# Magnetic resonance enterography in paediatric inflammatory bowel disease

**Descriptor:**

To assess the diagnostic accuracy of magnetic resonance enterography (MRE) in paediatric patients for suspected active Inflammatory Bowel Disease (IBD) by determining concordance with multi-modal endoscopy.

**Background:**

It is important that IBD in children is diagnosed accurately and promptly so that appropriate treatment can be initiated in a timely fashion. MRE is emerging as the preferred radiological investigation for clinically suspected IBD in children.  In the absence of an absolute gold standard in small bowel assessment, endoscopy with histopathological analysis is used in the literature as the reference standard.

## The Cycle

**The standard:**

Concordance of MRE reports and endoscopic histopathology reports in clinically suspected paediatric IBD.

**Target:**

80%

## Assess local practice

**Indicators:**

Concordance of MRE reports and endoscopic histopathology reports in clinically suspected paediatric IBD.

**Data items to be collected:**

Patient demographics (age, sex)

Date of MRE

MRE report

Date of endoscopy

Endoscopic histopathologic report

Concordance between MRE and endoscopy.

**Suggested number:**

30 patients

**Suggestions for change if target not met:**

Consider the time period between MRE and endoscopy to ensure that the condition has not changed between the two tests (eg if tests performed more than 30 days apart).

Imaging technique optimisation with the aim to increase diagnostic accuracy.

**Resources:**

Radiology reporting systems

Patient case-notes/online access to histopathology results

**References:**

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2. Gomollón, F., Dignass, A., Annese, V., Tilg, H., Assche, G. V., Lindsay, J. O., . . . Gionchetti, P. (2016). 3rd European Evidence-based Consensus on the Diagnosis and Management of Crohn’s Disease 2016: Part 1: Diagnosis and Medical Management. Journal of Crohns and Colitis,11(1), 3-25. doi:10.1093/ecco-jcc/jjw168
3. Negaard, A., Paulsen, V., Sandvik, L., Berstad, A., Borthne, A., & Try, K. et al. (2007). A prospective randomized comparison between two MRI studies of the small bowel in Crohn’s disease, the oral contrast method and MR enteroclysis. European Radiology, 17(9), 2294-2301. doi: 10.1007/s00330-007-0648-4

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**Published Date:**

Monday 4 June 2018

**Last Reviewed:**

Tuesday 29 May 2018