

Scenario for INAHTA workshop at HTAi 2017

CAPSULE ENDOSCOPY

A. Background to the assessment

Capsule endoscopy is a technology used in examination of the gastrointestinal tract. A small capsule containing a camera is swallowed by the patient, and photographs are transmitted to an external receiver for computer processing.

An application was made to the Health Minister of a large country to approve funding under a government insurance program for use of capsule endoscopy in investigation of obscure gastrointestinal bleeding. Approval would have a major influence on use of the technology and on practice patterns.

The Minister asked the Key Services Advisory Institute, which provides HTA advice for the program, to report on the status of the technology and its suitability for government subsidy. In particular, KSAI was to consider the safety, effectiveness and value for money of capsule endoscopy in this indication.

B. Assessment findings

KSAI found that:

* Adverse events (e.g. abdominal pain, nausea) were infrequent though lodgement of the capsule, requiring surgical removal, occurred in a small minority of patients.

* The diagnostic yield from capsule endoscopy was substantially higher than that for small bowel series radiology.

* There were few data on the impact of capsule endoscopy on patient management and long-term clinical outcomes.

* Capsule endoscopy provided estimated savings of over \$1000 per patient, but better data were needed on diagnostic yield, and prevention of further diagnostic procedures.

KSAI recommended that interim funding for capsule endoscopy in this application should be provided for not more than three years.

C. Follow up to the assessment

The Minister for Health accepted KSAI's recommendation and interim funding was put in place. The funding was conditional on collection of local data on the long-term safety, effectiveness, and cost-effectiveness of capsule endoscopy.

A capsule endoscopy register was set up, with support from a professional body, and data on several thousand patients were collected over three years. The data confirmed the safety and diagnostic yield of the technology and the savings it provided through lower diagnostic costs and decreased hospitalization.

A follow up HTA by KSIA considered these additional data and recommended continuing public funding as capsule endoscopy was as safe as and more effective than comparable diagnostic tests. This funding was approved by the Health Minister.