

## THE HEALTH ECONOMIC IMPACT AND BENEFITS OF MEDISHOUT, 2020

Problem / Impact

### The Problem

Hospital staff rely on IT, Equipment, Facilities, Estates and Stock to deliver care. When problems occur they get delayed as:



### The Impact

Unresolved issues accumulate; which wastes time for the next member of staff, creates chaotic working environments and hugely impacts patient care:

- One third of NHS nurses waste two hours per shift finding missing equipment, which equates to £900m of wages annually.  
Journal of Nursing Times, 2009
- Clinicians only spend one third of their time actually with patients.  
Annals Internal Medicine, 2016
- There has been a 32% increase in cancelled NHS procedures due to non-clinical reasons, such as faulty equipment  
Independent UK, 2019

Solution / Key Features

### MediShout Is The Solution

**WHAT**  
 MediShout is the "Brain" within hospitals that technology can function off. We are the world's first platform to integrate all logistical departments, give staff a single user-interface for reporting and do AI predictive analysis.

**HOW**  
 The MediShout App allows staff to instantly report any logistical issue to the Helpdesk or maintenance team who create change. The data collected allows issues to be prioritized and fixed according to impact on care.

**AI-ANALYSIS IS KEY**  
 Our machine-learning algorithms predict issues such as broken equipment. This allows hospitals to prevent problems in advance and undertake smarter-procurement of the best-performing manufacturers.



### Key Features

- Two-way messaging & instant feedback for users
- Add Photos: allowing Engineers to fix issues more efficiently

### Where Do Shouts Go?

- HELPDESKS**  
 Integrate With All Existing Helpdesks
- MEDISHOUT**  
 Use MediShout's own Helpdesk To View Messages
- EMAIL**  
 Shouts Can Be Sent Directly To Any Assigned Email

**APPROACH**

Using gathered data, a team of health economists at Health Enterprise East Ltd (HEE) performed a retrospective economic impact evaluation of MediShout.

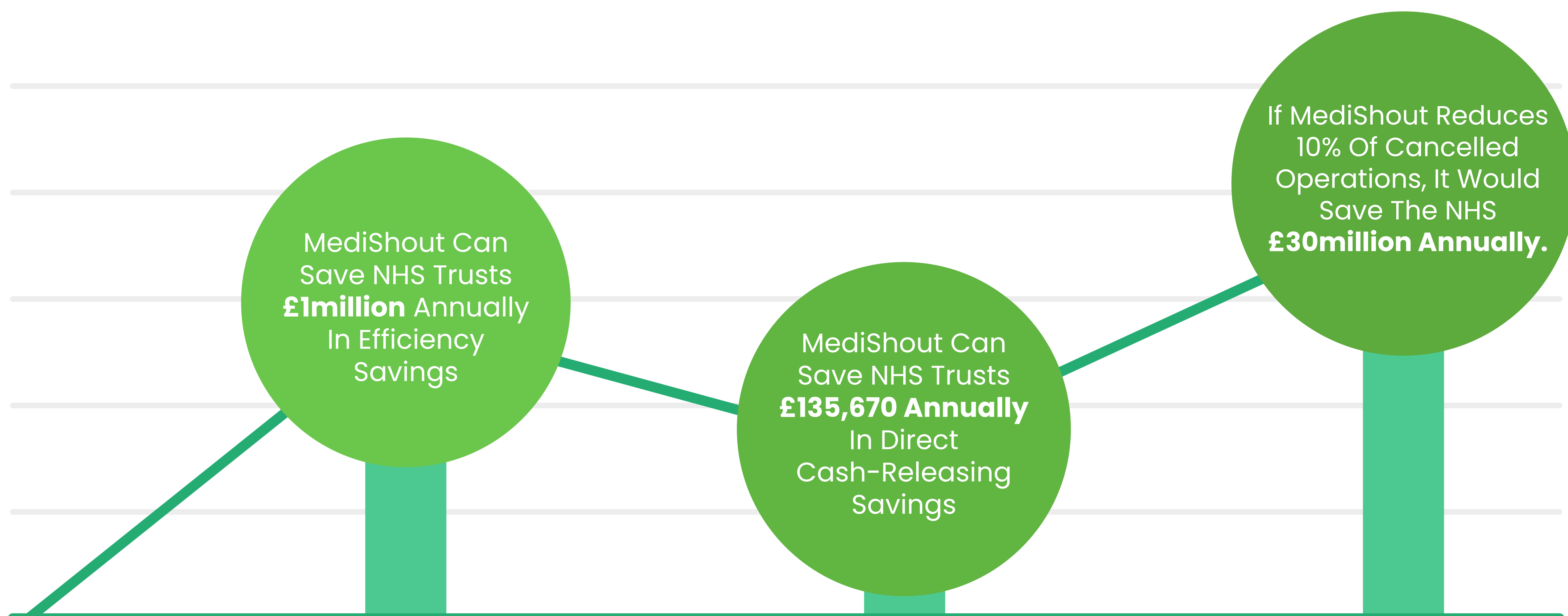
**DATA**

**Sources:** messages sent via the MediShout App and platform from eight NHS hospitals, freedom of information requests, peer-reviewed journals, clinician questionnaires, hospital staff focus groups, expert opinions.

**Metrics analysed:** nature of logistical issues impacting staff, resolution and reporting times of issues, delay between reporting and resolution, perceived time saving by the medical staff, staff preference and staff morale.

**ANALYSIS**

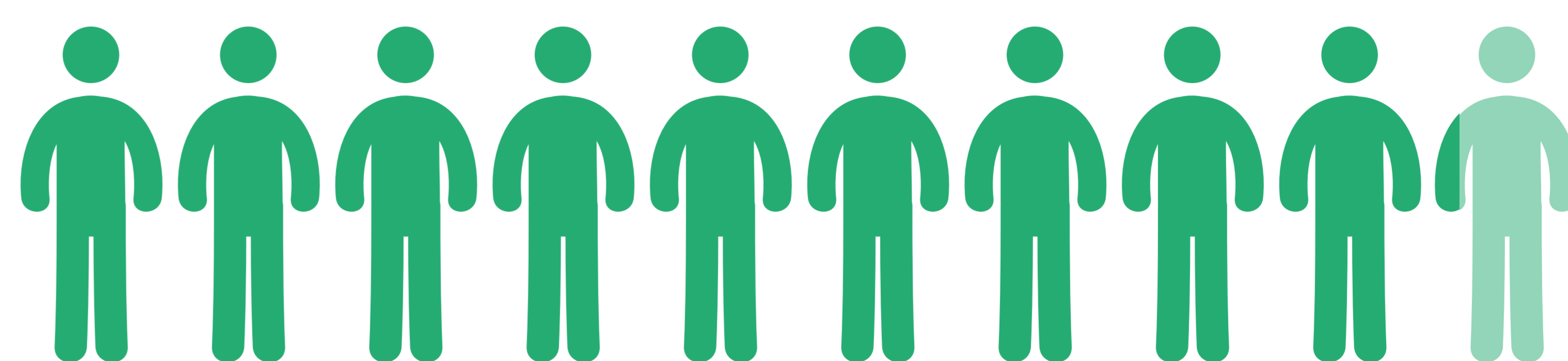
HEE performed a statistical analysis of the datasets. To provide a robust cost-saving estimation, they created an Economic Model which combined the above data with NHS tariff and unit costs for various grades and specialities of staff.



**MEDISHOUT CAN IMPROVE STAFF MORALE BY GIVING THEM CONTROL OVER THEIR ENVIRONMENT AND PREVENTING WASTED TIME:**

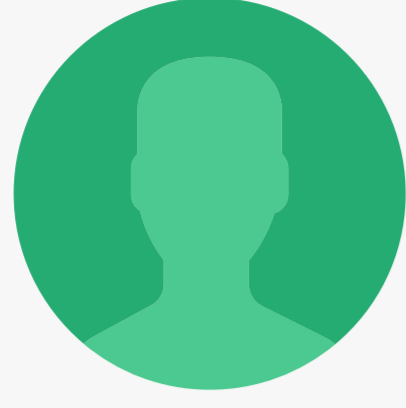


97% of staff (87/90) felt MediShout would give them more time with their patients




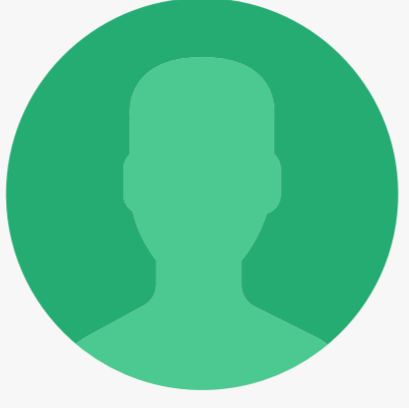
92% of staff (83/90) agreed they would use the MediShout App to report issues

## Testimonials




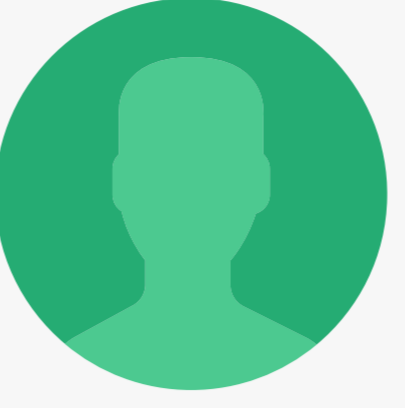
Medishout have worked with several of our NHS Trusts to understand our culture and adapt their technology to fit with our organisation's existing systems and flow.

**Charlotte Williams**  
NHS Trust Director of Strategy and New Care Models


Persistent stock issues improved [with MediShout] and a new computer was put in on the main surgical ward, saving a huge amount of time that could be spent on patient care instead.

**Alex Kennedy**  
Junior Doctor

MediShout is an excellent tool for ward-staff to easily escalate issues that affect our day-to-day work: broken printers and phones, dirty toilets, equipment shortages... things that have an underappreciated impact on morale but often go unresolved.

**Pablo Kostelec**  
Innovation Fellow




Since we have started using MediShout to log our Estates, Equipment and ICT issues we have had a much more robust oversight of these issues affecting our service delivery and are able to easily identify outstanding tasks and chase with the relevant service teams.


**Ian Gilmour**  
Paediatric Ed Matron



## Case Studies

**Case Study 01**


**West Hertfordshire Hospitals NHS Trust**



**15mins**  
saved per staff member daily

**Case Study 02**



**Imperial College Healthcare NHS Trust**



**Issue-reporting:**  
reduced from 10mins to 35secs with MediShout

**Case Study 03**




**Mid and South Essex University Hospitals Group**




Integrated with Helpdesks, 500 ward iPads, RFID tags

Wide-spread use: Nurses, Doctors, Admin, Physios, Pharmacists

## LIMITATIONS

-  Limited sample size for data collection
-  Differences in the size of hospitals will create variations in benefits reaped
-  Assumptions were made regarding the potential to reduce cancelled medical operations

## PROPOSED FUTURE WORK

-  Benefits of MediShout's technology will be further tested through longer-term adoption and research
-  A fully adopted national NHS roll-out could bring greater financial impact than estimated
-  MediShout uses Artificial-intelligence(machine-learning) algorithms to predict issues in advance such as broken equipment, which could help drive smart-procurement of devices. The economic benefits of this will be assessed in future studies.