

#### **IBD** Innovation

Design Workshop Report

December 2018



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### **Forword**

Inflammatory Bowel Disease affects more than 300,000 people in the UK. Many innovative solutions are being developed in this area in Scotland. These solutions range from clinical support tools and applications to support self-management to the production of digitally accessible trusted information. In November 2018 representatives from the NHS, government, third sector and commercial companies were brought together to share what they were working on. The aim of the day was to identify areas where participants could collaborate, ultimately improving the innovations available in this field.

The workshop was instigated by NHS Scotland and was designed and delivered by a team of designers from the Digital Health and Care Institute. This report describes the outputs form the day.

#### **Elizabeth Brooks**

Design Director, DHI

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### **Summary**

In November 2018 the Scottish Government funded Modern Outpatient Programme brought together a number of individuals, companies and third sector organisaitons currently engaged in digital innovations for Inflammatory Bowel Disease (IBD) patients and the clinicians supporting them. Each innovation was asked to supply information for a poster summarising their work before the workshop. These were available at the workshop and are included in this report. During the workshop the participants collectively mapped out their IBD products which aimed at supporting primary care, UK. The map included an area for secondary care, community care, and patients to better manage this long-term condition.

Following an exhibition of the posters and a number of demonstrations provided by participants, the group each defined and mapped their idea in the context of a typical patient pathway for someone diagnosed with an IBD related condition.

The mapping exercise aimed to illustrate any overlaps or complimentary areas of deployment in the systems being described by the participants. The map template which was adapted for this workshop was based on a generic patient pathway developed by Crohn's and Colitis

systems aimed at patients and an area for those aimed at clinicians. Each innovation was then mapped to the area in the patient pathway it aimed to serve.

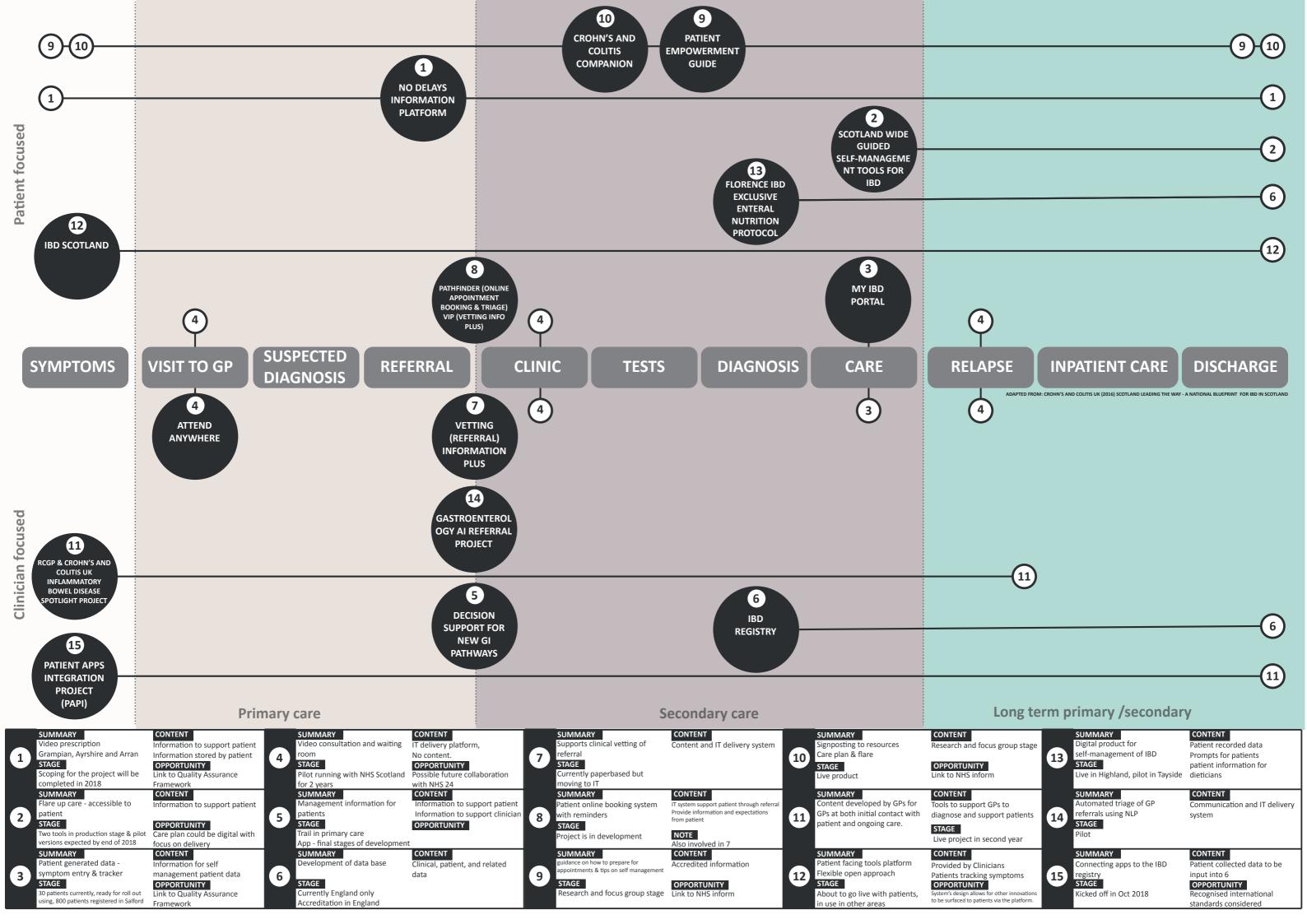
In the course of the mapping it was recognised that some innovations aimed to offer an underpinning technical architecture which would serve the length of the patient pathway. In the same way, some providers of information also aimed to support the patient from the start to the end of the pathway.

A number of the innovations serve the interface between primary and secondary care supporting referral and vetting.

Splitting innovations into whether they offered an IT solution or content helped highlight possible areas of collaboration. The mapping highlighted a number of common areas including the value of good quality, easy to access, selfmanagement support for patients. The group also touched on innovation opportunities in artificial intelligence made possible by the availability good quality IBD data.

It was recognised that digital technology can enhance and improve the patient experience as the NHS supports their selfmanagement of this condition.

The illustration of the IBD map that follows summarise each innovation as it was mapped onto the typical patient pathway. Included in the summary are a sort description of the product or idea, its aim, and its stage of development. Some questions were also raised during discussions around the mapping, these are presented in this report as points for further discussion.



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### **Further discussion**

During the mapping two key questions were raised relating to the provenance and reliability of information, and transforming data into useful applications that improve patient experiences.

#### **Validation**

There is lots of information available for patients and carers, can this information be kite marked?

#### **Intelligent systems**

With all the data available on IBD, how to we link the AI to the other processes we have been discussing, for example patient questionnaires?



### **Next Steps**

There are a lot of current innovation projects that have the potential to greatly improve IBD services in the future. These include both internal service improvements, and projects led by external organisations. This means the innovation landscape can appear very confusing and even disjointed, and it makes it harder to identify potential opportunities.

This mapping exercise was intended to help reduce that confusion. It was designed to give everyone a good understanding of the current landscape, and to allow them to identify potential links, overlaps or gaps between the various projects.

This work will be taken forward in two ways. Firstly, it is hoped that the individuals and organisations working in this area will use this report as a key reference, to identify potential areas of collaboration, or best practice, or to allow them to better focus their efforts and avoid any unwarranted overlap with other innovations.

Innovation can be supported and guided, but it cannot be mandated. The mapping exercise was designed to identify opportunities for future innovation, but it will be up to the individual companies involved in this work to decide if, and how, they wish to exploit those opportunities.

The second way this work will be taken forward is by helping the Scottish Government and NHS Boards overseeing innovation work in this field to better understand where there is a need to build stronger links between projects, or where work should be refocussed to avoid inappropriate duplication. This report is designed to inform the direction of future innovation, by identifying areas that are not the focus of current improvement efforts and ensuring that future projects are aware of the current landscape and will not conflict with existing work.

This work is at an early stage, but initial steps have included working with National Services Scotland to ensure that all these innovations are included on the national Health Innovation Advisory Portal (HIAP), and building links with national innovation forums, such as the Health and Social Care Innovation Network and the NHS Test Board Governance Group.

I would like to thank all participants for their help and willingness to support this work. By working together, we can ensure that current innovation work will play a key role in supporting the development of joined-up, patient-focussed IBD services. By doing so, we can help provide a better experience for people with IBD across Scotland.

#### **David Pratt**

National Improvement Advisor

Directorate for Health Performance and Delivery

### **IBD** innovation posters

In preparation for the workshop, individuals, companies and third sector organisations currently engaged in digital innovations for Inflammatory Bowel Disease (IBD) patients and the clinicians supporting them were invited to supply information for a poster summarising their work. The following section is the collection of these posters which are numbered to match the previous visual summary.



# 1.

# NO DELAYS INFORMATION PLATFORM

#### **AIMED AT**

Clinical Users: The platform allows clinical users to email bespoke video and other content directly to patients. The platform also allows the clinician to check if the patient has viewed the package of information 'prescribed' to them.

Patient Users: Patients receive a link to the information selected by the clinical team and can view this whenever they want and as often as they wish. They can share this with family/carers as appropriate.

#### **OVERALL AIM**

Stabilise the No Delays platform and upgrade functionality

Explore the potential of No Delays to facilitate the redesign of Pathways to reduce the need for face to face contact with a view to rolling out for nationwide utilisation on a 'Once for Scotland' basis.

#### PROJECT SUMMARY

- •Scope, specify and upgrade internet-based platform.
- •Work with clinical teams to review and test existing packages of video-based content in the context of the Patient Pathway and, where appropriate, develop new content.
- Review the functionality and potential of the No Delays product to support other workstreams e.g. NHS Inform on line facility, Vetting Information Plus digital project etc.

#### STAGE

Scoping for the project will be completed in December 2018 and the upgrade to the platform will be complete approximately 16 weeks from commencement. The project team will be consulting with partners and aligned projects to ensure connectivity and also to maximise opportunities to deliver improvements at scale.

#### **FUNDING**

The Scottish Access Collaborative.

## BENEFIT FOR PATIENT CARE

No Delays has the potential to support the redesign of Patient Pathways to reduce the need for traditional face to face appointments by providing video-based information and other content created by the clinical team. Clinical teams are supported to collaborate on the production of content and this ensures that information provided to patients is consistent and reflects current local practice. No Delays is a key enabler for selfmanagement through provision of video-based information on medicines management, medical equipment use, pre and post op exercise regimes and can also help patients prepare for appointments, treatment or procedures.

#### **DEVELOPMENT**

No Delays started as a research and development project in 2014 and the prototype platform was developed in consultation with clinicians and patients. The system has been in active use by nurses, AHPs, GPs and Consultants over the past 4 years. A wide range of clinical teams has been involved in reviewing Pathways and developing the video-based content and patients have also contributed directly by committing their story to film.

### CONTACT DETAILS

For further details contact Aileen.MacVinish@nhs.net (Project Manager) or Jamie. Hogg@nhs.net (Clinical Lead)

Demo site: www.nodelays.co.uk and sign in using email address demo@nodelays.co.uk and password bluesky

**SCOTLAND WIDE GUIDED SELF-MANAGEMENT FOR IBD** 

#### **AIMED AT**

Adults living with Crohn's Disease and ulcerative colitis in Scotland and NHS IBD services in Scottish hospitals. Staff in Primary Care are also expected to benefit from using the tools. After the testing stage, the intention is for the tools for be made available across the UK via the Crohn's and Colitis Companion:

https://companion. crohnsandcolitis.org.uk/

#### **OVERALL AIM**

One of the recommendations of the National Blueprint for IBD in Scotland is to "co-design and develop a Scotland-wide selfmanagement programme". The aim of the project is to produce national self-management resources.

#### **PROJECT SUMMARY**

- •Build on the findings of Crohn's and Colitis UK's scoping exercise, "What Self-Management means for people with IBD" which looked at what matters to people with IBD and HCPs and produced a position statement setting out the vital components of self-management for IBD.
- Co-design self-management tools via a multi-stakeholder codesign workshop. This led to the development of two distinct ideas for self-management tools; a 'flare-card' and an individualised care plan.
- Run a small test of change using pilot versions of the tools with around 100 patients in 3 or 4 sites. Evaluate and refine the tools with a view to rolling them out nationally in 2019.

#### **STAGE**

Both products are at the preproduction stage, with pilot versions expected to be available for testing by the end of 2018.

#### **FUNDING**

Initial funding is via the Modern **Outpatient Programme with** ongoing funding from Crohn's

#### **BENEFIT FOR PATIENT CARE**

The project will help to support most, if not all of the 'vital components' of selfmanagement of IBD, i.e.

- A responsive IBD service that is easy to access when needed
- IBD services with resources to support self-management
- IBD HCPs who are confident and knowledgeable about selfmanagement
- Good relationships between people with IBD and Health Care **Professionals**
- Good quality information and support for people with IBD to feel empowered and in control
- Access to tools, plans and support to manage treatments, symptoms, and flare-ups
- Access to emotional and psychological support
- Access to e-health and technology resources.

These components were developed by in response to feedback from patients and HCPs about what matters to them in relation to self-management of IBD.

#### **DEVELOPMENT**

The project has been co-produced with the Modern Outpatient Programme via a working group of patients, IBD clinicians (including gastroenterologists, nurses, dietitians), a GP and staff from Crohn's and Colitis UK. The co-design workshop in May 2018 was attended by 25 people and draft versions of the both tools have been further refined by a remote working group of key stakeholders.

Patients and clinicians will be involved in testing both tools and providing further feedback. The test of change in NHS Borders will be included in a patient engagement plan for a wider service improvement project.

# **MY IBD PORTAL**

#### **AIMED AT**

Salford Royal NHS Foundation Trust and Royal Free NHS Trust.

**OVERALL AIM** 

The aim of the project was to

improve patients access to their

quality of educational resources

to improve knowledge related to

their IBD.

health record and improve the

#### **PROJECT SUMMARY**

- Development of a personalised health record containing disease specific information and investigation results.
- Development of a self-management component advising how to manage relapsing disease.
- Links to Crohn's and Colitis companion.

#### **STAGE**

Fully operational for five years. Full research evaluation at 12 months and 2 years.

Crohn's and Colitis Living with IBD

### **BENEFIT FOR PATIENT CARE**

**Enhances self-management** patients have the power to handle their condition more confidently and effectively and to take more decisions for themselves.

Improved communication providing patient access to their personal health records at any time, any place with secure email and access across health communities will enhance communication.

**Enhanced shared decision-making** patients feel more confident dealing with clinicians and the NHS through a more equitable patient-professional partnership where information and power is shared.

**Education** tailoring bite sized information to the patients' personal health record will provide a more individualised service and has the potential to lead to positive health behaviour changes e.g. better compliance

#### **DEVELOPMENT**

Crohn's and Colitis UK

Salford Royal NHS Foundation Trust -Professor J McLaughlin, Cath Stansfield. Dr. Chris Calvert

Solid State - Nadim Yazdani

Patient View - Neil Turner

#### **FUNDING**

research award.

### **CONTACT DETAILS**

Elaine Steven, Health Services Development Manager, Crohn's and Colitis UK - elaine. steven@crohnsandcolitis.org.uk; Nancy Greig, Health Policy and Public Affairs Officer, Crohn's and Colitis UK - nancy.greig@crohnsandcolitis.org.uk https://www.crohnsandcolitis.org.uk/

**CONTACT DETAILS** 

http://www.patientview.org/

# ATTEND **ANYWHERE**

#### **PROJECT SUMMARY**

A web-based platform that allows NHS Boards to offer video-call appointments to patients instead of a face-to-face appointment when appropriate.

### **BENEFIT FOR PATIENT CARE**

Patients will not have to travel unnecessarily. It will provide them with a more convenient, comfortable method of having a clinical appointment.

#### **AIMED AT**

Patients across Scotland who would normally require a face-to-face appointment. At the moment this is limited to pilot sites in multiple Boards.

#### **STAGE**

Product is live and well established in Australia. NHS Scotland has been piloting it for approximately 2 years and is currently trying to scale up this work.

#### **OVERALL AIM**

A web-based platform that allows NHS Boards to offer video-call appointments to patients instead of a face-to-face appointment when appropriate.

Intention is that a national license for Attend Anywhere will be purchased by NHS Scotland, allowing national access to the system.

Work overseen by NHS NSS project team. There are local implementation teams in all pilot NHS Boards. Work is supported by the Scottish Government (through policy, finance and implementation).

#### **FUNDING**

#### **DEVELOPMENT**

#### **OVERALL AIM**

**DECISION** 

**SUPPORT** 

**FOR NEW GI** 

**PATHWAYS** 

**AIMED AT** 

•GPs, dietitians, practice nurses

and ANPs, junior doctors and

who do not specialise in GI

conditions.

• Patients and carers.

senior secondary care clinicians

To improve experience of people with IBS, IBD and Coeliac Disease, by facilitating implementation of pathways that maximise effective use of primary and community care and self-management and prevent unnecessary outpatient appointments.

### **PROJECT SUMMARY**

1) Providing healthcare professionals across the whole multidisciplinary team, in primary and secondary care, with quick and easy access to new assessment and management pathways.

2) Providing patients and carers with information on management and self-management of their conditions, to support selfmanagement and shared decision-making. This is based largely on signposting to high quality information sources such as NHS Inform and major charity websites.

This information is delivered through 3 routes:

- Mobile app which equally supports professionals and citizens.
- Website version of the mobile
- Embedding pathways in primary care electronic health record systems to support clinical decision-making and shared decisions in the consultation.

### **BENEFIT FOR PATIENT CARE**

This development supports:

- Improved patient experience.
- More efficient use of health service resources.
- Shared decisions with stronger patient and carer participation.
- More timely, safe and appropriate patient care.
- Better coordination of care across primary and secondary care interface.
- Moving to greater equity of service across Scotland.

#### **DEVELOPMENT**

Clinical leads (medical and dietitian) for GI Modern Outpatient Programme **GP** workshops Leading charities **NHS 24** 

#### **FUNDING**

Modern Outpatient Programme

#### STAGE

End-user testing in test environments

### **CONTACT DETAILS**

Dawn Robb, Project Manager - dawn.robb1@nhs.net https://sctt.org.uk/programmes/video-enabled-health-and-care/attendanywhere/ CONTACT **DETAILS** 

Ann.wales@gov.scot

# 6. IBD REGISTRY

#### **AIMED AT**

Primarily patients and clinicians, through better information returned, but also clinicians and groups with a focus on quality improvement, and also NHS managers.

#### **OVERALL AIM**

To improve care and outcomes for IBD patients and clinical teams across the UK by building a pseudonymised linked database of clinical, patient and related data.

# **PROJECT SUMMARY**

- Working with sites to capture data, providing them tools and support they need, including a secure web-based clinical data capture system.
- Working with specialists such as the University of Liverpool's Biostatistics Department to analyse and report on the data collected.
- Working closely with key stakeholder groups to identify how the data we collect can be best analysed, presented and put to use to help achieve our aims.

#### **STAGE**

The Registry has been growing since 2012, but is now in its 6th month as an independent company. We are looking forwards to 2019 as the year that we can really start to grow in achieving our aims as an independent company.

#### **FUNDING**

The IBD Registry is financially self-sustaining, with a diversified range of income sources, including grants, quality account service income, research infrastructure and support fees, and is looking to follow the role of other Registries in using its knowledge and infrastructure to provide a pharmacovigilance service for newly released medications.

# BENEFIT FOR PATIENT CARE

- By supporting the IBD Standards movement by presenting the trending metrics that show how clinical treatment is moving towards these goals.
- By providing localised data back to sites, benchmarked against national data, that helps to inform and improve their services.
- By providing a rich research environment, both in terms of data and research facilitation.

#### **DEVELOPMENT**

The IBD Registry is now an independent non-profit, governed by member organisations the British Society of Gastroenterology, the Royal College of Physicians and Crohn's and Colitis UK. We are very grateful for the BSG for supporting development of the Registry in its early and growing years.

# 7.

### VETTING (REFERRAL) INFORMATION PLUS

#### **AIMED AT**

All new referrals to outpatient services

#### PROJECT SUMMARY

- Collect clinical information earlier in the patient referral journey with appropriate education.
- Streamline referral pathway includes empowering patient with knowledge of stage of referral and options at each stage.
- Reduce reliance on outpatient clinic to gain specialist clinical details.

# BENEFIT FOR PATIENT CARE

Change focus of patient referral pathway to be more patient focussed empowering the patient to make choices for their health.

#### **STAGE**

Digital solution currently in development with paper based solution in pilot.

### DEVELOPMENT

Currently progressing as part of the Modern Outpatient program of work

#### **OVERALL AIM**

Capture patient data at the point of referral to streamline the patient journey from referral to diagnosis

#### **FUNDING**

Modern Outpatient Program

### CONTACT DETAILS

Our website is www.ibdregistry.org.uk
Please contact the IBD Registry for more information on support@ibdregistry.org.uk

CONTACT DETAILS

**PATHFINDER** (ONLINE **APPOINTMENT BOOKING & TRIAGE) VIP (VETTING INFO** PLUS)

#### **AIMED AT**

Patients who have been referred for an outpatient appointment.

#### **OVERALL AIM**

Our project aims to reduce waiting times. It does so by reducing the number of wasted appointment slots (from DNAs) and by reducing the number of unnecessary face-to-face appointments (e.g. where the patient could be better handled without the need for a f2f appointment).

#### **PROJECT SUMMARY**

- Online appointment booking with automated reminders.
- Active Clinical Referral Triage (online questionnaire + online education + "managed" patient requests for help).

### **BENEFIT FOR PATIENT CARE**

Improved patient experience. Eliminate the "radio silence" that patients typically experience while awaiting an outpatient appointment Better-informed patients Flexibility in choice of dates. Ultimately shorter waiting times if unnecessary appointments are reduced.

#### **STAGE**

Both projects are currently under development.

### **FUNDING**

Scottish Government

#### People living with Crohn's Disease

or Ulcerative Colitis.

**AIMED AT** 

**PATIENT** 

**EMPOWERMENT** 

**GUIDE** 

Useful for both newly diagnosed patients and those living with the condition for some time.

#### **DEVELOPMENT**

Modern Outpatient Programme (Scottish government) **NHS Grampian** NHS GGC **NHS Fife** Civtech

### **OVERALL AIM**

To empower people with Crohn's and Colitis to self-manage their condition and make the most out of their appointments with healthcare professionals.

#### **PROJECT SUMMARY**

- Provide guidance on how to prepare for an appointment, including how to set goals, ask relevant questions, and use the time wisely.
- Provide tips on self-managing your condition, including symptom tracking.

### **BENEFIT FOR PATIENT CARE**

Patients will be better equipped to self-manage their conditions, including managing symptoms at home, thereby reducing need for clinic and emergency visits. The guide will also help them understand how to get the most out of appointments with their IBD team, making more efficient use of clinic time.

**DEVELOPMENT** 

The Crohn's & Colitis UK's

Publication team, with the

London Local Network.

guidance of patients in the East

#### **STAGE**

Research and focus grouping stage.

Pfizer provided a grant to enable the development of the resource but had no input into the design or content of its production.

#### **FUNDING**

**CONTACT DETAILS** 

martin@lumerahealth.com

**CONTACT DETAILS** 

Please contact publications@crohnsandcolitis.org.uk for more information

### 10. **CROHN'S AND COLITIS COMPANION**

#### **AIMED AT**

People living with Crohn's Disease or Ulcerative Colitis. Useful for both newly diagnosed patients and those living with the condition for some time.

#### **OVERALL AIM**

To give people with Crohn's and Colitis all the information they need to manage their condition in an accessible, user-friendly way. The tool streamlines reliable and relevant information, helping patients get answers, access support and take control.

#### **PROJECT SUMMARY**

- Guide patients through a user journey based on commonly asked questions.
- Provide reliable, accurate and trustworthy answers to these questions.
- Provide information in a wide range of formats, including videos and animations.

#### **STAGE**

Live product, in constant development and continuously adding new resources.

#### **FUNDING**

AbbVie provided an educational grant to enable the development of the website but had no input into the design or content of its production.

### **BENEFIT FOR PATIENT CARE**

Patients will be better informed about all aspects of their care, including how to self-manage their symptoms and choose between drug treatment options.

#### **DEVELOPMENT**

Crohn's & Colitis UK's Publication team have produced the information in the resource in partnership with IBD doctors, nurses and other specialists as well as patients.

The Companion interface was created by specialist designers and the Crohn's & Colitis UK Digital team.

**RCGP AND CROHN'S AND COLITIS UK INFLAMMATORY BOWEL DISEASE SPOTLIGHT PROJECT** 

#### **AIMED AT**

GPs, GP trainees, practice nurses, community pharmacists, and A&E staff.

# **SUMMARY**

**PROJECT** 

- By producing an online toolkit www. rcgp.org.uk/ibd accessible to GPs and patients
- By speaking to GPs at national and regional GP education events, promoting the toolkit, developing pathways across primary and secondary care, and through the use of Regional Champions to promote the Project in a more localised way across the UK.

• By the production of a free eLearning module for healthcare professionals www.elearning.rcgp.org.uk/ibd, and by facilitating the introduction of greater awareness of IBD into the postgraduate GP training curriculum.

### **BENEFIT FOR PATIENT CARE**

Increased awareness of IBD and diagnostic pathways will speed the diagnosis of patients. An earlier diagnosis may improve the response to treatment. Greater awareness of the impact of IBD and the support systems available for patients will improve care for those diagnosed. Topics include: extra-intestinal symptoms, psychological, educational and employment impacts, increased risk of bowel cancer, osteoporosis, IBD in pregnancy and the appropriate use of oral steroids.

#### **STAGE**

The project has just entered the second half of its second year.

#### **DEVELOPMENT**

The steering group is a collaboration between the RCGP and Crohn's and Colitis UK. Dr Barrett (a GP) is the lead Clinical Champion) and Rachel Fowler is the patient representative. The group meets quarterly.

#### **OVERALL AIM**

Half of GPs surveyed lack confidence in managing patients with IBD. The Spotlight Project aims to increase awareness of IBD and provide GPs with tool to diagnose and support patients.

#### **FUNDING**

The project is funded by Crohn's and Colitis UK and runs for a financial year.

### **CONTACT DETAILS**

Resource can be viewed at companion.crohnsandcolitis.org.uk Please contact publications@crohnsandcolitis.org.uk for more information **CONTACT DETAILS** 

www.rcgp.org.uk/ibd | www.elearning.rcgp.org.uk/ibd @DrBarrettHVCCG | kevin.barrett@nhs.net

## **12. IBD SCOTLAND**

#### **AIMED AT**

People who have IBD Healthcare professionals in IBD teams (multiple disciplines).

Clinical deployment imminent.

**STAGE** 

• Develop relevant digital

messaging

services – information, tracking,

video conferencing, targeted

• Deploy to patients within an

available via web and app

the system using caseload

to patient level data

existing platform ('VitruCare'),

routes. Professionals to access

dashboards, with full drilldown

• Evaluate in clinical use across

several sites within Scotland

#### **OVERALL AIM**

Create and test a digital platform, providing people who have IBD with relevant information, tracking and communication tools - allowing them to self-manage, whilst remaining connected to their professional care teams.

### **FUNDING**

SBRI funded programme of work; Phase 1 complete, Phase 2 just ending, Phase 3 planned for early 2019.

#### **BENEFIT FOR PROJECT SUMMARY PATIENT CARE**

- Improve confidence in selfmanagement
- · Optimise timeliness of interactions between people who have IBD and their professional care teams
- Reduce need for some outpatient attendances
- Expedite escalation in treatment and/or admission to hospital when this is indicated
- Shorten length of hospital stay, by being able to remain in close contact post discharge.

#### **DEVELOPMENT**

Patient engagement and advice at scoping/design stages.

**HCP** involvement from IBD specialist clinical staff at Dundee and Inverness.

Technical development team (Dynamic Health Systems).

# **13.**

**FLORENCE IBD EXCLUSIVE ENTERAL NUTRITION PROTOCOL** 

#### **AIMED AT**

Patient and dietitian.

#### **PROJECT SUMMARY**

- Implement Florence self-management and review protocol.
- Patient uses Florence to input key data which allows virtual dietetic review only when needed.
- Dietitians only contact patients when patients are highlighted by Florence rather than reviewing everyone at clinic.

#### **BENEFIT FOR PATIENT CARE**

Improves patient care as it allows better self-management, reduces clinic appointments and reduces overall cost of treatment as outcome are easier to achieve.

#### **STAGE**

Live in Highland IBD practice and just starting in Tayside.

#### **DEVELOPMENT**

Dietitians and patients.

### **OVERALL AIM**

To assist patient better self-managed their IBD and reduce dietetic workload on routine review of patients.

#### **FUNDING**

Internally developed in NHS

Highland but now funded in Tayside via national TEC funding.

### **CONTACT DETAILS**

Richard.pope@dynamichealthsystems.co.uk

**CONTACT DETAILS** 

Jacqueline Walker

14.
SASTROE

### GASTROEN-TEROLOGY AI REFERRAL PROJECT

#### **AIMED AT**

The pilot phase will be rolled out across six consultant Gastroenterologist at the Western General in Edinburgh who triage GP referrals. The functionality is being developed so that it can scale across other specialties.

#### **OVERALL AIM**

The project aims to reduce unwarranted variation in the current Gastroenterology triage process and reduce waiting time delays for Urgent Suspected Cancer patients.

## **PROJECT SUMMARY**

- Develop an AI engine to read and triage GP referral letters, using natural language processing techniques and present this information to the triage clinician.
- To use the AI engine to identify Urgent Suspected of Cancer patients and automate the sending of these to the appointment booking team.
- To develop an 'attended robot' to streamline the time it takes for a triage clinician to downgrade an urgency status or return patients to General Practice for further assessment or tests.

#### **STAGE**

Initial results from the proof of concept (Winter 2017/18) and feasibility testing (Spring 2018) showed promising results in terms of RITA's ability to triage patients with suspected cancer, and most likely clinic or diagnostic pathway.

RITA is due to enter a pilot phase at NHS Lothian in January 2019 and if successful go live shortly after.

#### **FUNDING**

The development of the triage pilot for Gastroenterology has been funded by NHS Lothian and Deloitte.

Further roll out will require business case approval.

# BENEFIT FOR PATIENT CARE

- Reducing unwarranted clinical variation support improved consistency of clinical decision making and outcomes by reducing clinical variation
- Faster patient triage automating the referral triage process for Urgent Suspected of Cancer patients is estimated to reduce the overall Referral to Treatment (RTT) pathway by c1-3 days, or ~ 15% of a two week wait target
- Saving clinical time by reducing their administrative burden in triaging and sending communications to General Practice
- Analytics on referral letters will provide an additional insights around referral practice and referral quality to improve referral pathways.

#### **DEVELOPMENT**

Tracey Gillies, Medical Director at NHSL is the SRO for the project The Clinical Lead for the pilot in Gastroenterology is Dr Ian Arnott

The project is being managed by a Steering Board comprising: Tracey Gillies - Medical Director Susan Goldsmith - Director of Finance

Martin Egan – Director of eHealth Dr Ian Arnott – Clinical Lead Gastroenterology WGH

The work has undertaken in conjunction with Deloitte.

# 15.

### PATIENT APPS INTEGRATION PROJECT (PAPI)

#### **AIMED AT**

Primarily patients and clinicians, through better information returned, but prospectively also people with a focus on quality improvement and also NHS managers.

### **STAGE**

**PROJECT** 

**SUMMARY** 

To develop a simple working

pilot working with a number of

selected patient apps to be able

to demonstrate integration and

use the learnings from the pilot

guide for any patient application

to be able to use to successfully

the Registry to transfer patient

to be able to build a generic

and securely interface with

reported outcomes data.

The project has recently (October 2018) kicked off with its first all stakeholders meeting.

#### ing proof of

To provide a working proof of concept / pilot for patient apps to securely connect and submit patient reported outcomes data to the IBD registry.

**OVERALL AIM** 

### FUNDING

Initial funding is via the Modern Outpatient Programme and a grant from Takeda, with a 12 months development timescale, across financial years 2018-19 and 2019-20 from Crohn's and Colitis UK.

# BENEFIT FOR PATIENT CARE

By complementing and enhancing the Registry's captured clinical dataset with patient reported data, we will be able to enhance the depth and information in our reporting, and also intend in the future for approved research projects to be able to undertake reporting on this combined dataset.

#### **DEVELOPMENT**

Crohn's and Colitis UK and the IBD Registry are together leading the project, with involvement from patient applications such as MyIBDPatient, PatientKnowsBest, HealthSuite and CIMS-Infoflex. The project is sponsored by Takeda.

### CONTACT DETAILS

Please contact Crohn's and Colitis UK and/ or the IBD Registry for more information.

# CONTACT DETAILS

Ian Arnott, Clinical Lead, Gastroenterology NHS Lothian | Ian.Arnott@nhslothian.scot.

nhs.uk

Poter Lock Director Deloitte | plock@deloitte.co.uk

Peter Lock, Director, Deloitte | plock@deloitte.co.uk



