

SCOTCAP



Evaluating a solution that will contribute to the delivery of Gastroenterology diagnostic services. This innovative solution has capacity to help meet demand on a sustainable basis across Scotland.

PARTNERS

CIVIC



PillCam video capsule being showcased by Richard Lochhead, MSP, at Digital Health & Care Institute 2.0 launch

Executive sponsor introduction to SCOTCAP evaluation project

Katie Cuthbertson, Director Modernising Patient Pathways Programme (MPPP), Scottish Government

"The SCOTCAP project has been driven by a real commitment from all partners involved to test an innovative service model that has the potential to enhance services for patients; reducing the need to travel for appointments and avoiding invasive colonoscopy procedures.

This evaluation will allow a thorough assessment of the scope to roll this out more widely across Scotland whilst ensuring patients are co-producers of redesigned pathways of care".

HEALTH BOARDS



ACADEMIC



INDUSTRY



What is the SCOTCAP evaluation project?

Bowel cancer is the second most common cancer globally and has a very high incidence in Scotland.

The Scottish Capsule Programme (SCOTCAP) evaluation project is regarded as an integral part of the national redesign of outpatient gastroenterology services as it enables early and effective testing in the community, avoiding unnecessary referrals for hospital outpatient appointments. It is part of **the Scottish Government's Modernising Patient Pathways Programme (MPPP)**, which aims to support the delivery of services as close to home as possible and builds on the feasibility and economic studies conducted in the Digital Health & Care Institute (DHI) phase 1, Highlands and Islands Capsule Programme (HICAP) project.

The evaluation compares models of delivery encompassing rural and urban sites. It focuses on the use of video capsule diagnostic services capturing images, remotely analysing and digitally marking them to support consultant diagnosis.

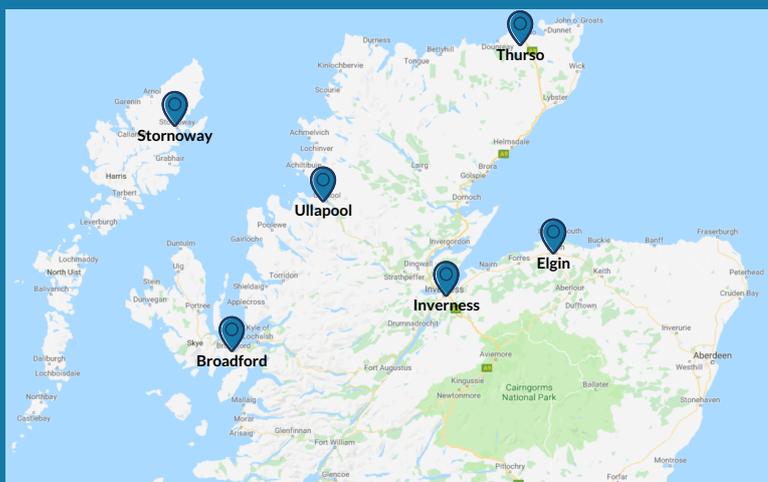
Referrals for Colon Capsule Endoscopy (CCE) are co-ordinated by secondary care sites. For patients who meet the inclusion criteria, and are selected, the managed service will be provided by an innovative partnership between Medtronic and CorporateHealth International. This means some patients will not have to travel to the hospital for tests. The managed service is accurate, with the potential to be cost effective and less invasive for patients than existing traditional colonoscopy procedures.

The academic supported evaluation will see 350 patients undergoing diagnostics in local hubs within the community, thereby minimising the impact on daily life. A large part of the capsule endoscopy process will take place within the patient's home. If the anticipated benefits are realised, it is hoped that CCE can be utilised in the future to ease the pressure on existing services used to diagnose lower gastrointestinal diseases including bowel cancer. Many patients undergoing a CCE will not need any further investigations, thereby reducing the number of patients requiring a colonoscopy.

The idea has been championed by Professor Angus Watson as Clinical Lead and is being led by Scotland's Digital Health & Care Institute, sponsored by the Scottish Government. This innovative approach is part of the Scottish Government's drive to transform the patient experience by optimising the roles of all clinicians, utilising new technologies and putting the patient at the centre of care.

Where is the SCOTCAP evaluation project taking place?

The evaluation is recruiting patients between June and December 2019 across 3 Health Boards.

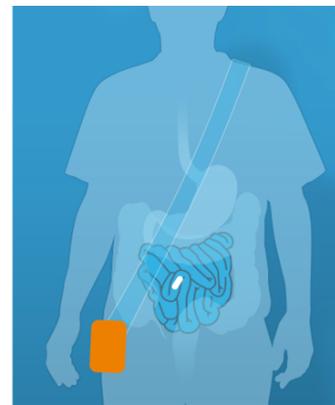


- **NHS Highland** - four community hubs are being utilised in Broadford, Ullapool, Thurso and Inverness.
- **NHS Western Isles** - one community hub in Stornoway.
- **NHS Grampian** - one community hub in Elgin (Dr Gray's Hospital).

What is Colon Capsule Endoscopy (CCE)?

The video capsule is a small camera the size of a large vitamin pill. After you swallow the video capsule, it will be transported naturally through the stomach and intestine, finally reaching the colon where it captures pictures of the lining of the large intestine.

This procedure has been shown to be accurate and is significantly less invasive to patients than the existing methods for colonoscopy.



During the time it takes to pass a capsule endoscopy (which can vary between two to fifteen hours) the video capsule takes up to 400,000 images of the intestinal lining. These are transmitted wirelessly, via a belt, to a data recorder that you wear around your waist and over your shoulder during the entire investigation, while you carry on your normal daily activities.

The video capsule is an alternative method of investigation of the colon which is painless, does not need sedation, and can be delivered in outpatient healthcare environments. It has a CE-mark, is fully approved by the NHS and its accuracy is well documented in many clinical trials.

NHS Highland and University partners (Universities of Aberdeen and Strathclyde) are managing the service evaluation, working with Medtronic and CorporateHealth International to co-create the new managed service process within the NHS, analyse the large amount of data that the new form of capsule endoscopy generates and provide quick and accurate results to NHS clinicians and patients.

Analysis from the SCOTCAP evaluation will focus on outcomes from a specific group of patients and will determine the efficacy of any new potential service.

One of the unique aspects of the project is the creation of Scotland's first Innovation Partnership procurement contract, which has enabled thus far, commissioning bodies to "partner" and work collaboratively with private sector companies to develop and test a new service within the community. Significantly, this service could be rolled out across Scotland, without the need for further procurement, if the evaluation proves successful.

What the SCOTCAP evaluation project is not

The SCOTCAP evaluation project is not:

- The development of a new service that will replace the need for colonoscopies, clinical staff or lead to the closing down of units. Instead it is a **complementary service** that will provide clinicians with an alternative tool that could be used to allow those who need a colonoscopy to be seen quicker and start treatment plans sooner by providing a definitive assessment for a large group of patients that do not require any further intervention.
- Using Artificial Intelligence (AI) to support capsule reading and reporting. Instead, the images obtained are interpreted by highly skilled senior endoscopists.

Potential impact and benefits

Patient

- Less travel and time off work required for procedure - can be done in the privacy of their own home and local community
- Less invasive and uncomfortable than a traditional colonoscopy
- Reduce waiting times for traditional colonoscopy by offering appropriate patients CCE as an alternative

Clinical community

- Service can be provided within patient's locality, closer to home, without unnecessary travel to secondary care sites and integrates with Primary Care
- Service is highly accurate
- Service can alleviate capacity to focus on clinical procedures

NHS/ Health Boards

- Enable early and effective diagnosis in the community as it aligns with Scottish Government's Modernising Patient Pathways Programme
- Reduce the total cost of gastrointestinal diagnostics and avoid unnecessary referral for outpatient appointments
- Reduce waiting times and alleviate bottlenecks within the service by providing an alternative for patients, that may allow them to avoid the need for a colonoscopy
- Deliver an Innovation Partnership Framework to support innovative procurement for Public Services in Scotland

Industry

- Commissioning bodies can now "partner" and work collaboratively with private sector companies to develop and test a new service within the community

SCOTCAP evaluation project - next steps...

In parallel with the SCOTCAP evaluation, a business case is being drafted, which will factor in the outputs from the evaluation to support decisions being made regarding next steps in terms of the feasibility of such a service in NHS Scotland.

SCOTCAP evaluation project - further information

- SCOTCAP webpage (www.dhi-scotland.com/projects/scotcap)
- NHS Inform patient webpage (www.nhsinform.scot/colon-capsule-endoscopy)

Key contacts

The SCOTCAP evaluation project is generating wide interest across Scotland, UK and internationally.

If you've been contacted by any external parties requesting information on the project, please direct them to the project team, who will be able to immediately respond to any queries.

General enquiries

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