

# Innovation Matters

# CEO & Director Statements



**Sue Jacques**  
Chief Executive Officer

The amazing endeavours of CDDFT staff have been behind the recent upgrading of our CQC rating from 'requires improvement' to 'good'.

We know that can only be achieved through sustained hard work, and as our health service evolves, through developing and adopting innovative ways of working. Yet this vital element of our practice sometimes fails to get the attention it deserves. We need to champion these advances where we see them, and help all our staff to understand that innovation is at the heart of the work that we do.

Such sentiment comes from the very top – NHS England's Chief Executive, Simon Stevens, has stated, "Necessity is the mother of invention, and health care worldwide is now fizzing with smart innovation. In the NHS we're now taking practical action to develop and fast track these new techniques into mainstream patient care."

CDDFT Innovation is evolving. It will harvest ideas and bring together the learning from our diverse range of

services; it will streamline the process of developing and embedding innovative practice in our clinical and non-clinical areas, and it will be at the forefront of a new, regional service to access funding to develop high-value innovations for the benefit of our patients, of CDDFT staff, and of the organisation itself. Through all these, we will deliver the best care for our patients.

CDDFT wants to be at the forefront of Innovation in our region as we move towards more integrated working practices, and we will support our staff to deliver this in every way.



**Dr James Limb**  
Research & Innovation Director

The CDDFT Innovation team is evolving, and we want to champion and support innovation across the Trust, for all its staff and patients.

In 2020, we will develop a new, digital 'Virtual Innovation Hub' to bring you an agile, comprehensive service to support your ideas through the Innovation Pathway from ideas to adoption, we will promote your great ideas to facilitate their adoption across the wider service, and we will be leading the creation of the

new TD Health Solutions company to give you access to the diverse range of grants and funding available outside the NHS to bring your ideas to light. Speak to us through email, social media, by phone or in person, and be confident we will help to take your ideas to the next level.

**Dr Avinash Kapoor**  
Deputy Director of Innovation



The spread challenge<sup>1</sup> published by The health foundation balances the excitement of newer technology with difficulties to make innovation work everywhere.

The **'Falling short: Why the NHS is still struggling to make the most of new innovations'** document published by nuffieldtrust<sup>2</sup> lists fundamental issues as overly supply-driven and top-down approach to innovation along with inability to build innovation in daily job plans, lack of clarity of chief executive involvement in innovation, lack of evidence generation for assessing real world innovation, along with boundaries in procurement and organisations which only allow short term cash savings rather than long term transforming of care pathways leading to efficient services.

The CDDFT needs to exploit our staff's wealth of knowledge to permit widespread innovation at workplace. We see many great ideas discussed locally in workplace but not able to convert to actual improvements. We will gain more success in innovating by better understanding of newer concepts and

adapting our resources. We need to understand why successful interventions are not universally applicable in all areas. Some of these barriers are related to the programmes designed to spread innovations and complexity of healthcare environments. The adoption of innovation requires time, skill, and dedicated resources. Our innovation strategy provides this vision to make innovation widespread both in innovating and adopting which is integrated in all staff job roles. The strategy also includes a dedicated innovation hub, a clear pathway for funding, additional resources including newer platforms to discuss ideas, innovation links, and partnership with external and internal stakeholders along with specialist resources for commercial development.

We are constantly looking for newer ways to support our ambition of becoming the most innovative Trust in the region by 2025.

Please scan the QR codes below with your phone's camera to read the articles



1. The Spread Challenge



2. Falling short: Why the NHS is still struggling to make the most of new innovations

## Your Innovation Team

## How to Use this Brochure



The Innovation team is headed by Dr James Limb, Director of Clinical Research & Innovation and includes; Dr Avinash Kapoor, Deputy Director of Innovation; Ian Dove, Business Development Manager and Emma Gillespie, Business Development Support Officer.

We are based at the Centre for Clinical Research and Innovation, Floor 5 at Darlington Memorial Hospital and cover innovation all 7 of the trusts sites, including community teams.

We are the first point of contact for all staff with great ideas and support you by offering specialist advice and guidance to turn your idea from a concept to a fully working and product or service which has the potential to transform patient care.

The services we are able to offer along the Innovation Pathway include:

- Early stage market / product research
- Peer Reviews and Evaluation
- Prototyping
- Sourcing of Funding
- Links to expertise in academia and industry
- Specialist Intellectual Property advice (IP) covering; patents, trademarks, copyright, trade secrets and design rights



#ihaveanidea

Have you got a great idea? Contact us at: [cddft.ihaveanidea@nhs.net](mailto:cddft.ihaveanidea@nhs.net)



You can find out more about how we have supported innovation at the trust by viewing our **Innovation Showcase on page 10**.

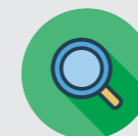


Find out more about the role of the **Academic Health Science Network, North East and North Cumbria (AHSN NENC)**, one of 15 local AHSN's established by NHSE in 2013 and how the Innovation Pathway can help support every stage of your idea from concept to success.



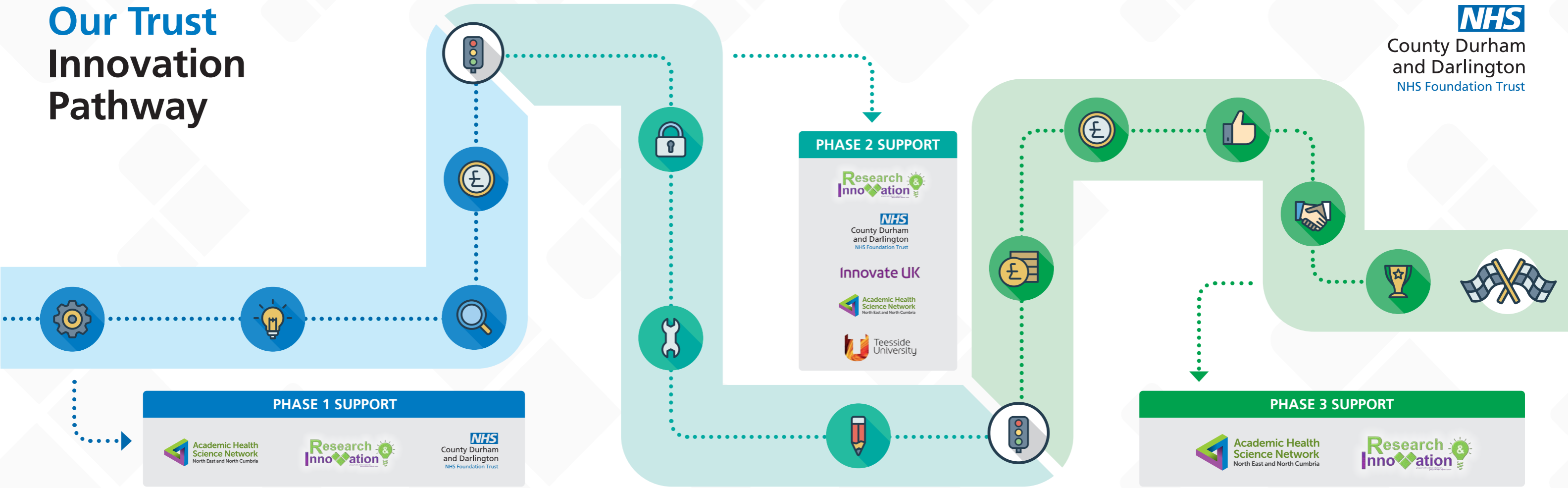
A huge part of our new 2020 strategy has been shaped around the feedback given to us by CDDFT staff in response to our 2019 Staff Innovation Culture Survey. This was the first and only culture investigation of its kind in NHS trusts within our region, and from this, we were able to better understand what staff require from us so that we can create the best possible service for you.

To view a snapshot of the results of our survey, please scan this QR code with your phone's camera.



Moving forward in 2020, there will be some changes. Look out for all updates in the trust's weekly staff news bulletin. If you would like to become more involved in innovation, why not explore solutions to the 4 Key Challenge Areas we will be focussing on over the next few years, which will be launched on Crowdcity.

# Our Trust Innovation Pathway



## Phase 1

- 1. Culture**  
The pathway begins with the promotion and nurturing of an innovations culture within the trust. This underpins everything the trust does within innovations with the support of the Innovations team. phone or in person, and be confident we will help to take your ideas to the next level.
- 2. Ideas**  
Ideas are collected on a case-by-case basis and assessed by the innovations team. Any potential ideas are placed on the panels' innovations project plan. The team will do their own initial assessment of the strength of an idea before making contact with AHSN NENC.
- 3. Markets**  
An initial gateway report is created by AHSN NENC, identifying its need within the market place. AHSN NENC undertake peer reviewing and provide feedback on the strength of an idea.
- 4. Phase 1 Funding**  
Proof of concept initial R&D funding grants available;  
  - UK: 5-10k available
  - EU: 50k available

**GATEWAY:**  
The strength of the idea at this stage is assessed. It can either be archived or then pushed through to the next phase.

## Phase 2

- 5. Intellectual Property**  
The staff members' idea is protected by the trusts intellectual property policy (IP) which is kept up to date by the commercial team. Patent application, copyright, design rights and trade mark assistance is also supported externally at a cost.
- 6. Prototype**  
If the innovations idea is a product development the trust can then contact partner Teesside University to support initial prototyping. If required AHSN NENC can help to locate industry partners.
- 7. Evaluate**  
Trial of a product or a service improvement for clinical practice can take place at this point to establish an evidence base for the effectiveness of the innovation. There may be a cost associated with this stage and research trials could be supported through grants from the likes of Innovate UK.

**GATEWAY:**  
Should further funding be needed for an idea it is re-assessed at this stage. Backing should be assured before devoting further time to ensure the project does not stall.

## Phase 3

- 8. Commercialisation**  
Following prototyping and evaluations the idea at this stage can then be assessed for commercial opportunities while preparing for regulatory approval. Ideas are assessed on whether a product or service idea could provide the trust and inventor some royalties, or whether it has no commercial value, but should be considered an improvement that could be freely shared with other trusts.
- 9. Funding**  
This is the pivotal point within the pathway. Assistance to fund a project may come through funding calls and grants dependant on the financial need. The commercial department with create a business plan and funding model to present to finance and the directors should it need fiscal support from internal means and support from the board should be assured before attempting to devote time and progress a project any further. Funding grants available at this stage dependant on project length;
  - UK: Less than 12 months - up to £100k  
Over 12 months - 100k+
  - EU: Less than 12 months - up to £1.5m  
Over 12 months - £3m

**NOTE:**  
The CDDFT Innovation Pathway is adapted from the North Tees and Hartlepool NHS Foundation Trust Innovation Pathway.

- 10. Adoption**  
The idea is now finalised and the next step is to raise it's profile as well as the profiles of those who supported it's development to promote a faster uptake.
- 11. Brokering**  
Share the innovation with trusts willing to take on the idea and make use of it within their organisation while working on connections with regional supply chain.





# The Role of the AHSN

County Durham and Darlington NHS Foundation Trust is a Member Organisation of the AHSN NENC. The Trust benefits from a wide range of services delivered by the AHSN NENC, including access to industry partners, engagement with networks of healthcare experts, and access to regional and national healthcare programmes.

Additionally, the Trust and staff have access to opportunities for collaborative working, which address local healthcare programmes as well as local and regional healthcare priorities and needs.

Working with your Trust Innovation team we help with ideas assessment including intellectual property and product searching, market research, and peer reviewing, to inform commercialisation decisions.

**Innovation Link - Charlotte Fox** : [charlotte.fox@ahsn-nenc.org.uk](mailto:charlotte.fox@ahsn-nenc.org.uk)



Organised by AHSN NENC, The Bright Ideas in Health Awards is now celebrating its seventeenth year.

The Awards celebrate the achievements of individuals and teams working within the NHS, industry and academia, who have risen to the challenge of telling us how, and where, they believe that the services provided to patients can be improved, either through a technical innovation or through better service delivery.

Everyone can play a part in developing innovative solutions to the healthcare challenges that we face every day.

The competition, depending upon the category, is open to all SMEs, NHS organisations and academic institutions in the North East of England and North Cumbria. Everyone can play a part in developing innovative solutions to the healthcare challenges that we face every day. The competition, depending upon the category, is open to all SMEs, NHS organisations and academic institutions in the North East of England and North Cumbria.

## Bright Ideas in Health Awards: Past and recent CDDFT Successes



**2019: 1<sup>st</sup> Place** - Innovation Champion Category

**Ian Dove:** Ian has worked with the Trust since 2008, first as Service Transformation Lead Officer, and then later on as Business Development Manager.

Throughout this time, he has championed digital health, provided mentorship and guidance to the wider Innovation Team, and has driven forward local Projects, working tirelessly in the development of innovation at the Trust. His experience and insight have been crucial to the successful implementation of innovation throughout the Trust.



**2019: 2<sup>nd</sup> Place** - Demonstrating an Impact upon Patient Safety Category

**Cardiac Arrest Prevention:** Cardiac arrests in hospital are normally attended by a cardiac arrest team of skilled individuals who have received appropriate training to ensure that they know how to respond.

Despite this, the survival rate is low, and it has remained so for the last fifty years. The aim of the Project is to reduce the incidence of cardiac arrest calls within the Trust, thereby improving patient outcome and experience. The Project began with a change in title from a 'Resuscitation Service' to a 'Cardiac Arrest Prevention (CAP) Team', in recognition of the fact that resuscitation often means that it is too late. The focus of the CAP Team is the prevention of avoidable harm, to achieve the best possible outcomes for patients accessing healthcare in the Trust.

Year	Award	Category	Innovation
2018	Finalist	Service Improvement	Improving the Efficiency of Moving and Handling Training
2017	Finalist	Service Improvement	Rib Attack Enhanced Recovery Pathway
2016	2nd	Innovative Medical Device or Technology	Octavius Fixation Device
2016	3rd	Innovative Medical Device or Technology	ReDi slide sheet
2015	Finalist	Innovative Technology or Device Category	Specific baby plinth designed for specialist audiologists to perform a specific hearing test on neonates PATCH- Paediatric Audiology Testing Crib Holder
2015	1st	Patient and Public Involvement	Continuous Development and Innovation in Patient & Public Involvement Strategies in Research
2014	1st	Service Improvement	Using digital health to monitor patients prescribed oral nutritional supplements
2013	1st	Training and Education Materials Category	UKETS - UK Endovascular Trainees
2013	HC	Service Improvement	Clinical Quality Improvement Framework (Cqif)
2013	HC	Service Improvement	Health Call INR monitoring
2012	HC	Leading Innovation Category	Care Home Admission Prevention Scheme (CHAPS)
2011	3rd	Innovative Medical Device or Technology	Airway Equipment Storage Device
2009	HC	Innovative Service Delivery	Patient Environment Decontamination Unit
2008	2nd	Innovative Medical Device or Technology	Arterial cannula dressing

## ICU Counselling Service



# Innovation Showcase



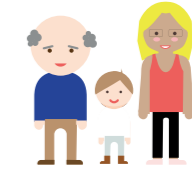
A new counselling service based at DMH run by Sally Horsley for the patients of intensive care and for family members bereaved through intensive care.

The support for the patients begins in the intensive care unit and continues on the ward. Once home, patients can return to the hospital for weekly counselling. Bereaved relatives are also offered weekly counselling following their loss.

This is a new service of six months and the innovation team were key in its development, assisting Sally through the innovation forum to secure an honorary

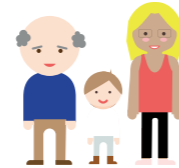
contract which enabled her to begin working immediately as a volunteer. A successful application was then made to have the post funded for twelve months through charitable funds and a room to host the service was sourced in the Centre for Clinical Research and Innovation.





## Health Call Digital Care Home

## Dysphasia Swallowing Cards



Dysphagia can result in choking, pneumonia, chest infections, dehydration, malnutrition and weight loss. In the general population the prevalence of dysphagia is around 2.3 % to 16 %.

The prevalence data increases with ageing rising to around 33% in the elderly (Smithard, D. Dysphagia: Prevalence, Management and Side Effects Nursing in Practice, February 2015).

An idea raised by Lorna Corcoran from the CDDFT Dietetics department produced in collaboration with the SALT team aims to assist patients with dysphagia to communicate their diet changes in food outlets.

Wallet sized cards for patients suffering from dysphagia provide an explanation to food service staff for why a customer may need the texture of their food altered. This removes any communication barriers and provides discreet information to food service staff.



The North East and North Cumbria has a significant residential and nursing homes for older people. The current model of care is that District Nurses provide care such as wound assessments and dressings and insulin administration.

Advanced Nurse Practitioners (ANPs) or Community Specialist Practitioners (CSPs) are contacted if there is any concern about the health of a resident as the first port of call. The ANPs or CSPs are provided by different organisations dependent on the CCG and District Nurses (DN's) are all provided by Foundation Trusts.

The care homes refer to the District Nurses and CSPs/ ANPs by phone and use different numbers for them to call for the appropriate team. There was no method for care homes to provide clinical observations and no structure for how the care home staff communicate with the relevant health care staff to make the referral.

Health Call Digital Care Home (HCDCH) is a digital application that has been developed, in partnership with the care homes, GP Federations, CDDFT and Health Call to have a dual function. Primarily it is a method for care homes to refer to DNs, ANPs or CSPs, but it is also used for routine monitoring and earlier identification of deterioration by capturing regular observations to determine 'the norm' for residents. This allows clinicians in our organisations to prioritise their workload and deliver interventions in a timely manner.

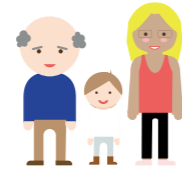
HCDCH allows care homes to interact with the health care system in a more efficient way using a digital

platform rather than over the phone and allows data that they have provided to be pulled into their EPR and available to appropriate clinicians, reducing the duplication of work.

**From the deployment of HCDCH during the in hours period the benefits identified have included:**

- A reduction of unplanned admissions to hospital.
- When the tool is fully implemented it could potentially save 1840 bed days per month in some areas
- 30% reduction in ANP visits
- More empowered care home staff
- Reduced time on the phone and therefore able to spend more time with residents
- More clinical information available to clinical staff enabling improved triaging and case load prioritisation
- Improved digital skills of care home staff
- Referrals being made earlier in the day as don't have to wait until there is time to phone the referrals through.

## Versal Slide Sheet



The Versal Slide Sheet is a disposable slide sheet with a difference, uniquely designed; it is one size and can be placed underneath the patient in the same position for all repositioning tasks.

The Versal Slide Sheet was designed by CDDFT Back Care Advisor, Diane Hindson who found that there were too many different slide sheet types and sizes available, often resulting in confusion amongst staff. Multiple slide sheets were required for one task, resulting in an increased cost to the trusts.

Diane designed a one size fits all solution, the Versal compromising of two surfaces that move against each other in any direction at the same time and remain joined together when underneath the patient. This design means one sheet can be used for a variety of positioning tasks and replaces the need for flat sheets where two must be used together, and tubular sheets where any movement not at 90 degrees to the axis of the tube is not easily facilitated.

GBUK now develop the slide sheet and the Versal has been fully adopted by CDDFT as the only slide sheet used throughout our trust.

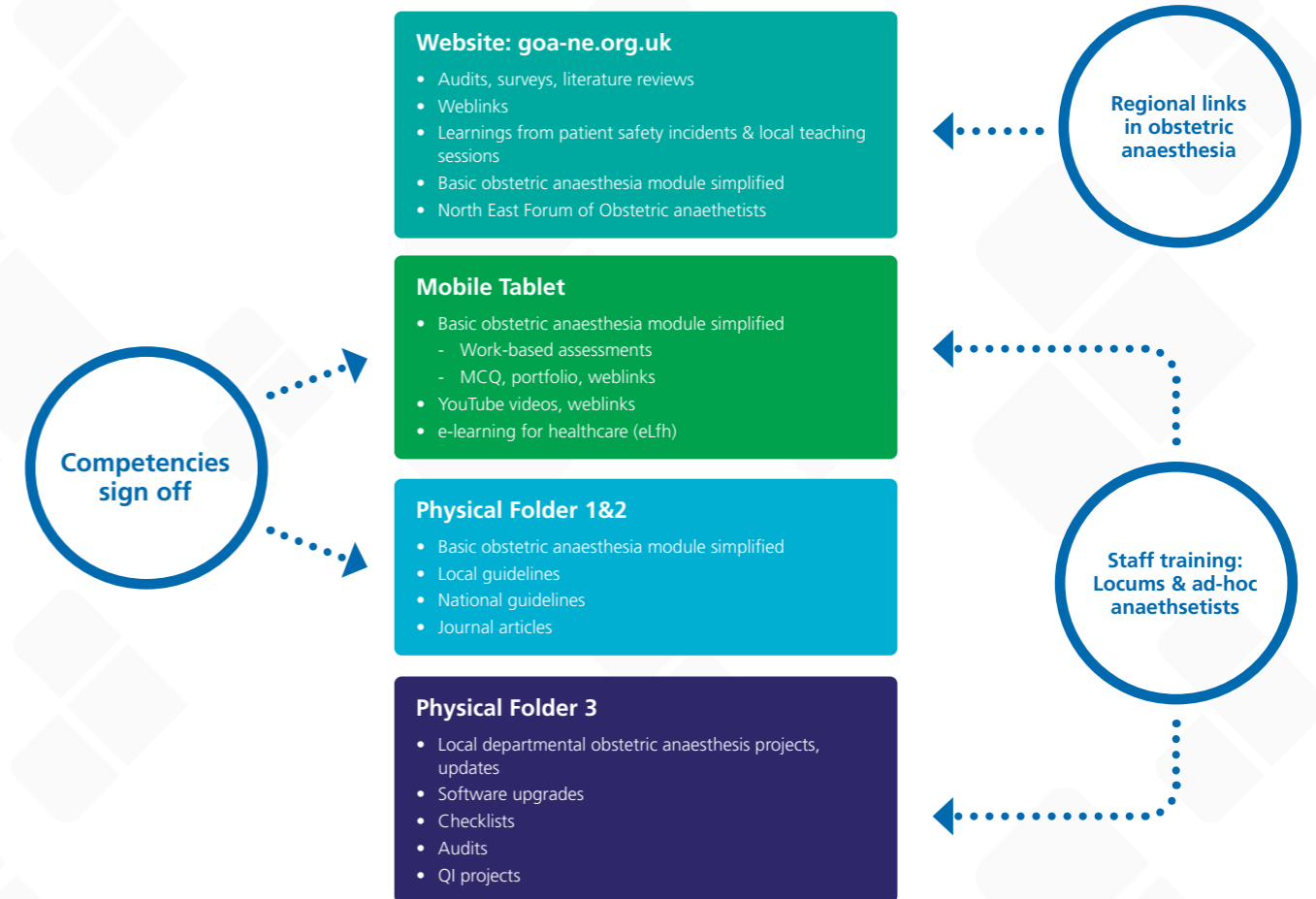
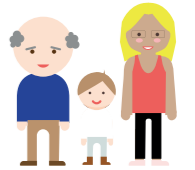
The Versal helps reduce error and risk, improves patient quality, comfort and safety and helps to protect staff from injury.

2019 FINALIST

BRIGHT IDEAS IN HEALTH AWARDS



## Mobile Learning in Obstetric Anaesthesia: Learning in the Clinical Setting



### Website: [goa-ne.org.uk](http://goa-ne.org.uk)

- Audits, surveys, literature reviews
- Weblinks
- Learnings from patient safety incidents & local teaching sessions
- Basic obstetric anaesthesia module simplified
- North East Forum of Obstetric anaesthetists

### Mobile Tablet

- Basic obstetric anaesthesia module simplified
  - Work-based assessments
  - MCQ, portfolio, weblinks
- YouTube videos, weblinks
- e-learning for healthcare (eLfh)

### Physical Folder 1&2

- Basic obstetric anaesthesia module simplified
- Local guidelines
- National guidelines
- Journal articles

### Physical Folder 3

- Local departmental obstetric anaesthesia projects, updates
- Software upgrades
- Checklists
- Audits
- QI projects

Regional links in obstetric anaesthesia

Staff training: Locums & ad-hoc anaesthetists

Innovation Showcase

As outlined in the NHS forward plan and Topol review, there is an ever increasing demand on NHS resources. Our idea (Right set up-Right information) addresses this by promoting efficient use of the time at work by availability of focussed relevant information in different platforms which facilitates on the job training and support learning in the clinical environment.

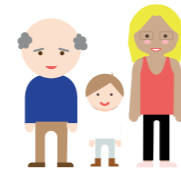
These platforms are in the form of physical folders, electronic tablet and a website. The group of obstetric anaesthetists in the north east (GOA-NE) website [www.goa-ne.org.uk](http://www.goa-ne.org.uk) allows easy sharing of obstetric anaesthesia related information among different hospitals in the North East.

We provided information on a mobile tablet to allow trainees to access and transport the material more easily. The device has internet access to allow electronic assessments.

We also created a physical folder containing the latest clinical governance information to facilitate staff access to the latest local updates, guidelines and audit projects. The folder for basic obstetric anaesthesia module simplified contains all information including literature review, local and national guidelines mapped to trainee competencies and available in hard copy which are required to get sign off of basic obstetric anaesthesia module.



## Acute Intervention Teams



### Cardiac Arrest Prevention

Cardiac arrests in hospital are normally attended by a cardiac arrest team of skilled individuals who have received appropriate training to ensure that they know how to respond.

Despite this, the survival rate is low, and it has remained so for the last fifty years. The aim of the Project is to reduce the incidence of cardiac arrest calls within the Trust, thereby improving patient outcome and experience. The Project began with a change in title from a 'Resuscitation Service' to a 'Cardiac Arrest Prevention (CAP) Team', in recognition of the fact that resuscitation often means that it is too late. The focus of the CAP Team is the prevention of avoidable harm, to achieve the best possible outcomes for patients accessing healthcare in the Trust.

2019 2<sup>nd</sup> Place

BRIGHT IDEAS IN  
HEALTH AWARDS



The project took place over a seven year period, April 2012 to March 2019, and comprised of 5 clear work streams, each of which evolved in response to learning from individual PDSA (Plan, Do, Study, Act) cycles. The work streams were:

- 1. Data Collection and Quality** - ensuring 100% data accuracy in relation to cardiac arrest calls to provide robust baseline data.
- 2. In Depth Case Review** - introduction of detailed case review, and if required investigation, of all cardiac arrest calls.
- 3. Hot Spots** - identification of 'hot spots' and delivery of targeted work tailored to specific themes arising e.g. education of nurses and health care assistants regarding early escalation.
- 4. Electronic Observations** - building a case for, and implementing, an electronic observation system combined with a bespoke escalation pathway.
- 5. Acute Intervention Team** - developing and implementing a team based on our organisational need, identified through work streams 1-4, to support the provision of proactive care to the deteriorating patient.

## What's Next?



January 22<sup>nd</sup> 2020 saw the official launch of CDDFTs dedicated Innovation Day and our first event held at the Durham Centre in Belmont



Approval of the **2020-22 Innovation Strategy**



**Launch of Crowdcity** - an ideas management platform and dedicated 'virtual hub' for CDDFT staff- look out for our new challenges and why not submit some of your own!

**For details on how to sign up, please contact the Innovation Team at [cddft.ihaveanidea@nhs.net](mailto:cddft.ihaveanidea@nhs.net)**



**New pathway for commercially viable innovations** following the incorporation of TD Health Solutions, A partnership between CDDFT and North Tees and Hartlepool Hospitals NHS Trust providing a dedicated portfolio management for commercial innovation projects with the aim to process innovations at a quicker pace.



Following the success of the trusts first Staff Innovation Culture Survey, we will be circulating our '**you said / we did**' findings and commencing stage 2 of the survey later this year.



Recruitment of **Staff Innovation Links**.



More workshops, challenges, innovation showcases and drop in sessions so **all staff** can contribute to innovation.



County Durham  
and Darlington  
NHS Foundation Trust

Become a CDDFT

# Innovation Link



Do you have an eye for a  
**great idea?**



Do you want to help make  
CDDFT **the most innovative  
trust** in the North East?



Could **you** be an Innovation  
Link?

**We are seeking enthusiastic and committed staff members from any clinical or non-clinical group and any band, to join our new voluntary team of Innovation Links.**

The Innovation Link will be a recognised supporter of innovation and a key point of contact for all staff with great ideas, providing a vital liaison between staff and the Innovation Team.

We want **all staff** to have the confidence and opportunity to submit their great ideas and to do this, innovation links to play a vital role.

So if you are interested in learning more about the world of healthcare innovation and improving patient outcomes through innovative new products and services, then we would love to hear from you!

For an informal chat about the role please contact Emma on **07500 089 478 or 01325 743 228.**

Alternatively if you have any questions or would like to nominate yourself or a colleague, please contact us at: [cddft.ihaveanidea@nhs.net](mailto:cddft.ihaveanidea@nhs.net)



**Please remember to gain consent from your Line Manger!**



safe • compassionate • joined-up care

# crowdicity®

Where Innovation Happens

### Introduction to Crowdicity:

Find out how our new collaboration platform can help foster a culture of innovation within CDDFT, bringing people together to discover better ideas faster, with minimum effort.

Crowdicity will help us foster a culture of innovation in a variety of ways, including;

#### Engaging staff

By creating custom innovation groups focusing on department, clinical needs or expertise to encouraging staff to innovate across the trust.

#### Idea refinement / modification

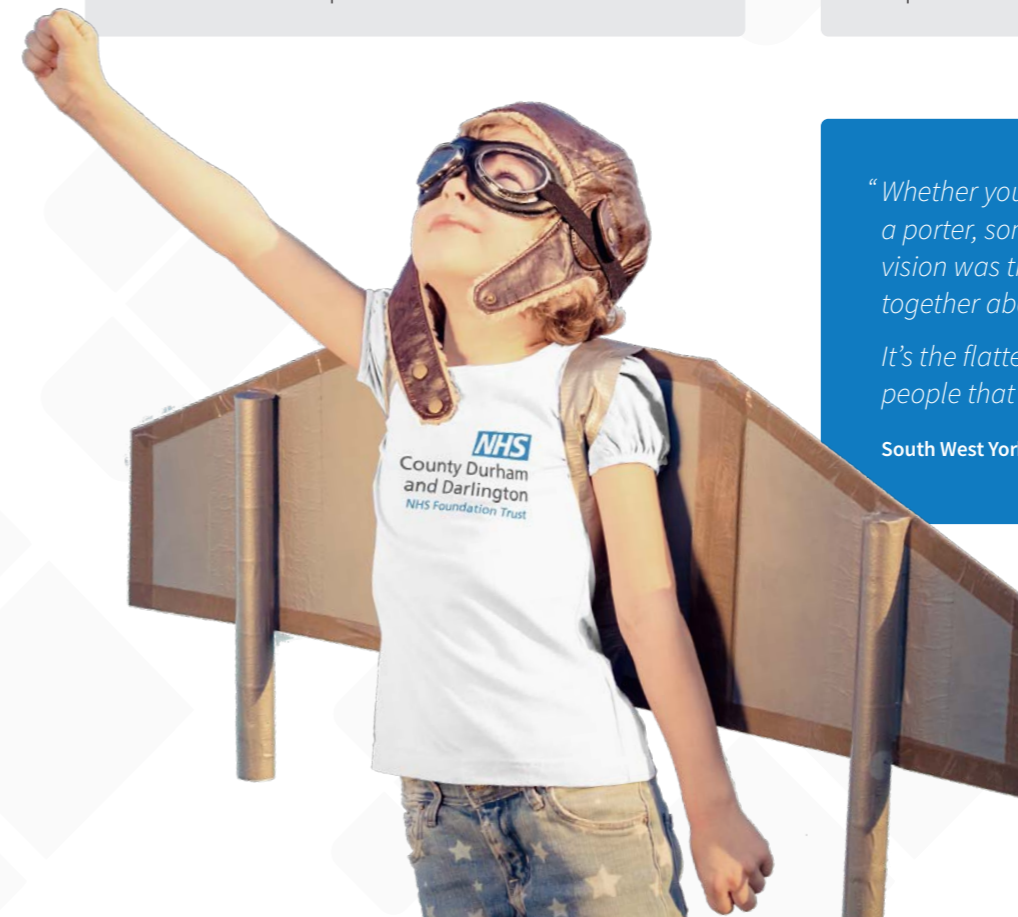
Customise the innovation journey to suit current criteria / processes before progressing the best ideas through to realisation and execution.

#### Co-creation

Collaborating with suppliers, partners and key players to refine products, devise new service models and deliver efficiencies, all benefiting from collective expertise.

#### Initiation of innovation challenges

Creation of events-based challenges including idea capture, refinement, validation and selection leading to awards, investment, recognition and adoption.

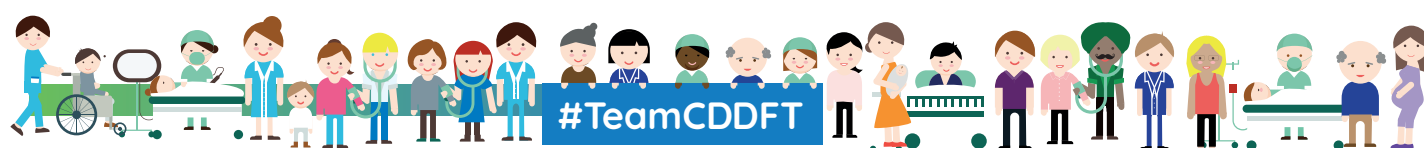


*“Whether you’re a staff nurse on a ward, the chief exec, a porter, someone who works in finance, whoever... the vision was that you can actually have a conversation together about something of shared interest and value. It’s the flattened hierarchy and that access to other people that is really, really powerful.”*

South West Yorkshire Partnership NHS Foundation Trust



County Durham  
and Darlington  
NHS Foundation Trust



### We are located at:

Centre for Clinical Research and Innovation  
Floor 5, Darlington Memorial Hospital

### If you are a staff member with a great idea to share, please contact:

✉ [cddft.ihaveanidea@nhs.ne](mailto:cddft.ihaveanidea@nhs.ne)

📞 Emma Gillespie on 07500 089 478 / 01325 743228

### If you are an external company and would like to work with us, please contact:

✉ [cddft.innovationteam@nhs.net](mailto:cddft.innovationteam@nhs.net)

📞 Emma Gillespie on 07500 089 478 / 01325 743228