

Digital Outpatients Innovation Exchange



Welcome

Eastern AHSN is delighted to host this event and we welcome you to participate in positive discussions and forge partnerships to accelerate the adoption of innovations within outpatients across the East of England.

Today also presents an opportunity to consider how you could practically adopt these innovations locally and be supported by Eastern AHSN to implement them successfully for your trust.

During the event, there will be opportunities for you to connect with new innovators and hear from existing partnerships during the two matchmaking sessions. These sessions were chosen for you based on preferences selected on registration for the event.

[Your specific tables will be on your Blendology badges. Please join this table after lunch in the Millennium Suite.](#)

There is a further session in the afternoon called 'pick your innovator' which will be a further opportunity to see any innovators.

If you have any questions about the day and support that Eastern AHSN can offer you, please see any member of the Eastern AHSN team.

Thank you,

Piers Ricketts, Chief Executive Officer

Eastern AHSN 
Part of
The AHSN Network

Innovators directory

Aire Logic Ltd

Ampersand Health

Cievert

DrDoctor

Health Navigator

Healthcare Communications

LifeBox Health

Message Dynamics Ltd

Olympus KeyMed

Ortus-iHealth

PathCloud Ltd

psHEALTH

SHI Global Limited

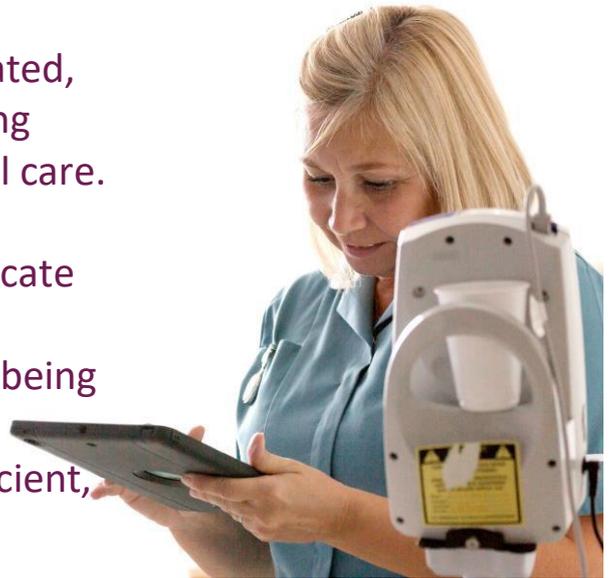
Zesty Ltd



forms4health

Forms4health is an intuitive, easily integrated, electronic smart forms platform, facilitating paperless working across health and social care.

Using the platform organisations can replicate existing processes, whether currently conducted on paper or digitally as well as being able to bring additional benefits to streamline workflows and allow more efficient, cost-effective and intelligent working.



Improve care outcomes through accurate up to date information recording at the point of care



Save clinical and patient time driving efficiency



Manage implementation in a way that suits you - start with a small number of forms and grow at your own pace



Support improved patient engagement



Create significant cost efficiencies, saving funds on paper, resources and staff time



Transform working practices and realise benefits quickly with our fast implementation



Enhance information sharing across departments and care settings



Achieve paperless targets quickly, efficiently and cost-effectively



Improve data quality through standardisation, ease of completion and consistent inputs

The flexible form design tool can be used to create forms for any purpose, supporting workflows across all departments. The forms themselves can include a range of sophisticated features, from branching logic (conditional questions), calculations, to clinical decision support.

In addition to removing the need for paper forms, reducing costs, and saving time, the data gathered through forms4health can be easily analysed to provide valuable business intelligence, from evaluating patient wait times to assessing resource allocation

To find out more about our eforms product and how it could help your business Achieve its desired outcomes, please visit our website www.forms4health.com
For information about our full range of services visit www.airelogic.com



New Model of Care for Long-Term Inflammatory Conditions



- Transformation of outpatient pathways.
- Clinically-validated self-management programmes.
- Aligned with the NHS Long Term Plan.

85%

...of patients prefer our model to the existing model of care.

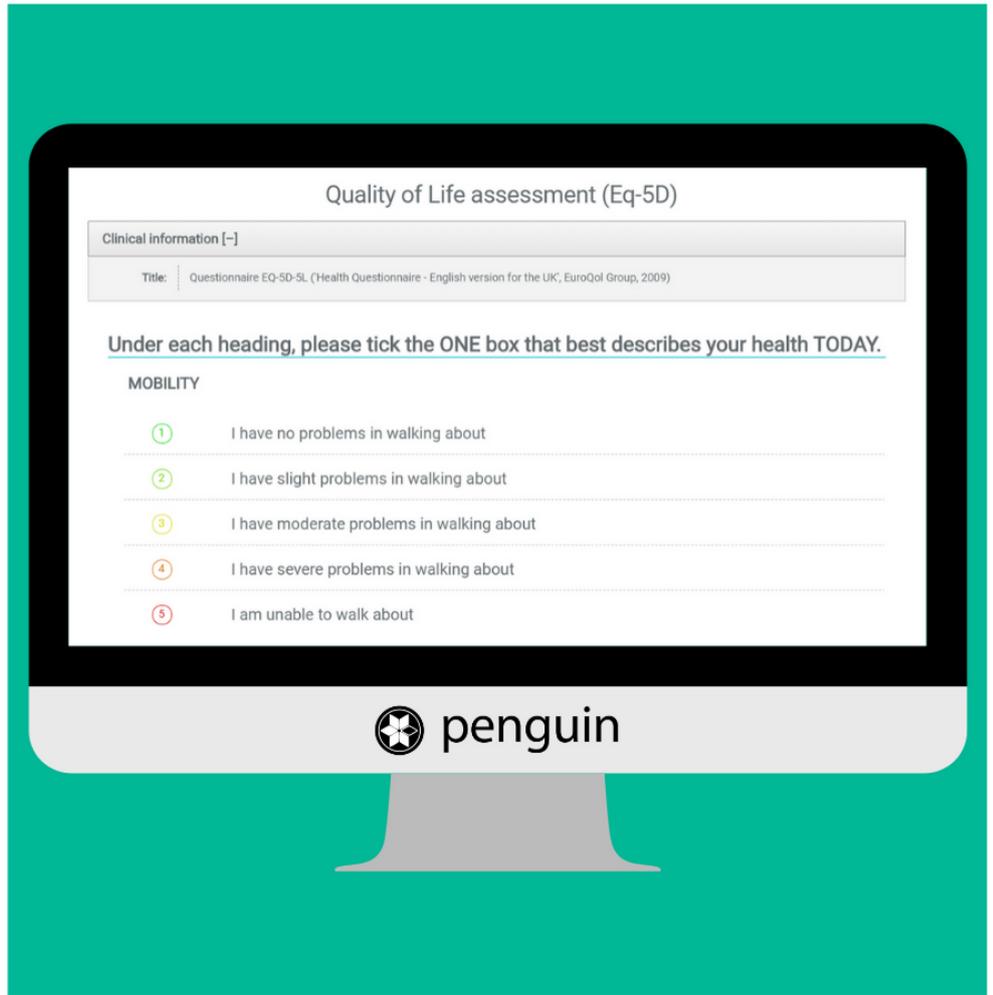
“

This app has definitely changed how I think about managing my condition. Having all the information, advice and reminders at my fingertips makes it easier to stay on top of everything...and it really is a comfort knowing my RA team can see how I'm doing and be close at hand when I need.

”



SARAH, RA PATIENT



No more **routine** follow-up appointments - use Penguin to assess patients **remotely**.

Penguin **automatically** determines when a patient **should have** a follow-up appointment, and when they can stay at **home**.

Penguin works in **any** clinical speciality.

**IMPROVE
OUTCOMES**



CONTACT US

Alex: alex.blakoe@cievert.co.uk

Web: cievert.co.uk

**REDUCE
COSTS**

Follow-up Management

See patients based on need, not time.

Situation:

According to the NHS Long Term Plan, a third of face-to-face follow-up appointments are deemed as unnecessary.

Healthcare providers are faced with an ever-increasing strain on NHS services, with outpatient appointments having doubled in the last 10 years. This model of care is no longer sustainable.

Benefits:

- 30%** average reduction of unnecessary face-to-face follow-up appointments
- 83%** average form completion rate
- 80%** average time saving with digital review clinics
- 93%** positive patient feedback



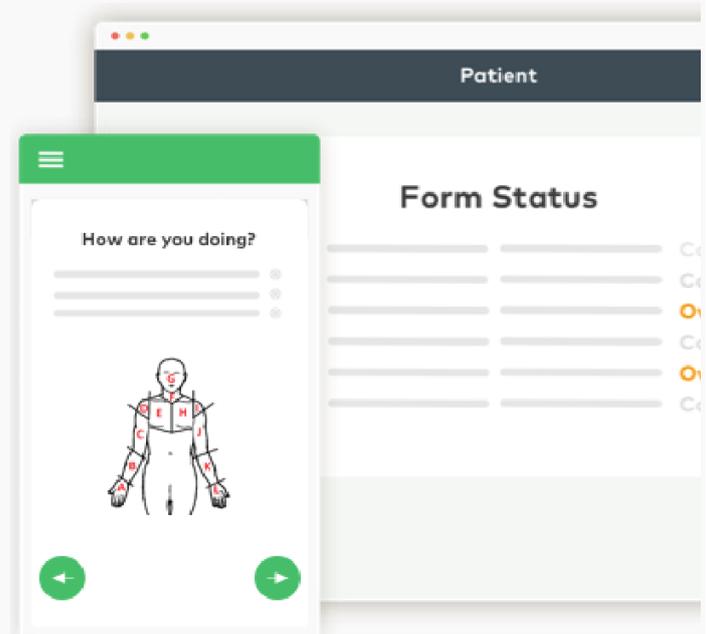
After having Follow-up Management live for 3 months, we have saved over 100 appointments in one clinic, and patients have rated our digital service as excellent.

*– Ananth Shivanandan
Oncology Consultant
Nottingham University Hospitals*

Solution

Follow-up Management reduces unnecessary face-to-face follow-up appointments for healthcare providers. It has been designed to directly contribute towards saving patients 30 million trips to hospital and the NHS over £1 billion a year in new expenditure. The product empowers clinicians to:

- Invite patients to complete a form digitally, through our secure Patient Portal
- Send patients reminders to maximise form completion
- Review results and communicate outcomes digitally
- Track patients' outcome history over time to inform better care



DrDoctor



The challenge:

Ever increasing demand for urgent and emergency care (UEC) is one of the most pressing problems for the NHS. Yet, only 1% of the population can account for up to 55% of unplanned bed days.

Our solution:

Health Navigator partners with NHS organisations to identify and support these patients most at risk of consuming urgent and emergency care. By combining powerful predictive analytics with nurse-led proactive patient coaching, we significantly reduce UEC and improve patient quality of life.

Working closely with 9 CCGs, 7 acute hospitals, and primary/community care providers, we do five things:

- Deploy cutting-edge AI and data analytics to identify patients with a high probability of non-elective care consumption in the near future.
- Place dedicated, highly-trained registered healthcare professionals on your site.
- Coach and navigate these 1% of patients at risk of occupying over 50% of hospital beds.
- Improve PROMs while significantly reducing the need for UEC.
- Report back system observations and insight to help providers and commissioners continuously improve UEC services and prevention.

Scientifically evidencing impact:

Our proactive health coaching intervention is scientifically documented through:

- 2 peer reviewed publications in the European Journal of Emergency Medicine.
- An ongoing NIHR-registered randomised control trial in partnership with the Nuffield Trust, currently deployed at 7 NHS acute trusts.

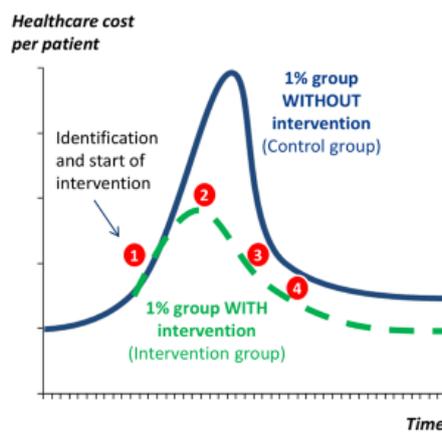
Our trials show:

- 36% reduction in A&E attendances.
- 24% reduction in non-elective spells.
- Reduction of LoS by up to 1.5 days on average per non-elective spell.
- Strong impact on patient self-reported health through SF12 surveys.
- A +33% impact on patients ability to manage their own healthcare (PAM13).

Our offer to outpatients teams:

- Reduced pressures on the NHS's front-line outpatient staff.
- Reduced referrals to outpatients from primary care and A&E.
- Improved capacity management.
- Support for outpatients between follow-up appointments, through our coaching.

Care consumption for our patients, compared to control



1. AI powered patient identification
To ensure the right intervention, to the right patients at the right time.



2. Proactive Health Coaching
Telephone-based and nurse-led, empowering the patient and improving care coordination.



3. Evaluation and continuous follow-up
Continuous monitoring to prove impact and ensure resource-efficiency.



4. Discharge
When the patient is no longer in need of our support, it is agreed with the patient that we end the programme.



#1 Patient appointment portal in secondary care

The multi award winning patient appointment portal is live in 55 hospitals at scale, delivering over 50% in postal cost savings for NHS trusts.

Appointment letters are delivered instantly to patients' smartphones, where they can access digital information anytime and anywhere, with no app download required.

Patients can register to receive all communications to the portal and view past and future appointment details.

Test results, discharge and outcomes letters can be delivered to the portal too, creating a clearly outlined patient pathway record of all communications within the portal inbox. PROMS, video consultations and follow up e-forms can also be accessed from this hub.

SMART FEATURES

- Letter delivery is instant and trackable with read receipts
- Patients confirm, cancel or rebook with 1 tap - reported back to the hospital in real time
- Socially inclusive: translates digital text to 99 languages in 2 taps and enables patients to have the letter read out loud and increase font size
- Inbox with all patient pathway letters with clear notification badges for new communications and cancelled appointments
- If the digital letter is not opened, a postal letter can be automatically sent
- Adds the appointment directly into patient's digital calendar
- Home to hospital Google map with live travel info
- Direct link for patients to access NHS advice and guidance
- A barcode/QR code can be added to enable patients to self-check in



"I previously missed an appointment because the postal letter didn't arrive until 3 weeks after the appointment date. I like the fact I have all the information I need digitally and with sufficient notice of future appointments."

Patient, United Lincolnshire Hospitals NHS Trust

"Such an efficient way of organising and booking appointments. It's there on your phone to look back on and gives you no excuse to say you did not remember. I am very impressed."

Patient, Calderdale and Huddersfield Hospitals NHS Trust

The LifeBox Health Digital Software

The LifeBox Health digital software has three key components - an interactive digital health questionnaire, audio-visual tools for enhanced patient education, and specific outcome tools to measure success of procedures.

The LifeBox interactive digital health questionnaire has resulted in improved quality of assessment of patients which has then enabled reduction of potential risks of patients undergoing surgery. This process of assessment has achieved enhanced health identification and optimisation of patients prior to their hospital admission, via information acquired through an innovative interactive completed digital health questionnaire. The unique interactive element to the health questionnaire, standardises assessment and the organisation of digital task driven actions.

The incorporation of specific designed AV media means, that for the first time, patients can be better informed about surgery, anaesthesia and the consenting process. It enables patients to acknowledge information and understanding of their proposed procedure. The patient feedback portal allows direct questions to be asked by patients to the medical staff. This can all be undertaken from the comfort of the patients own home which is shown to provide a stress free environment where the absorption and retention of the, sometimes complex, hospital information about surgery is enhanced.

The incorporation of assessment scores, allows patient outcomes to be measured through a single journey and means better compliance for completion of these scores, increasing

hospital standards of outcome measurements. Clinical results showed LifeBox achieved a 98% completion of PROMS scores for patients compared to 57% in the same time period for a competitor.

LifeBox key components



Interactive digital health questionnaire



Audio-visual tools for enhanced patient education



Specific outcome tools to measure success of procedures

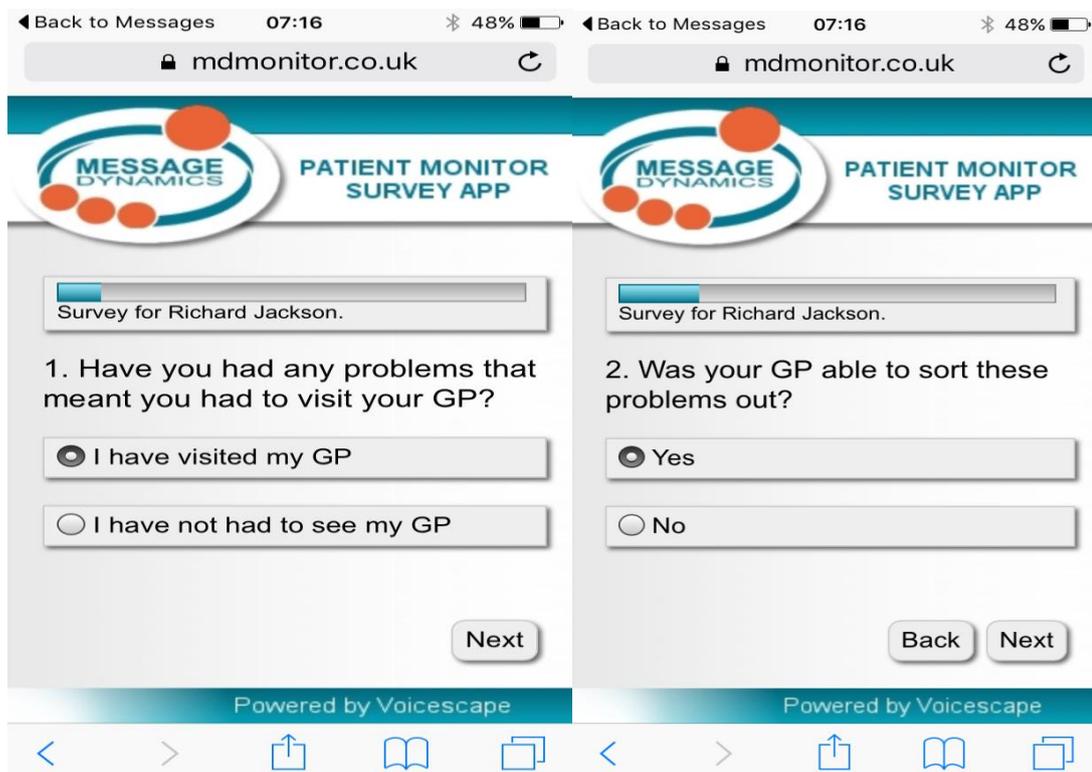


MESSAGE DYNAMICS INCREASES OUTPATIENT CAPACITY

Message Dynamics provides a range of digital services designed to improve the efficiency and quality of healthcare services. The company's Patient Monitor is a virtual consultation service, developed with NHSE funding. Patients can choose to receive these virtual consultations via either an app or the telephone.

Many face-to-face outpatient appointments could be dealt with through the use of technology or are not clinically necessary¹. Patient Monitor allows clinicians to ask patients the same questions that they would ask in a face to face consultation. Each consultation includes a triage (using rules set by the clinicians) that alerts clinicians if there is an issue with the patient's wellbeing and whether an intervention may be required.

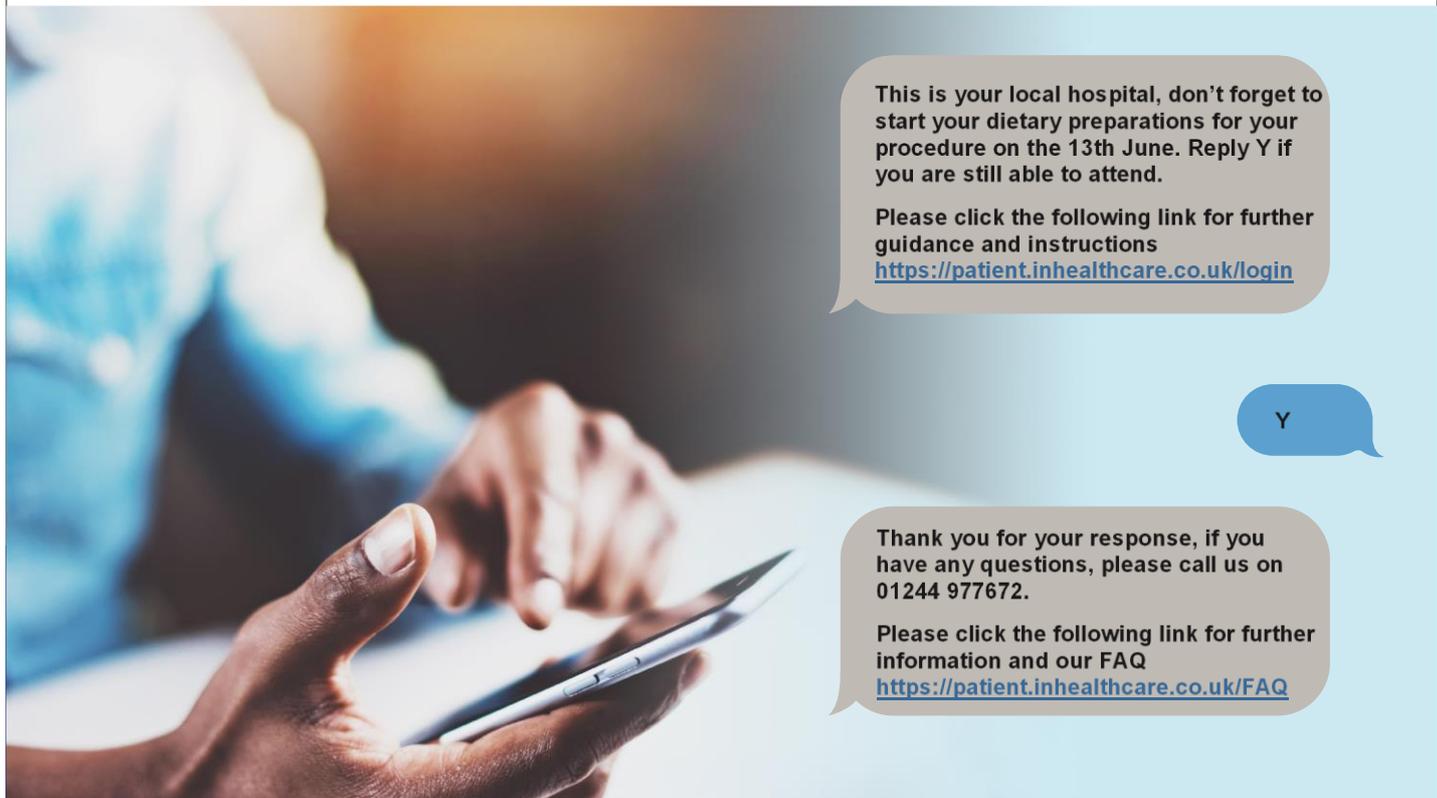
In situations where a (surgical) procedure has gone as planned and complications are unlikely, Patient Monitor can be used instead of a face-to-face appointment. The service allows patients to confirm that they are OK to be discharged back into the care of their GP. It also provides a safety net, because the service will alert clinicians if a patient's recovery has not gone as expected or if the patient needs help.



Patient Monitor is in use in a number of Trusts and it has been shown to reduce outpatient follow up appointments by 40% and DNAs by 80%.²

1) NHS Operational and Contracting Guidance 2020/21 (January 2020)

2) Outcomes of an Innovative Outpatient Monitor Service for Gynaecological Patients - The Case Study of the Royal Free Hospital



This is your local hospital, don't forget to start your dietary preparations for your procedure on the 13th June. Reply Y if you are still able to attend.

Please click the following link for further guidance and instructions
<https://patient.inhealthcare.co.uk/login>

Y

Thank you for your response, if you have any questions, please call us on 01244 977672.

Please click the following link for further information and our FAQ
<https://patient.inhealthcare.co.uk/FAQ>

Supporting Patients Through Their Colonoscopy Procedure

Helping patients better understand and engage with their care

The challenge for the NHS: patient education is often of poor quality and difficult to understand

- The current system is stretched to maximum capacity
- Paper based admin contributes to lost letters resulting in missed appointments
- Patients are not receiving the treatment or guidance they need
- Procedural waste causes a knock-on effect on a hospital's schedule

Our solution

In collaboration with Inhealthcare, we have developed **digital education service** which aims to engage patients throughout their treatment pathway – from referral to appointment to diagnosis and beyond.

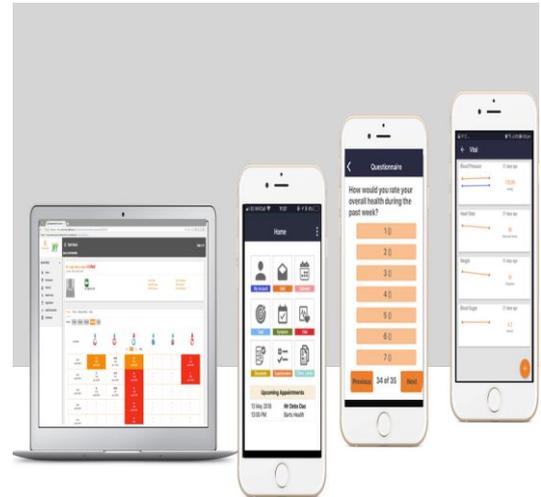
To find out how we can work with you to alleviate the pressure on your hospital and better manage your patient flow, visit our stand to try our technology first hand or email us amedical@olympus.co.uk and quote '**digital education service**'.

Ortus i-Health

At **Ortus-iHealth** we have developed the only **one-stop shop** to digitise outpatients & empower patients and clinicians to be in control of the clinical journey.

A digital platform connecting the entire outpatient journey

- Appointment management (patient and clinician)
- Digital Letters
- Digital Questionnaires (pre and post appointment, PROMS/PREMS)
- Patient vital signs recording and clinician remote monitoring
- Recording of clinical consultations
- Virtual outpatient clinics – video and remote (from vital signs reporting) consultations
- Patient access to clinical information and 2-way communication



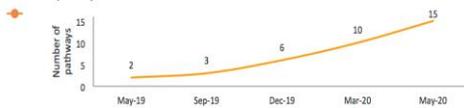
Our highly intuitive **web and app-based patient and clinician portals** provide a one-stop shop to digitise your out patients: **No need to procure multiple different solutions for each!** Combining:

1. Patient Portal
2. Virtual Clinic Solution though: Telehealth & Remote Monitoring
3. Digital Questionnaires: PROMS, PREMS, Pre-assessment, e-Consent

Traction Accelerator

2018-2019  7 departments

Over 1000 patients appointments Y1, >5000 appointments predicted Y2 (2020)



Target: 15% OP Appointments in 3 years

- High Clinical Adoption & Ease of use feedback
- High Patient Satisfaction

Validation



Peer reviewed publications



Reduce DNAs
12% to 3.4%
= up to 75%



See 6 more patients per
4 hour clinic
= 50% greater capacity



Digital review 8
patients in 45
mins

Start with one transformation project such as virtual clinics, but future proof and easily transitions to others such as a Patient Portal & integrate with your EMR with our Integration ready platform!

Our ask: We are looking for more partners to use our platform to facilitate scale up over different departmental use cases and to develop the evidence base to support the validation of virtual outpatient systems.

For further information please visit our website: www.ortus-ihealth.com/ Or contact Dr Debashish Das at dd@ortus-ihealth.com

PathCloud

Collaborative Diagnostics Platform



PathCloud is a diagnostics workflow automation solution to help resolve the time and cost burden facing clinicians, patients and healthcare organisations.

- **Saves time and cost** - by streamlining your workflow
- **Easy implementation** – works with your current systems
- **Scalable** - from the smallest to the largest healthcare organisation



Manage all your diagnostics investigations from a single command centre (MRI's, CT's, Bloods, Histopathology etc.). The platform is patient-centric and transitions geographical boundaries, working particularly well for "virtual" healthcare environments.

PathCloud's Software Modules



PathCloud's configurable software modules encompass the key aspects of the diagnostics delivery process:

- **Consult & MDT's:** Conduct virtual care consultations, and virtual advisory, MDT sessions;
- **Request Investigation:** One point of access for all your diagnostics service requests;
- **Notes:** Document consultations, and receive pre-consultation info;
- **Result View:** Receive and view all report and images from any diagnostics provider;
- **Analytics:** Measure performance, and payments;
- **Refer:** Receive or submit referrals to specialists, sub-specialists and MDT's;

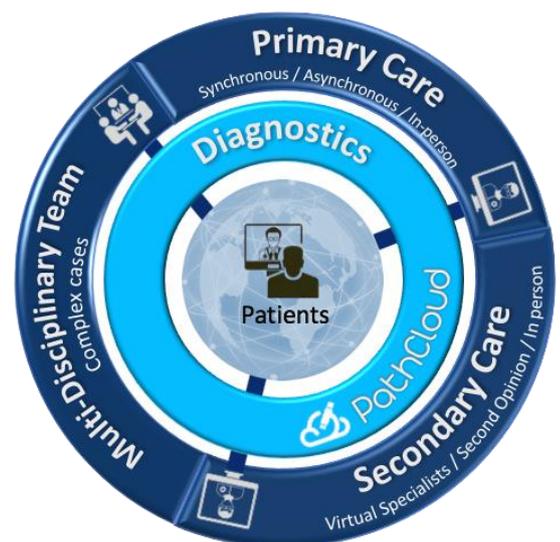
Interface with existing systems - enable bi-directional integration (HL7, FHIR, API's) to ensure patient information is available and accessible;

At PathCloud's core is an "Adaptive Workflow Module" which is designed to Integrate AI and Machine Intelligence to streamline and deliver a seamless 360-degree data acquisition, consulting and referral process.

95% of clinical pathways rely on diagnostics investigations. Physicians using PathCloud can easily transition patients with their data through Primary to Secondary care and advisory services if necessary, obtaining a specialist opinion on the most effective treatment option available to a patient.

We recognize that a quality healthcare service requires a strong clinical process and workflow. Our services are designed to optimize efficiencies and support your stability and growth regionally, nationally, or internationally.

Layers of Healthcare



Customising
To your needs



Training
To ensure optimal use



Dedicated support
Keep operating smoothly



Flexible pricing
To make it accessible

Email: info@Pathcloud.net, www.pathcloud.net, Call:+44 (0)845 527 5994

PathCloud Ltd, 184 Cambridge Science Park, Cambridge, CB4 0GA

ART

ADVANCED REFERRAL & TRIAGE

NHS TRUSTS AND COMMUNITY SERVICE PROVIDERS STRUGGLE TO COST-EFFECTIVELY PROCESS AND TRIAGE LARGE VOLUMES OF INCOMING REFERRALS.

COMMISSIONERS NEED TO UNDERSTAND DEMAND, VARIATION AND SUPPORT SERVICES TO CONSISTENTLY ADHERE TO CHANGING CCG POLICIES.

ART is a software solution that allows NHS organisations to streamline and standardise the referral process by automating activity and connecting software systems, so teams are freed up to focus on patient care.

TYPICAL CHALLENGES



High volume of manual and duplicative admin work



Limited visibility across the system



Clinical productivity is impacted



Patient risk due to human error and variation

THE OPPORTUNITY WITH ART



Reduce cost and free up staff through automation



Real-time, actionable and accessible insights



Streamlined experience and valuable feedback for clinicians



Automate complex and repetitive work

“ We were dealing with large volumes reactively ”

“ The efficiency and the data are the most powerful things ”

Talk to us about how ART works, the services we've supported so far, how they've benefited and if we might be able to support a service like yours.

Getting the right **patient**, to the right **place**, at the right **time**

psHEALTH

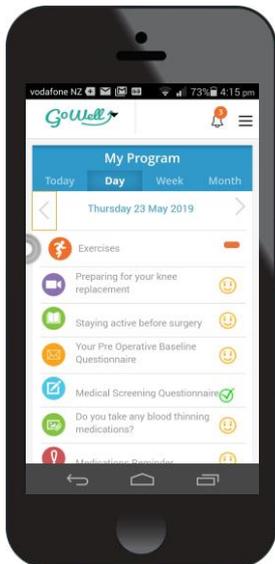
0345 5050 120

info@pshealth.co.uk

www.pshealth.co.uk

Mercury House, 117 Waterloo Road, SE1 8UL, London

Personalised care plans deliver £1million budgeted savings at NHS Trust



Care plans built by multi-disciplinary care teams with their patients have driven significant new cost savings, improved clinical capacity, outcomes and satisfaction

Go Well Health is a cloud based digital solution that multiple health and social care providers use to collaboratively build with their patients and carers engaging personalised care

that deliver information, questionnaires, exercises, automated messages, activities and support along the entire patient journey. Accessible 24/7 on any internet enabled device these plans enable more equitable care and achieve better patient outcomes at reduced costs and align to the NHS long term plan, particularly empowering people to better manage their health thereby reducing their reliance and demand on clinical services.

GWH has been proven at South Tees Hospitals NHS Foundation Trust to provide many savings and efficiencies in the orthopaedic outpatient environment and across the wider clinical pathway.

The Business Intelligence Unit estimates savings of £1million. This is over a 10 to 1 return on their investment.



Over the next 12 months Go Well Health will be used for the following operative procedures

- Elective orthopaedics
- Elective and acute colorectal surgery
- Elective and acute Gallbladder and biliary surgery
- Elective and acute hernia surgery in the main operation theatre
- Acute general surgery including laparotomy, small bowel obstruction and large bowel obstruction
- Elective upper abdominal surgery including liver surgery, reflux surgery, gastro-oesophageal resection and pancreatic surgery
- Acute appendicectomy and other acute laparotomy/laparoscopy

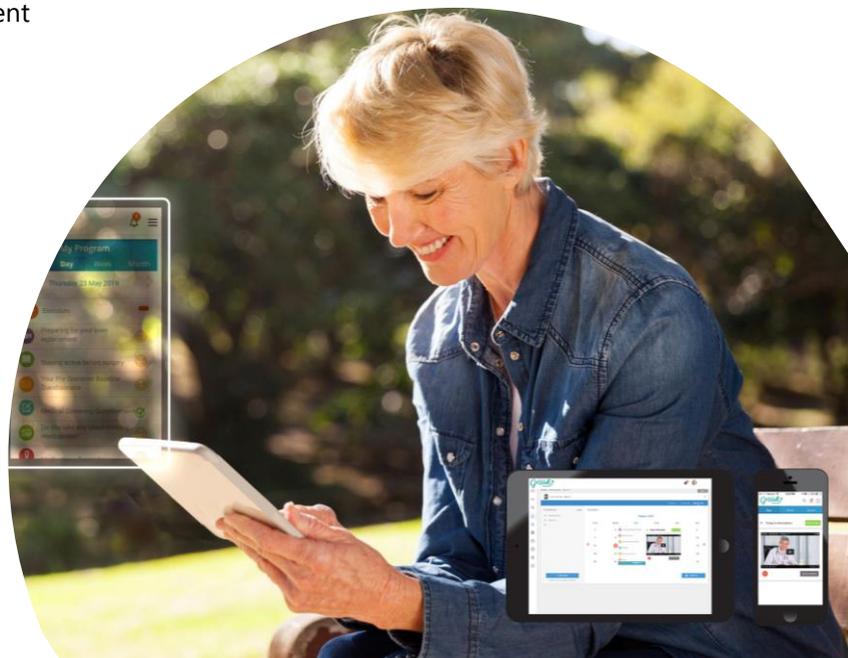
Go Well Health drives new efficiencies across the whole patient journey, achieves scale, consistency and frees up clinical capacity.

Contact

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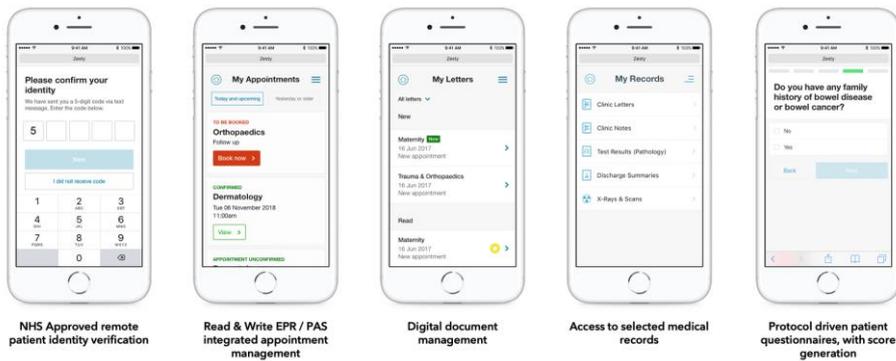


www.zesty.co.uk

Introduction

At Zesty we've spent the last 2 years building a new type of patient portal, in partnership with Milton Keynes University Hospital. Our platform empowers patients to manage their own care, right from their smartphone. Our integrated patient portal removes the friction from everyday health related tasks, like booking and managing appointments, reading letters digitally and sharing copies of electronic medical records.

Our vision is to fundamentally change the way hospitals and community providers communicate with their patients, whilst providing tools that empower patients to take more direct control of their care. Zesty work with 20 NHS Clients. 10 Acute NHS Trusts, 10 Primary Care, Community Trust and Sexual Health providers.



NHS Approved remote patient identity verification

Read & Write EPR / PAS integrated appointment management

Digital document management

Access to selected medical records

Protocol driven patient questionnaires, with score generation

Evidence

Getting patients to use technology is a significant challenge - many patient portal efforts have suffered poor patient adoption in the past. Patients need motivation to use online platforms and, in turn, a successful platform must be brilliantly simple to use. This is where Zesty shine. We have a long history of building internet apps that support millions of users and we've brought this expertise to healthcare.

The simple truth is transaction support drives adoption and subsequent engagement. Empowering patients to manage their own appointments online leads to significant adoption rates, creating an engaged digital audience and opening the door to a multitude of additional cost benefit scenarios. Services run on our platform at Guy's and St Thomas enjoy patient adoption rates of over 90%. Over 60% of all patients visiting Milton Keynes University Hospital register on our platform every week.

The Zesty team were proud to see NHS England highlighting our work in partnership with Milton Keynes University Hospital NHS Trust as an example of the GDE blueprint success.



www.zesty.co.uk

Our purpose is to turn great ideas into positive health impact

We believe that health is improved by great ideas, but great ideas only make an impact when they are put into practice. Our health is too important to leave change to chance.



Citizens, academia, health services and industry will achieve more working together than they will in isolation. Our job is to make this happen. We do this by helping innovators navigate complex systems, generate value propositions and convene stakeholders to overcome challenges together.

The Eastern region is home to the largest health and life sciences cluster outside the US and some of the most brilliant health and care practitioners in the world. We want our region to benefit from both, creating better health outcomes and more prosperity.



We are ambitious for patients and committed to applying evidence to make change happen.

Our business strategy

Priority enablers of change

The solutions to the key issues facing our health and care system are being realised in three enabling areas:



THE NHS WORKFORCE

The health and care workforce faces the same issue the world over, namely insufficient qualified professionals to meet increasing demand. In line with the NHS Long Term Plan and the Health Education England Topol Review, we firmly believe that the adoption of digital and other technologies can support the workforce in this period of increasing demand.

We are supporting new technologies to free up our workforce, making the best of their skills and expertise to address healthcare challenges. Through technology such as MedicBleep, which replaces outdated pagers with a time-saving mobile app, and the advent of expanding technologies such as clinical decision support tools and robotic surgery, we are able to create efficiencies and keep our incredible healthcare teams working at the top of their game.



PUBLIC AND PATIENT INVOLVEMENT

We work closely with patients and the public to ensure their voices inform and shape what we do. We do this, not only because it's the right thing to do, but also because it can help accelerate innovations through the system.

We continue to build a strong partnership with the East of England Citizens' Senate which plays an important role to ensure that citizens' views are at the heart of the development of health services in our region. Recently, we have also funded the development of a participatory appraisal programme where we recruited and trained citizens from diverse and non-traditional backgrounds and minority groups to run workshops in their communities to elicit views on different health and care issues. The team has recently completed its first programme, supporting aspects of the design of the proposed healthy new town at Northstowe.



DIGITAL

Digital technology is a fundamental part of everything we do. We are supporting the development and roll-out of fundamental digital infrastructure through our participation in the Eastern Region and the Cambridgeshire & Peterborough integrated care records. We are also supporting apps and digital technologies through a number of accelerator programmes that connect innovators with industry experts and NHS stakeholders, such as at our FutureTech roadshows and MedTechBOOST events. Initiatives such as Just One Norfolk, an award-winning platform we supported to increase access to health services for children and young people, are already making a real difference to people throughout the region.

Eastern AHSN

