient and ultimately its safe destruction. The NeedleSmart Pro device destroys the contaminated needle in a sealed chamber in just six seconds, effectively minimising post-procedural NSI. The NeedleSmart device heats the needles inserted into the chamber to 1,300 degrees Celsius, which will kill potential harmful pathogens, viruses and bacteria adhering to the needle. Within seconds the needle is compressed into a tiny ball and released from the NeedleSmart device as a safe sphere of metal at the tip of the syringe. NeedleSmart have recently achieved FDA approval as a Class II medical device, making NeedleSmart the first UK company to achieve FDA 510(k) approval (Class II for Sharps Needle Destruction Device (NDD)), allowing the MedTech disruptor to expand into the US market and other global territories. Commenting on the new safety partnership with Alder Hey Children's NHS Foundation Trust, NeedleSmart CEO and smart MedTech disruptor, Cliff Kirby, said: "We are absolutely delighted to be working with Alder Hey Children's NHS Foundation Trust on this unique innovation partnership, with its first phase aimed at clinician and staff safety around needlestick injuries (NSI). There is a massive issue for the NHS around the safety of healthcare staff. The wider implications of NSI include the costs of medical treatment for the injured healthcare worker, the costs of substitute staff and costly litigation, all while the NHS is under immense pressure dealing with the pandemic." Claire Liddy, Managing Director of Innovation at Alder Hey Children's NHS Foundation Trust, said: "At Alder Hey, we want to ensure that we are

always standing at the leading edge of clinical innovation and safety. NeedleSmart's product solution offers a number of innovation drivers to build from starting with clinician and patient safety around the major issue of needlestick injuries, carbon reduction and data transactions. Working alongside the team at NeedleSmart, we are constantly challenging conventional thinking around sharps disposal and what benefits could be achieved at that moment. We want to work with businesses that have the potential to make a real difference. At the heart of Alder Hey is a commitment to innovate – we dare to think differently, We build areas of technical strength and excellence and scan the horizon for cutting-edge technology that can positively impact healthcare, we work with a select number of partners that share our drive and vision – and NeedleSmart is one such business. At a time when co-worker safety, sustainability and innovation are so important, disruptive technologies have a critical role to play. We have been assessing the viability of NeedleSmart in the background during our first Covid-19 vaccination programme – and we are delighted to be working together with NeedleSmart to reduce the occurrence and impact of needlestick injuries across the NHS as we work through the daily challenges presented by the pandemic.” NeedleSmart's Cliff Kirby added: “Coming from a product development background, I know all too well that any product only succeeds with the blessing and input of the end user. This ethos sits at the centre of the Alder Hey Innovation Centre and we are really excited to work with the team on a co-development strategy that could have such a huge and positive impact in the medical environment. Having watched the team at Alder Hey deliver the first rounds of Covid-19 vaccinations, it is an absolute privilege to be associated with an organisation that quite clearly takes a challenge head on and delivers a solution in a way that is second to none. The development work with Alder Hey provides critical use case information to support the national level programme targeting sustainable carbon reduction in this space to the wider NHS sustainability target of carbon net zero by 2040 within the NHS.”

ENDSFor all press and media enquiries, please contactHead Of Global PR & Communications - Gerard Franklin @i5 Media: gerard@i5media.co.uk m: 07791 039636 For more information on NeedleSmart, visit [www.needlesmart.com](http://www.needlesmart.com)[www.digitalvaccination.com](http://www.digitalvaccination.com) The NeedleSmart process explainer <https://youtu.be/C968RkWtSi8> The NeedleSmart DVS explainer <https://www.youtube.com/watch?v=nIAzsMwyBDc>

NOTES TO EDITORS ABOUT NEEDLESMAST NeedleSmart is a market leading, British patented needle destruction technology engineered in the UK with offices in Knowsley, and Pittsburgh, Pennsylvania. Their award-winning NeedleSmart PRO needle destruction device has achieved FDA approval as a Class II medical device, being the first UK company to achieve FDA 510(k) approval (Class II for Sharps Needle Destruction Device (NDD)). As well as contributing to the reduction of needlestick injuries and their consequential costs, the NeedleSmart process has the potential to reduce the cost and increase efficiency of used needle disposal. NeedleSmart's innovative technology also offers the opportunity to move hypodermic needles, syringes and consumables associated with the injection/vaccination process, away from conventional sharps bins to a solution that allows recycling to become a possibility. NeedleSmart technology compresses the needle, significantly reducing the needle footprint leading to a minimum of 50% increase in needle count per sharps bin. After the unexpected Covid-19 pandemic and the mass vaccination programme that followed, NeedleSmart's DVS (Digital Vaccination System) was created to support mass vaccination programmes, digitalising the vaccination process with every detail being automatically recorded in the cloud. DVS delivers a single solution that can coordinate every individual vaccination initiative into a single, coherent vaccination programme

ABOUT ALDER HEY INNOVATION CENTRE – Today's Child, Tomorrow's Healthier Adult Alder Hey Innovation is the largest, dedicated, purpose built, hospital led innovation centre in the UK. Alder Hey Children's NHS Trust has a proud history of innovation spanning over a hundred years. Today we continue that legacy pioneering the use of cutting-edge technology and innovating to save lives and improve the life chances of today's child. Our ambition is to be the world leader in advancing child health with innovation, utilising our unique hospital-based innovation centre, disrupting, discovering and disseminating to have real impact. Our mission is to solve the real-world healthcare problems children and young people face today, creating fair access to care and enabling a healthier future for all. Our unique strengths lie in our experience to innovate and disrupt, with a strong track record of rapid problem solving, creating an end-to-end pipeline and process from problem identification and solutions through to commercial income. Our strategy is fueled by a bespoke open innovation system, to rapidly identify real-world problems and bring the right partners together to solve those with innovative and disruptive technology. Our co creation approach involves scouting and partnering with local and international industry and academia, bringing the most innovative technology and solutions to Alder Hey, where we strive for excellence and breakthroughs in healthcare. [www.alderheyinnovation.com](http://www.alderheyinnovation.com)

ABOUT ALDER HEY Alder Hey Children's NHS Foundation Trust provides care for over 330,000 children and young people every year. Alder Hey delivers clinical excellence for all children, for routine illnesses as well as very complex and rare conditions. One of four stand-alone children's hospitals in the UK, it is a national centre for neuro and craniofacial surgery, a regional centre for burns injuries and a Centre of Excellence for children with cancer, heart, spinal and brain disease. Alder Hey as an NIHR funded Clinical Research Facility (CRF) that specialises in the design, and delivery, of early phase drug trials in children with a wide range of conditions. The Trust is one of only four epilepsy surgical centres in the UK and one of only two accredited major trauma centres in the North West. Alder Hey is also a respiratory Extracorporeal Membrane Oxygenation (ECMO) surge centre and is the referral centre for the treatment of congenital heart defects in North West England, North Wales and Isle of Man. It became the first UK Centre of Excellence for Childhood Lupus in 2010. Alder Hey is the first accredited Investing in Children hospital in the UK. It has a dedicated patient experience programme which includes the award-winning Alder Hey Arts involving music therapy, dance programmes, storytelling and animation projects. It is also one of a few hospitals to have a Children and Young Person's Forum. Alder Hey opened a new hospital 'Alder Hey in the Park' in 2015. Europe's first hospital in a park, the new facility provides a purpose-built, unique and world class healing environment for children and young people. Alder Hey is supported by The Alder Hey Children's Charity which aims to raise vital funds for lifesaving equipment, research projects and patient experience initiatives. For more information visit [www.alderhey.nhs.uk](http://www.alderhey.nhs.uk) and [www.alderheycharity.org](http://www.alderheycharity.org)

Reference Points \*Survey conducted by SERMO. 510 actively practicing UK, US, German,

Swedish, Japanese and Australian surgeons responded to a survey on the importance of surgical gloves. April 2019. \*\* A review of sharps injuries and preventative strategies, *Journal of Hospital Infection*, 2003 \*\*\* Needlestick Injury in 2008, Royal College of Nursing, 2008 \*\*\*\* NHS statistics, facts and figures. July 2017. <http://www.nhsconfed.org/resources/key-statistics-on-the-nhs>. There are 254 NHS Trusts in the UK, so the estimated cost is calculated to be £127m (£500,000 x 254) i5 Media Gerard Franklin+44 7791 039636 [gerard@i5media.co.uk](mailto:gerard@i5media.co.uk) View source version on newsdirect.com: <https://newsdirect.com/news/alder-hey-and-needlesmart-partnership-aims-to-reduce-100-000-needlestick-injuries-to-nhs-healthcare-workers-7954430392022> News Direct Corp.

Original content of: News Direct, transmitted by news aktuell

Diese Meldung kann unter <https://www.presseportal.de/en/pm/152041/5125412> abgerufen werden.