

## **HICG/1/25 - Longitudinal History Patterns for Earlier Diagnosis of Endometriosis**

Early diagnosis is a priority for patients and health services. Endometriosis is a distressing condition affecting women of reproductive age which is commonly diagnosed only after repeated consultation for symptoms.

In this project we will develop and implement a method to support earlier diagnosis. First we will arrange unstructured GP record data into structured “longitudinal histories” with discrete time periods. Second, we will interview expert clinicians and patients to identify patterns of symptoms, consultations and tests over time which may be potential pointers to diagnosis of endometriosis. Third, we will construct these patterns so that they can be searched for within the longitudinal histories. Finally we will examine the predictive value of these patterns in data from women with, and without endometriosis.

This study will generate clinically relevant data from an existing dataset. The methods of longitudinal history construction, pattern generation and searching will be applicable to other conditions.