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Management of uncertainty in general practice using a rational evidence-based medicine (EBM) tool

Submission date 10/07/2026	**Recruitment status** Not yet recruiting	[X] Prospectively registered [_] Protocol [_] Statistical analysis plan [_] Results [_] Individual participant data [X] Record updated in last year
Registration date 21/07/2026	**Overall study status** Ongoing	
Last Edited 13/07/2026	**Condition category** Other	

Plain English summary of protocol

Background and study aims
General practitioners (GPs) often face situations where the diagnosis or best treatment is not clear, which can create uncertainty and stress in everyday practice. This study aims to find out whether using an online evidence-based medicine tool called Ebmfrance can help GPs manage this uncertainty better. We want to see if the tool changes how GPs make decisions, how confident they feel, and how they deal with complex cases in real-life consultations and group case discussions.

Who can take part?
The study involves volunteer GPs in France, including residents (interns), early-career doctors and experienced practitioners. Doctors may already be using Ebmfrance or may discover it for the first time as part of the study. No patients are directly enrolled, and the focus is on the doctors' experience, not on individual patient outcomes.

What does the study involve?
Participating GPs will use the Ebmfrance tool in their everyday practice over a period of about 12 months, both during individual consultations and in practice analysis groups (GAP) where they discuss complex cases with colleagues. Each time they use the tool, they will record how complex they find the situation, how confident they feel before and after using Ebmfrance, and whether the tool leads them to change their diagnosis, treatment or referrals. They will also complete questionnaires at the beginning and end of the study about how uncertain they feel in their work and how satisfied they are with the tool. In addition, some GPs will be invited to focus groups to discuss their experience with uncertainty and with Ebmfrance in more depth.

What are the possible benefits and risks of participating?
The main potential benefit for GPs is to have structured support to manage uncertainty in daily practice, which may improve decision-making, increase confidence and reduce disagreement between colleagues about complex cases. The study may also help improve the Ebmfrance tool and inform future training in evidence-based practice. The risks are minimal: participation requires some extra time to complete questionnaires, record tool use and join group discussions,

and may increase awareness of uncertainty, which some doctors might find uncomfortable. No additional clinical procedures are imposed on patients, and all data about the GPs and the cases they discuss will be handled confidentially and in accordance with data protection regulations.

Where is the study run from?
Société Française de Médecine Générale (SFMG)

When is the study starting and how long is it expected to run for?
November 2026 to November 2029

Who is funding the study?
GIRCI Île-de-France (Interrégion de Recherche Clinique et d'Innovation) Appel à Projets de Recherche en Soins Primaires (ReSP-Ir – RESPIR)

Who is the main contact?
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Study information

Scientific Title
Management of uncertainty through the rational use of EBM tools: the GEPURE study

Acronym
GEPURE

Study objectives
Primary objective:
To evaluate the impact of using the Ebmfrance tool for 12 months on perceived uncertainty in general practice, by analysing its influence on medical decision-making in individual consultations and practice analysis groups (GAP) in authentic clinical contexts.

Secondary objectives:
1. To identify clinical situations recognised as complex by general practitioners (GPs) each time the Ebmfrance website is used
2. To assess the impact of the Ebmfrance tool on GPs' decision confidence in these situations
3. To describe the different patterns of use and impacts of the Ebmfrance tool:
3.1. According to the context of use (individual consultation vs GAP)
3.2. According to GP experience (resident, early-career GP, experienced practitioner)
3.3. According to the clinical situation (acute, chronic, mixed)
3.4. According to the perceived degree of complexity
3.5. According to the duration of prior use of Ebmfrance
4. To assess the acceptability of the Ebmfrance tool among GPs
5. To assess satisfaction with the Ebmfrance tool among GPs

Ethics approval required
Ethics approval required

Ethics approval(s)
Submitted 02/06/2026, Comité d'éthique du CNGE/DMP UVSQ (2 Avenue de la Source, Montigny le Bretonneux, 78180, France; +33 170429291; contact@dmg-uvsq.com), ref: none provided

Primary study design
Observational

Secondary study design
Non-interventional, prospective cohort study with mixed-methods evaluation (quantitative and qualitative components) in general practice

Study type(s)

Health condition(s) or problem(s) studied
Using the Ebmfrance evidence-based decision support tool in routine general practice for 12 months reduces physicians' perceived diagnostic and therapeutic uncertainty and increases their decision confidence in real-life clinical situations.

Interventions

Study design
Multicentre, mixed-methods, before-and-after, non-randomized study conducted in primary care among volunteer general practitioners. It combines a longitudinal quantitative component using questionnaires and a qualitative component using focus groups.

Study population and sample size
The study population consists of volunteer general practitioners in practice, whether or not they hold a doctoral thesis, and whether or not they participate in practice analysis groups, regardless of their prior level of use of EBMFrance.

Post-inclusion exclusion criteria
No specific post-inclusion exclusion criteria are planned, apart from voluntary withdrawal from the study.

Expected number of participants
The sample size calculation is based on the assumption of a mean PRU score of 50 before the intervention, detection of a 10-point difference, a standard deviation of 18, a power of 80%, an alpha risk of 5%, and an intra-subject correlation coefficient of 0.5. A total of 51 subjects are required; 64 participants will be targeted, taking into account an expected response rate of 80%

Recruitment
Recruitment will be carried out among volunteer general practitioners, via dissemination through university and professional networks and practice analysis groups. The recruitment procedures and materials used are described below, and the dissemination message is appended as an annex.

A panel will be assembled in order to include GPs who participate in practice analysis groups (GAP) as well as others who do not. Up to ten GAPs of 6 to 8 participants may be mobilised, in parallel with individual recruitment by email.

Material: the EBMFrance tool
The intervention is based on access to EBMFrance, a knowledge base in general practice grounded in the evidence-based medicine (EBM) approach and designed for use in clinical settings. The tool can be consulted online, both individually during consultations and during GAP sessions. Each participant will have access for the entire 12-month follow-up period and will use it freely, according to the clinical situations encountered and the perceived complexity.

Study procedures
At inclusion
The following data will be collected: age (in categories), sex, professional experience, practice characteristics, usual use of clinical decision support tools, attitudes towards guidelines, and an initial PRU score. The PRU is an instrument developed to measure physicians' reactions to uncertainty in care, with dimensions including anxiety related to uncertainty and reluctance to discuss it; a cultural and psychometric validation in French has been performed

During the 12-month follow-up
For each use of EBMFrance in consultation or in a GAP, the following will be collected:
1. A perceived complexity score.
2. A level of decision confidence before and after use of the tool.
3. Any changes in management after consultation of the tool.
4. The modalities of use of the tool.
5. In GAPs, any change in the level of disagreement between physicians about the case discussed.

At 12 months and thereafter
At 12 months, the PRU score will be collected again, and a satisfaction questionnaire will be administered to all participants. Between months 24 and 30, focus groups will be conducted with a subgroup of participants in order to explore perceived usefulness, strengths, limitations, and the practicality of EBMFrance.

Data collection
Quantitative data will be collected using secure online questionnaires (inclusion questionnaire, brief per-use questionnaires, satisfaction questionnaire). Focus groups will be audio-recorded, fully transcribed, and then the recordings will be deleted after transcription. Participating physicians' data will be pseudonymised, with the correspondence table stored separately from the analysis dataset and access restricted to authorised personnel only.

Statistical analysis
A descriptive analysis of baseline and follow-up data will be carried out, using counts and percentages for qualitative variables, and means with standard deviations or medians with interquartile ranges for quantitative variables, depending on their distribution.

Analysis of the primary endpoint will take into account the paired before/after nature of the data. Depending on the assumptions being met, a paired Student's t test or a paired Wilcoxon test will be used. Comparisons between subgroups will be based on chi-square or Fisher's exact tests for qualitative variables, and on Student's t tests or Wilcoxon tests for quantitative variables. Multivariable analyses will be performed using regression models to adjust for potential confounders; variables associated with a p-value < 0.20 in univariable analysis may be included in the model, with the possibility of forcing variables considered clinically relevant, such as age and sex.

The qualitative material from the focus groups will be analysed using an approach inspired by the Grounded Theory developed by Glaser and Strauss, and later by Charmaz.

Collected variables and data protection (MR 004)
Data from participating physicians are pseudonymised. Participant identity is collected solely for the creation of the correspondence table, which is stored separately from the analysis dataset with restricted access. The variables collected include socio-demographic and professional data (age in categories, sex, experience, practice characteristics), PRU scores, complexity scores, decision confidence scores, and modalities of use of the tool. No nominative patient data are collected.
Data processing is carried out in accordance with the CNIL reference methodology MR 004. MR 004 compliance is established with the Data Protection Officer (DPO) of the sponsoring institution, who is the designated contact person for data processing. The retention period, identity of the data controller, and DPO contact details are specified in the compliance commitment attached to the submission. Participants are informed of their rights of access, rectification, erasure, restriction, and objection.

Intervention Type
Other

Primary outcome(s)
1. Change in perceived uncertainty score before and after using the Ebmfrance tool measured using the Physicians' Reaction to Uncertainty Scale (PRU), at baseline at inclusion and the end of the 12 month follow-up

Key secondary outcome(s)
1. Perceived complexity score measured using a Likert scale at each use of Ebmfrance

2. Decision Confidence Score measured using a questionnaire at before and after use of EBMFrance

3. Frequency and modalities of use of EBMFrance measured using the frequency of use, timing of use (during individual consultations vs during GAP meetings), and duration of each use at each use of Ebmfrance

4. Number and nature of changes in medical decisions per clinical case after using Ebmfrance measured using number and nature of changes (diagnosis, treatment, referrals) collected via a questionnaire at after use of the tool

5. Acceptability of the tool measured using the proportion of GPs who adhere to the study, dropout rate, mean time to perform an information search, reasons for failed information searches, qualitative data on perceived usefulness, strengths and limitations, and practicality of the tool at each use of Ebmfrance

6. Satisfaction of general practitioners with the tool measured using a Likert scale at each use of Ebmfrance

Completion date
01/11/2029

Eligibility

Key inclusion criteria
1. General practitioner or GP resident in active practice
2. Willing to participate in the study
3. Using or agreeing to use EBMFrance during the follow-up period

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
25 Years

Upper age limit
80 Years

Sex
All

Total final enrolment
150

Key exclusion criteria
1. Specialist physician other than general practice
2. Refusal to participate
3. Inability to use the digital tools required for data collection

Date of first enrolment
01/11/2026

Date of final enrolment
31/05/2027

Locations

Countries of recruitment
France

Sponsor information

Organisation
Société Française de Médecine Générale (SFMG)

Funder(s)

Funder type

Funder Name
GIRCI Île-de-France (Interrégion de Recherche Clinique et d'Innovation) Appel à Projets de Recherche en Soins Primaires (ReSP-Ir – RESPIR)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet			13/07/2026	No	Yes
Participant information sheet			13/07/2026	No	Yes