

A health economic analysis of the introduction of a cell collection system (Cytosponge®) as a viable alternative to upper GI endoscopy in the COVID recovery

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Description

The devastating impact of oesophageal cancer across Scotland requires a focus on early diagnosis to bring significant benefits to the health of our population.

This strategic driver, coupled with the impact of the COVID-19 pandemic on the backlog of patients, has resulted in a need to have a more person-centred and easily accessible method for diagnosing premalignant or early curable oesophageal cancer across Scotland.

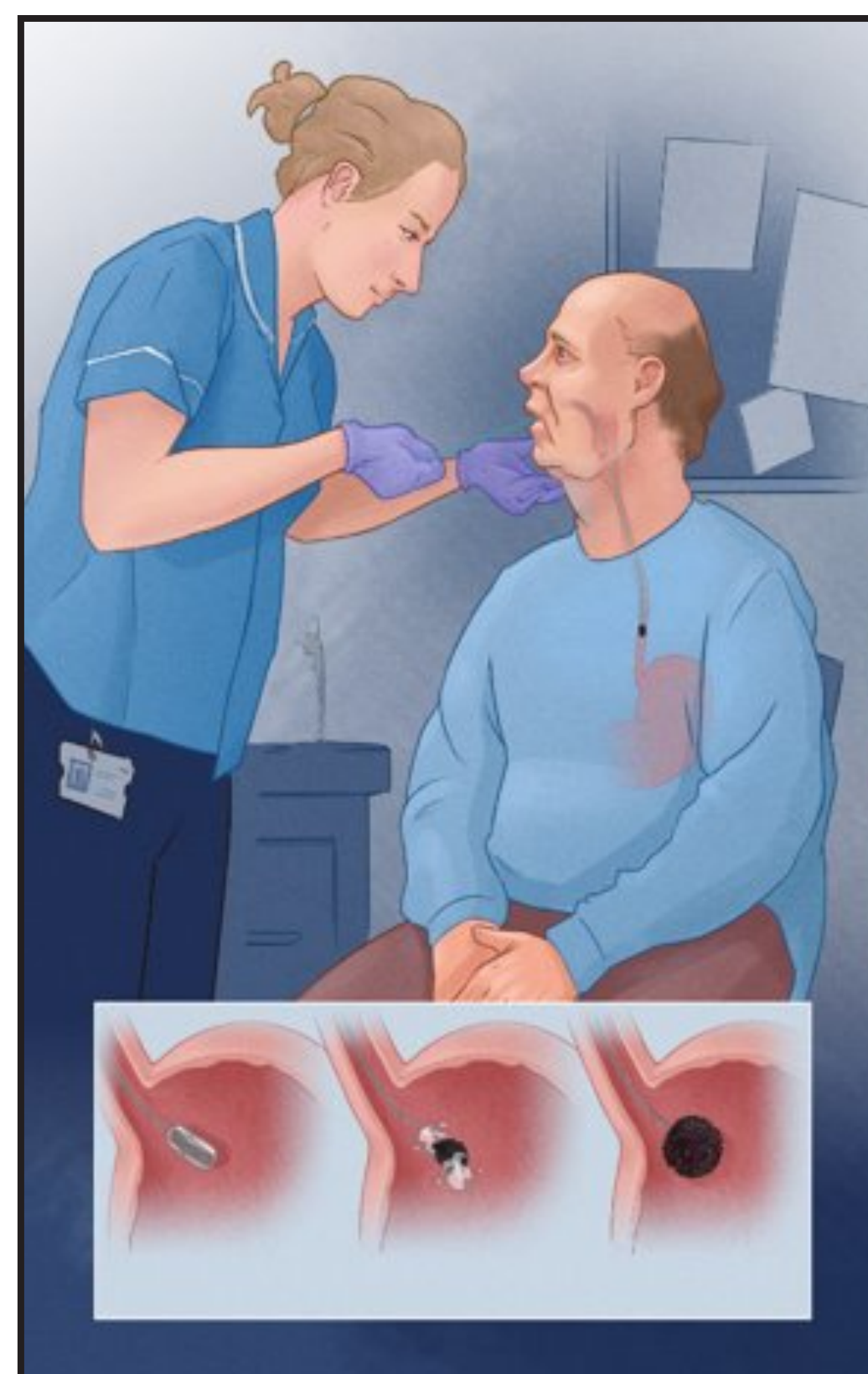
Cytosponge® is an alternative to endoscopy for this. In 2020, work was started to introduce a Cytosponge® Managed Service across NHSScotland, as part of Upper GI Endoscopy Recovery Planning.

This approach has been supported by a business case that demonstrates the value and sustainability of this innovative diagnostic approach, recommending this as a critical part of NHSScotland's endoscopy services.

Aim

Once approved, the business case will:

- Endorse Cytosponge® as an alternative simple, patient friendly and cost effective method for the diagnosis of pre and early oesophageal cancer given its simplicity in terms of patient experience, value in comparison to a traditional endoscopy, and accuracy in detecting oesophageal pathologies.
- Demonstrate the strategic commitment from Scottish Government to the adoption of a Cytosponge® managed service across NHSScotland.



Method

We:

- Brought together a group of subject matter experts to direct the develop the business case (clinical, finance, and those involved in the adoption of the service).
- Engaged 2 Masters students from the University of Glasgow who, in collaboration with NHS Lanarkshire and NHS Greater Glasgow & Clyde, modelled the patient pathways and applicable costings.
- Compared existing Endoscopy services and the Cytosponge® pathway to clearly evidence the value of this service.
- Validated these findings with the University of Cambridge who developed the Cytosponge® procedure and associated financial modelling for England.
- Summarised the results of this analysis into a business case that not only demonstrates that Cytosponge® is a value for money diagnostic tool, but that it also provides strategic value to NHSScotland and therefore presents a compelling case for change.



Results

With every Cytosponge carried this is an increase to the existing capacity, allowing NHSScotland to continue to do BAU endoscopies with the number of patients receiving Cytosponge being additional to that existing endoscopy capacity.

The economic analysis show that full adoption will result in non-cash releasing savings £2m over 5 years.

In terms of affordability, the financial case has shown a capacity saving of £361k in year 1, rising to £430k in year 5.

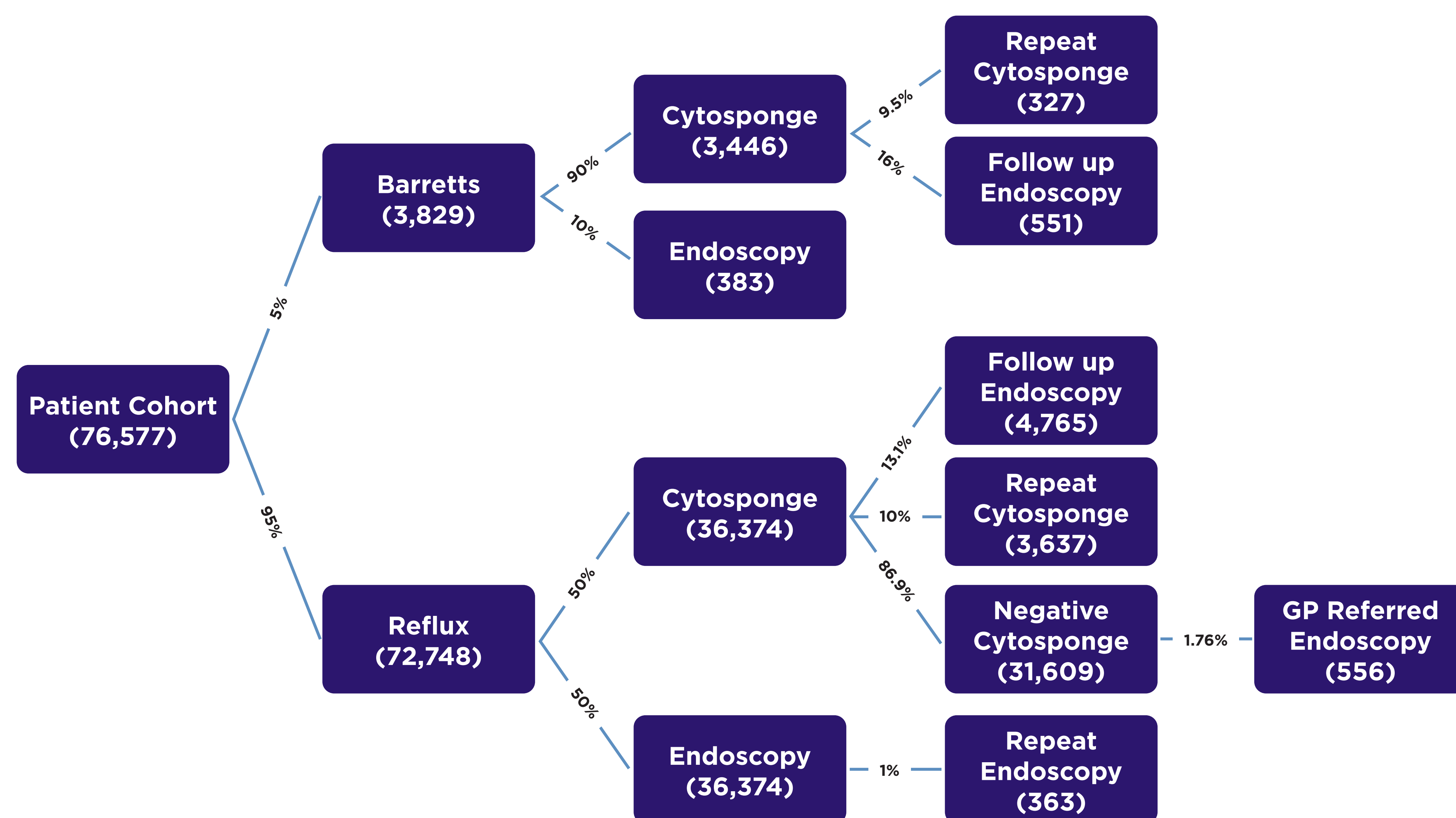


Figure 1: Patient numbers, PHS data 2019-20, being the last full year of pre-Covid data.

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