

GEMINI PPI WORKSHOP: CONDITIONS LIST RESULTS



Introduction

Thank you for attending the GEMINI PPI workshop on the 7th July 2022. At the workshop we discussed the Gemini project and that we are building the GEMINI condition list.

This list of long-term conditions underpins all further analysis. We want this list to be as complete as we are able to make it, and the PPI workshop has been a key part of that, in particular to help identify conditions of real importance to patients.

Following the PPI workshop, we compiled a list of the conditions you suggested. For each condition we then considered how common it is (prevalence), its relevance to GEMINI, and our ability to accurately identify the condition in our data. This helped us decide which conditions could be added to the GEMINI condition list. 59 suggestions were made at the workshop, and 28 either have been, or are in the process of being, added.

Below are the decisions made for each condition, and the reasons for that decision.

Added to the list

The following conditions, after PPI suggestions, are now included in GEMINI.

- Bipolar disorder
- Erectile dysfunction
- Hyperplasia of prostate
- Obsessive-compulsive disorder
- Pancreatitis
- Personality disorders, general
- Tinnitus
- Ulcerative colitis

Likely to be added

The following conditions, after PPI suggestions, are in the process of being added to GEMINI. We will do our best to add all, but issues may arise that make some impossible to include, such as difficulty in defining the condition.

- Bunion
- Chronic kidney disease
- Eczema
- Endometriosis
- Insomnia
- Osteopenia
- Post-traumatic stress disorder
- Substance misuse
- Ventricular hypertrophy (enlarged heart ventricles)

Already included

The following conditions were suggested but are already included in GEMINI. Some are contained within a broader group (e.g. hepatitis C is included in our chronic viral hepatitis group).

- Bronchitis
- Collapsed womb
- Detached retina
- Endometriosis
- Hepatitis C
- Irritable bowel syndrome
- Kidney stones
- Phobias
- Reactive depression
- Seasonal affective disorder
- Slipped disc

Excluded because they are rare (low prevalence)

The rarer a condition is, the harder it becomes to get meaningful results from statistical analysis. We exclude the following conditions from GEMINI because they occur in less than 1% of people aged 65 and over in the UK. Prevalence is measured in CPRD Aurum, a database of anonymous patient data from GPs across the UK. We look at all individuals age 65 or over at a given time point and see what percentage have a diagnosis of the condition at any point in their life..

Cerebral palsy	0.0488 %
Costochondritis	0.3632 %
Crohn's disease	0.4113 %
Eating disorders	0.0827 %
Ectopic pregnancy	Very rare
Growth hormone deficiency	Very rare
Haemoglobin E-trait	≤ 0.1055 % **
HIV	0.0385 %
Hyperacusis	0.0409 %
Lupus	0.2423 %

Motor neuron disease	0.0410 %
Multiple sclerosis	0.3119 %
Polycystic kidney disease	Very rare
Scleroderma	≤ 0.0839 % **
Thalassemia	0.0640 %
Tourette's syndrome	Very rare

** Where prevalence is less than or equal to (\leq), the prevalence is of a broader group that contains the condition (e.g. the group "haemolytic anaemias" contains haemoglobin E-trait, and has a prevalence of 0.1055%. Therefore haemoglobin E-trait has an equal or lower prevalence, and so is excluded).

Excluded because not long-term

The following conditions are primarily not long-term conditions, and so are excluded (though we acknowledge some can potentially be long-term when they are reoccurring).

- Bursitis
- Fibroids
- Glandular fever
- Hernia
- Lymphadenopathy (swollen lymph glands)
- Menorrhagia

Other

Here we list the other conditions suggested, with specific notes.

Allergies	Excluded: wide variety of types and causes of allergies makes this group hard to use from a genetic perspective. Some allergies are included within other groups (e.g. in skin conditions, in asthma). If time and resources allow, we will do a genetic study of allergic conditions to see if there may be a way to include more.
Vertigo	Excluded: wide variety of causes makes this group hard to use from a genetic perspective. Dizziness is being used as a clinical outcome when considering the impact of conditions.
Polycystic ovary syndrome	PCOS has a very low prevalence in our database as we currently define it. We are investigating the definition of PCOS we use.
Recurring Sexually Transmitted Infections(STIs)	We are investigating if it will useful and feasible to include some STIs in GEMINI.

Loss of sex drive	Excluded: we are unable to accurately identify cases in our databases.
Learning difficulties	Excluded: outside the scope of GEMINI
Interstitial lung disease (ILD) (including pulmonary fibrosis)	We are investigating if it will be useful and feasible to include ILD in GEMINI. We plan to talk with the DEMISTIFY project. (https://gtr.ukri.org/projects?ref=MR%2FV005324%2F1) to aid with this.
Colitis	Ulcerative colitis has been added. Other forms of colitis are excluded due to not being long-term.
Hormone Replacement Therapy (HRT)	Excluded: as a treatment, HRT does not fall in the scope of the GEMINI condition list. We will consider HRT later in the project when investigating the interactions of treatments with conditions.
Cancers	Various cancers were suggested. We will be including cancer conditions with the help of a cancer-focused project with the university.