Call for Proposals 2021

"Social sciences and Humanities Research to improve health care implementation and everyday life of people living with a rare disease"

Call Text

Submission deadline for pre-proposals: February 16th, 2021 at 2 PM (CET)

For further information, please visit us on the web:
http://www.ejprarediseases.org/

Or contact:

Joint Call Secretariat (FFRD, France)

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1. Background – Aim of the call

There are at least 7000 distinct rare diseases, the great majority being of genetic origin. Although individually rare, taken together rare diseases affect at least 26-30 million people in Europe. Moreover, they represent a major issue in health care: a large number of these diseases have an early or very early onset and/or lead to a significant decrease of life expectancy. Moreover, most of them cause chronic illnesses with a large impact on quality of life and the health care system.

Therefore, research on rare diseases is needed to provide knowledge for prevention, diagnosis, better care and everyday life improvement for patients. Yet, research is hampered by lack of resources at several levels: (1) Few scientists work on any given specific disease, (2) There are few patients per disease and they are scattered over large geographic areas, causing difficulties to assemble the necessary cohorts, (3) Existing databases and bio-material collections are usually local, small, and not accessible or standardized, (4) **The complex and multiple problematics of these diseases require interdisciplinary cooperation to improve everyday life and care.**

Health is more than bioscience and medicine. Health also strongly relies on adequate social, psychological, cultural and historical resources[1]. **Care is more than healthcare**: it is "the provision of what is necessary for the health, welfare, maintenance, and protection of someone or something"[2]. Social sciences and Humanities (SSH) help understanding all dimensions of health and care: human condition, suffering, personhood, our responsibility to each other, implementation within cultural and social contexts[3]. **Therefore, SSH research in the field of rare diseases is of crucial importance to help better understanding and better implementation of solutions for those living with a rare disease.**

The specificities of rare diseases - limited number of patients per disease, scarcity of relevant knowledge and expertise, and fragmentation of research - single them out as a distinctive domain of very high European added-value. **Rare diseases are therefore a prime example of a research area that necessitates collaboration/coordination on a transnational scale.**

In this context, the **European Joint Programme on Rare Diseases (EJP RD)** has successfully implemented two Joint Transnational Calls since 2019 to further help in coordinating the research efforts of European, Associated and non-European countries in the field of rare diseases and implement the objectives of the International Rare Disease Research Consortium (IRDiRC). These actions are following the ten Joint Transnational Calls for rare diseases research projects launched previously by the ERA-Net E-Rare since 2006. The aim of the call is in compliance with the vision and goals set by the International Rare Diseases Research Consortium (IRDiRC) which fosters international collaboration in rare diseases research. For more information, visit the IRDiRC website.

[1] *Clarke B, Ghiara V, Russo F. Time to care: why the humanities and the social sciences belong in the science of health. BMJ Open 2019;9:e030286. doi: 10.1136/bmjopen-2019-030286*
[2] *Oxford languages dictionary*
[3] *https://guides.uflib.ufl.edu/hsclwellness*

2. Participating organizations

A number of national and regional funding organizations will participate in the **EJP RD Joint Transnational Call (JTC) 2021** and will fund research projects on rare diseases. The call opens simultaneously with the involvement of the following funding organizations in their respective countries/regions:

- Austrian Science Fund (FWF), Austria
- Research Foundation Flanders (FWO), Belgium, Flanders
- Fund for Scientific Research - FNRS (F.R.S.-FNRS), Belgium, French-speaking community
- Canadian Institutes of Health Research – Institute of Genetics (CIHR-IG), Canada
- Ministry of Social Affairs (MOSAE), Estonia
- French National Research Agency (ANR), France
- German Ministry of Education and Research (BMBF), Germany
- National Research, Development and Innovation Office (NKFIH), Hungary
- Chief Scientist Office of the Ministry of Health (CSO-MOH), Israel
- Italian Ministry of Health (MoH-IT), Italy
- Tuscany Region (RT/TuscReg), Tuscany (Italy)
- Research Council of Lithuania (LMT), Lithuania
- National Research Fund (FNR), Luxembourg
- National Centre for Research and Development (NCBR), Poland
- Slovak Academy of Sciences (SAS), Slovakia
- National Institute of Health Carlos III (ISCIII), Spain
- Swiss National Science Foundation (SNSF), Switzerland
- The Scientific and Technological Research Council of Turkey (TUBITAK), Turkey
- The French National Institute of Health and Medical Research (INSERM), France (will provide dedicated funding only to Patient Advocacy Organisations).

3. Management and Evaluation Structures

Two boards, the Call Steering Committee (**CSC**) and the Scientific Evaluation Committee (**SEC**), will manage the evaluation process of the call with support of the Joint Call Secretariat (**JCS**) (FFRD, France). SEC and CSC members are not allowed to submit or participate in proposals within this call. The process includes the evaluation procedure of pre- and full proposals, the final selection and the award of research projects.

The Call Steering Committee (CSC) is composed of a single representative from each country/region funding organization that joins the JTC2021. The CSC will supervise the progress of the call and the evaluation of proposals. The CSC will make the final funding recommendation to the national/regional funding organizations on the proposals to be funded, based on the final ranking list provided by the SEC. All decisions concerning the call procedures will be taken by the CSC.

The Scientific Evaluation Committee (SEC) is a panel of internationally recognized, independent, scientific experts responsible for the evaluation of submitted proposals. SEC members must sign a confidentiality form and a statement to confirm that they do not have any conflicts of interest.

4. Scope of the call

The aim of the call is to enable scientists in different countries to build an effective collaboration on a common interdisciplinary research project based on complementarities and sharing of expertise, with a clear future benefit for patients.

Projects shall involve **a group of rare diseases or a single rare disease following the European definition** i.e. a disease affecting not more than **five in 10.000 persons** in the European Community, EC associated states and Canada. Applicants are encouraged to assemble groups of rare diseases based on solid criteria and commonalities if this leverages added value in sharing resources or expertise or has the capacity to elucidate common disease problematics.

Topic: **Social sciences and Humanities Research to improve health care implementation and everyday life of people living with a rare disease**

4.1 SSH disciplines covered

The following list of health-related Social sciences and Humanities (SSH) disciplines is used for definition (taken from the European Commission (EC) that was adapted from the UNESCO International Standard Classification of Education (ISCED 2011)):

Social sciences, business and law

- Social and behavioral sciences: economics, management, sociology, anthropology, demography, geography, psychology, neuropsychology, cognitive science, human rights, law, political sciences, communication, and social studies of science and technology;
- Education science: educational research;
- Governance: public and institutional administration, social and health economic and systems, policy, and social policy.

Humanities and the arts

- Humanities: cultural studies, linguistics, philosophy, ethics, and history.

4.2 Topics list

Research proposals should cover <u>at least one</u> of the following areas

- **Health & social care services research to improve patient and familial/household health outcomes**
- **Economic Impact of Rare diseases**
- **Psychological and Social Impact of Rare diseases**
- **Studies addressing the impact/burden of the delay in diagnosis and of the lack of therapeutic intervention**
- **e-Health in rare diseases: Use of innovative technology systems for care practices in health and social services**

- **Development and enhancement of health outcomes research methods in rare diseases**

- **Effects of pandemic crisis and the global outbreak alert and response on the rare disease field, and the emergence of innovative care pathways in this regard**

See details on subtopics for each above mentioned area in Annex 1.
Other research topics are possible as long as they focus on SSH research and are not in the excluded topics list.

4.3 Excluded approaches and topics

The following approaches and topics are <u>excluded</u> from the scope of the call:

- Interventional clinical trials to prove efficacy of drugs, treatments, surgical procedures, medical technology procedures. This also includes studies comparing efficacy, e.g. B. two surgical techniques or therapies. Clinical phase IV pharmacovigilance studies cannot be funded either.
- Studies on the exclusive testing of the safety of medical devices.
- Health technology assessment reports (HTA) for a specific product
- Projects focusing on meta-analyses and systematic reviews
- Creation of new registers or establishment of new long-term cohorts and / or promotion of existing registers or long-term cohorts beyond the specific research question of the submitted project.
- Development of new digital or technological tools.
- Projects to accelerate diagnosis and/or explore disease progression and mechanisms of rare diseases as covered in EJP RD JTC 2019.
- Development of new therapies as covered in EJP RD JTC 2020.
- Projects focusing only on rare neurodegenerative diseases which are within the main focus of the Joint Programming Initiative on Neurodegenerative Disease Research (JPND). These are: Alzheimer's disease and other dementias; Parkinson's disease (PD) and PD-related disorders; Prion diseases; Motor Neuron Diseases; Huntington's disease; Spinal Muscular Atrophy and dominant forms of Spinocerebellar Ataxia. Interested researchers should refer to the relevant JPND calls. **Childhood dementias/neurodegenerative diseases are not excluded**.
- Rare infectious diseases, rare cancers and rare adverse drug events in treatments of common diseases.

4.4 Type of studies

Qualitative Analysis
Description and analysis of patient's lifepath, as well as healthcare and social care processes and structures, using qualitative methods, form an important part of SSH research. Qualitative studies are often the starting point for identifying relevant questions for further quantitative studies. The projects can also include further development of scientific instruments and methods and their validation in practice. The sole translation, evaluation and/or testing of individual questionnaires is not funded.

Non-interventional quantitative studies
In order to be able to name the strengths and weaknesses of a system, in a scientifically sound manner, the collection and evaluation of relevant and valid data using recognized methods and procedures are necessary, as well as the further development and validation of scientific instruments and methods. Adequate comparison groups are essential. In this type of studies, the system is preferably analyzed prospectively. This includes observational studies like anthropological studies, case control studies, cross-sectional and longitudinal studies as well as cost-effectiveness studies.

Interventional studies on care implementation
These are comparative interventional studies to evaluate the effectiveness of practices under everyday conditions. The study design must be multi-armed. Structural equality of the groups can be achieved through suitable measures, e.g. by randomization. In contrast to clinical studies that show the efficacy of a therapeutic measure, e.g. test a drug, the interventional studies funded within the scope of this Call require proof of effectiveness and the effect of measures in everyday care e.g. in heterogeneous patient groups examined. This requires the use of patient-relevant endpoints, e.g. health-related quality of life, as the primary targets of the studies. Other methodological prerequisites for an interventional study on care implementation include broad inclusion and exclusion criteria, if possible, no requirements for the patients going beyond everyday care and the conduct of the study in the facilities in which the examined intervention is used as part of regular practices. Project proposals must clearly demonstrate the potential health impact as well as the added value of transnational collaboration.
This includes participatory action research.
For interventional studies on care implementation, feasibility must be clearly demonstrated regarding the 3-year duration of the project, including realistic timelines for regulatory aspects like ethical approval etc. in different countries.
For interventional studies on care implementation, ECRIN, the European Clinical Research Infrastructure Network, partner of the EJP RD can provide advice for the planning and design of cluster randomized controlled trials or randomized and practice-based studies. **It is highly encouraged from the preproposal stage to contact ECRIN's team** (marta.delalamo@ecrin.org).

4.5 Project description

Applicants will describe and justify the following elements (see section 3 – Project Description of the Guidelines for Applicants for complete information on the content of pre and full proposal templates):

- Background, rationale, present state of the art in the SSH research field, preliminary results
- Objectives and hypothesis
- Soundness and pertinence, originality, social care and public health interest
- Workplan & methodology *(highlighting feasibility)*
- Ethical and legal issues, data management
- Work packages, timeline and budget
- Responsibilities and workloads, complementarity of participants, management plan
- Impact of expected results, benefits and implementation in care

- Valorization, measures to exploit and disseminate the results, possible actions in social, health and/or socio-economic care, translatability and sustainability

5. Funding and eligibility criteria

5.1 Funding

The maximum duration of the project is three years.

Double funding of research projects is not permitted. The JCS and national/regional funding organizations will perform cross-checks of submissions against other joint transnational (e.g. NEURON, JPND, EuroNanoMed, ERA PerMed etc.) and national calls. Partners may not apply for funding for the same research activities in different calls.

Consortia of projects funded in previous Joint Transnational Calls of the EJP RD or ERA-Net E-Rare can apply for funding for an extension of their cooperation. These consortia must clearly demonstrate the success of the current project and innovative scientific aims for their future collaboration. Their applications will compete with applications for new research projects.

5.2 Categories of partners

Partners belonging to one of the following categories may request funding under a joint research proposal (according to country/regional regulations):

- academia (research teams working in universities, other higher education institutions or research institutes),
- clinical/public health sector (research teams working in hospitals/public health and/or other health care settings and health organizations),
- enterprises (all sizes of private companies). Participation of small and medium-sized enterprises (SMEs) is encouraged when allowed by national/regional regulations,
- patient advocacy organizations

5.3 Countries and region-specific guidelines

Although applications will be submitted jointly by applicants from several countries, individual groups will be funded by their respective regional/national funding organization. **Applicants therefore must contact their respective funding organizations and confirm eligibility in advance** of submitting an application. **The adherence to the national/regional regulations in the "Guidelines for Applicants" document is mandatory.** The inclusion of a non-eligible partner in a proposal will **lead to the rejection of the entire proposal without further review**. If you need additional information, please contact the JCS. Note that a parallel proposal submission is required by some regional/national funding organizations.

5.4 Consortium Makeup

❖ 5.4.1 Multidisciplinarity – Matchmaking

The aim of this call is to support multinational, innovative, and multidisciplinary **humanities and social sciences research** projects **to improve healthcare implementation and everyday life** of people living with a rare disease.
Consortia **have to include both SSH and clinical expertise's** in their consortium. Moreover, to ensure that the needs and priorities of rare disease patients are adequately addressed, they or their representatives must be appropriately involved in all projects (see section 5.5).
The **use of the matchmaking tool is strongly encouraged** to build multidisciplinary research projects:
https://live.eventtia.com/en/jtc2021matchmaking

❖ 5.4.2 Limit number of partners

Only transnational projects will be funded. Each consortium submitting a proposal must involve **three to six eligible principal investigator partners (referred to as partners below)** from **at least three different participating countries** (see list in section 2). In specific cases this can be increased to eight partners (see below). No more than two eligible partners from the same country can be present in each consortium; **further national/regional limits may apply, see "Guidelines for Applicants".** The limit of 8 partners applies to inclusion of Early Career Researchers and partners from underrepresented countries (see below). PAOs requesting funding do not count toward this total.

The number of partners can be increased to 8 in two cases:

1. The inclusion of partners from participating countries usually underrepresented in projects (Slovakia, Hungary, Lithuania, Poland, and Turkey).
2. The inclusion of Early Career Researchers as full partners (see section 5.6).

❖ 5.4.3 What is a partner? a collaborator? a sub-contractor?

In order to be **considered as an eligible partner**, a group must contribute substantially to at least one of the projects work packages. If the only role of a group is to provide patient access, data or samples for the study, they will not be considered as partners of the consortium, but can be included otherwise, via cooperation agreements or subcontracting.

Consortia may include **collaborators** that secure their own funding. Collaborators cannot be work package leaders, and their contribution to the consortium must be described (where relevant a CV can be included in the proposal). As they do not receive funding as part of this call, they do not count toward the limit of 8 partners requesting research funding (nor is there a limitation of collaborators per country, as long as their participation is justified).

If necessary, to implement the action, consortia may also include **sub-contractors, according to country/regional regulations**. Sub-contractors may cover only a limited

part of the action, and their contribution to the consortium must be described. They do not count toward the limit of 8 partners requesting research funding (nor is there a limitation of collaborators per country, as long as their participation is justified and if subcontracting is possible according to national/regional funding rules).

❖ 5.4.4 Consortium organization

Each transnational proposal must nominate a **project consortium coordinator** among the project partner principal investigators. The coordinator must be an eligible project partner from an EJP RD JTC 2021 funding country/region. The project coordinator will **represent the consortium externally**, to the JCS and to CSC, and will be **responsible for its internal scientific management** (such as controlling, reporting, and intellectual property rights issues). This workload should be taken into account in the estimation of the budget of the coordinator. A single principal investigator will represent each project partner. Within a joint proposal, the principal investigator of each project partner will be the contact person for the relevant country/regional funding organization.

5.5 Patient Advocacy Organizations and Patient Involvement

Consortia are strongly advised to include patient representatives and patient advocacy organizations (PAOs).
From an early stage in proposal development, applicants should consult relevant disease-specific patient organizations and/or alliances of rare disease patient organizations. For information on where to find patient representatives and PAOs willing to be involved in research, please see:

- Orphanet portal for rare diseases and drugs patient organization directory
- Rare Diseases Europe (EURORDIS)
- European Reference Networks (ERNs)
- European Patient's Academy on Therapeutic Innovation (EUPATI).

The consortia will clearly present the role and responsibilities of the patient representatives and PAOs, how they will operate, at what levels and stages of the research, and provide justifications for allocated resources. Patient representatives and PAOs can be involved in all levels of the proposed work, including in project design, by advising on prioritization, sitting on advisory groups, being a member of the consortium steering group or the governance group. Patient representatives and PAOs may be part of institutional scientific boards to discuss the proposal and subsequent study on issues such as:

- the research idea, for relevance to patient concerns,
- possible outcomes, especially patient reported outcome measures,
- informed consent,
- patient input on appropriate outcome measures,
- possible patient intervention in the project,
- review of the data collected,
- dissemination of research findings.

For more information on patient-centered care and strategies to involve patient representatives and PAOs in your research project, please consult:

- EJP RD Short guide on patient partnerships in rare diseases research projects

- INVOLVE Briefing Notes for Researchers and cost calculator,
- Recommendations for Successful Patient Involvement in Scientific Research (de Witt et al., 2016),
- Measuring what matters to rare disease patients (Morel & Cano, 2017),
- CIHR's Patient Engagement resources.

It is highly recommended that PAOs first explore funding opportunities from their respective funding organisations (see Guidelines for applicants).
If PAOs cannot be funded by their respective national/regional funding organisations, they can be eligible for direct funding through INSERM.
Exceptions:
Estonian PAOs cannot be funded directly by INSERM; please refer to the guidelines for applicants.
Spanish PAOs cannot be funded directly by INSERM; please refer to the guidelines for applicants to check the eligibility conditions for PAOs funding by ISCIII.
PAOs from Italy applying in collaboration with IRCCS funded by the MoH-IT, can participate in a Consortium as a "collaborator" with their own funding (see point 5.4.3 of this call) or can be financed as a "sub-contractor" through the IRCCS's budget. In any case, they cannot be funded by INSERM directly.

5.6 Early Career Researchers

Early Career Researchers (ECRs) are encouraged to join consortia as full research partners and are therefore subject to the same eligibility criteria as other partners. ECRs must demonstrate independence and scientific excellence, and should be clearly identified in the proposal and their CV. A definition of ECRs according to European Research Council criteria is provided in the "Guidelines for Applicants", section 4.1. **Please note that national/regional definitions and time limits might differ.** Therefore, please refer to national guidelines and contact your national/regional funder. Please refer to the "Guidelines for Applicants", section 4.2 for requirements for the identification of ECRs.

6. Registration and submission

Research consortia who intend to submit a transnational project proposal should **register as soon as possible** via the electronic proposal system: https://ptoutline.eu/app/ejprd21. Please fill in the data sheet in the system. The same data sheet can be used for the submission of pre-proposals and full proposals (if invited). Please fill in the data sheet in the system. The same data sheet can be used for the submission of pre-proposals and full proposals (if invited).

There will be a **two-stage submission procedure for joint applications**: a pre- and full proposal stage. In both cases, one joint proposal document (in English) shall be prepared by the partners of a joint transnational proposal and must be submitted by the coordinator only to the JCS via the electronic submission system. Proposals must be prepared using the templates provided on the EJP RD web page (**www.ejprarediseases.org**). Proposals not conforming to template instructions (including length and format) will be rejected.

Call Timeline

16th February 2021	Pre-proposal submission deadline
End of April 2021	Invitation to full proposal
15th June 2021	Full proposal submission deadline
30th July 2021	Deadline for rebuttals
December 2021	Notification of funding decision

Full proposals will be accepted only from those applicants who were explicitly invited by the JCS to submit them.

In general, no fundamental changes between the pre- and full proposals concerning the composition of the consortia, objectives of the project, or requested budget will be accepted. In order to make such a change, a detailed justification must be provided to the JCS for consideration by the CSC. One justification can be that because of additional advice gathered on the feasibility of the project, additional expertise or resources are needed. However, the national/regional regulations on budget caps will still apply and the budget change needs to be pre-approved by the national/regional funding organization.

Further information on how to submit pre-proposals and full proposals electronically (including Guidelines for Applicants and submission templates) is available at the EJP RD website (http://www.ejprarediseases.org/).

7. Evaluation process

At the pre-proposal stage, applicants should focus on presenting the scientific idea/hypothesis and supporting preliminary results, studies or data. The proposal should describe the project, starting from an unmet need, and follow through to the expected end-point of the study. Pre-proposals will be evaluated by SSH and rare diseases experts.

At the full proposal stage, in addition to the scientific content, a full description of patient engagement (or a justification if this is not applicable), data management, statistical methods, and ethical and legal issues will be required. Applicants should anticipate this requirement and ensure that they have consulted with relevant experts to verify the feasibility of the project, and that the proposal can be completed within the defined budget (taking into account budget limits listed in the Guidelines for Applicants).

7.1 Evaluation Criteria

Evaluation scores will be awarded according to specific evaluation criteria that are in line with Horizon 2020 rules (see below), using a common evaluation form. Each criterion will be scored out of five, for a maximum overall score of 15 points. The threshold for an individual criterion is three, with an overall threshold of 12 points.

❖ 7.1.1 Scoring system

0: Failure: The proposal fails to address the criterion in question or cannot be judged because of missing or incomplete information.
1: Poor: The proposal shows serious weaknesses in relation to the criterion in question.
2: Fair: The proposal generally addresses the criterion, but there are significant weaknesses that need corrections.
3: Good: The proposal addresses the criterion in question well, but certain improvements are necessary.
4: Very good: The proposal addresses the criterion very well, but small improvements are possible.
5: Excellent: The proposal successfully addresses all aspects of the criterion in question.

❖ 7.1.2 Criteria

1. **Excellence (0-5)**
   a. Clarity and pertinence of the objectives,
   b. Credibility of the proposed approach and methodology,
   c. Soundness of the concept,
   d. Feasibility of the project (adequate requested resources, time schedule, access to and engagement of patients, data and material),
   e. Competence and experience of participating research partners in the field(s) of the proposal (previous work in the field, specific expertise),
   f. PAOs and patient representatives have an active and meaningful participation in the project (including where possible in the design and definition of research priorities, interpretation and implementation of results, their dissemination, and communication).

2. **Impact (0-5)**
   a. *Potential of the expected results for exploitation and for future social, public health and/or other socio-economic relevant applications
   b. *Added value of transnational collaboration: gathering a critical mass of patients/ material, sharing of expertise and resources, harmonization of data,
   c. **Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data. A data management strategy in the full proposal is mandatory,
   d. Innovative potential: relevant application for rare diseases care, possible actions in social, health and/or socio-economic care.
   e. Inclusion of Early Career Researchers as full partners,
   f. Benefit to patients, their families, and carers with an active and meaningful involvement of patient organizations and patient representatives,

3. **Quality and efficiency of the implementation (0-5)**
   a. Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks, resources and timeframe,
   b. Complementarity of the participants within the consortium, including the integration of PAOs or patient representatives where possible,
   c. **Appropriateness of the management structures and procedures, including risk management, contingency plans and innovation management,
   d. **Plan for sustainability of infrastructures or resources initiated by the project,

e. **Budget and cost-effectiveness of the project (rational distribution of resources in relation to project's activities, partner responsibilities, and time frame).

*Sub-criteria 2a and 2b will be prioritized for assessing the impact of proposals (pre- and full proposal stage).
**Sub-criteria 2c, 3c, 3d and 3e will be taken into account only for the full proposal evaluation step.

7.2 Pre-proposal Review

Eligibility check
The JCS will check all pre-proposals to ensure that they meet the call's formal criteria. The JCS will forward the proposals to the CSC members who will perform a check for compliance to country/regional eligibility rules. **Please note that proposals not meeting the formal criteria or the national/regional eligibility criteria and requirements will be declined without further review.**

Peer review of pre-proposals
Pre-proposals passing the eligibility check will be forwarded to the SEC members for a first evaluation (see evaluation criteria above). The SEC members will perform the assessment of the pre-proposal and fill the evaluation forms with scores and comments for each criterion. Each pre-proposal will be assessed by 2 SEC members. The SEC members will then meet to establish a ranking of the pre-proposals. This ranking will be used by the CSC to decide which pre-proposals will be accepted for full proposal submission. General recommendations from the SEC will be forwarded to applicants invited for the second step of the evaluation process. The summary review report will only be forwarded to applicants not invited for the second step.

At this stage research teams of underrepresented or undersubscribed countries may join successful pre-proposals (see 5.2 in Guidelines for Applicants for more details).

7.3 Full proposal Review

Formal criteria check
The JCS will check the full proposals to ensure that they meet the call's formal criteria.

External reviewer evaluation
Each proposal will be allocated to at least two external scientific reviewers with expertise relevant to the application.

Rebuttal stage
Before the SEC members see the reviews from external reviewers, each project coordinator will be provided with the opportunity to read and provide a written response to the evaluations of the external reviewers. The scores will not be given at this stage. This step allows applicants to correct factual errors or misunderstandings in the review, and to reply to reviewers' questions. Issues which are not related with reviewers' comments cannot be addressed and the work plan cannot be modified at this stage.

The applicants will have up to one week (in late July 2021) for this **optional** response to the reviewers' comments.

SEC Meeting Evaluation
The JCS will send full proposals, reviews and rebuttals to the SEC members. The SEC will meet to discuss each proposal and, **after consideration of the evaluation criteria, external reviews, rebuttals, and their own discussions**, the SEC will assign final scores, make a classification of the proposals, and rank proposals recommended for funding. The final summary review report prepared by the SEC members will be sent to all applicants.
Three groups of reviewers will be present at the SEC meeting to evaluate projects:

1. **SSH and clinical experts**
2. **Patient representatives**
   Proposals will be evaluated by expert patient reviewers according to the relevant evaluation criteria listed above (subcriteria 1g, 2f, 3b; see section 7.1.2) with a 3-levels scoring system. These reviewers will be present at the SEC meeting to discuss proposals and provide their feedback.
3. **Statistical / methodological experts**
   Proposals will be evaluated by experts in methodology or statistics according to the relevant evaluation criteria listed above (subcriteria 1b, 1e, 1f; see section 7.1.2) with a 3-levels scoring system. These reviewers will be present at the SEC meeting to discuss proposals and provide their feedback.

Ethical evaluation
After the second SEC meeting, full proposals recommended for funding by the SEC will be remotely evaluated by independent experts in ethics. These experts will report on the feasibility of a given proposal to comply with the ethical requirements. If necessary, it will list those tasks that need to be done and documents that need to be submitted by the consortium in order to receive approval for funding from an ethics standpoint. **Only those proposals approved by both the scientific and ethical evaluations (complying with all central Horizon 2020 and regional/national ethical requirements), will be funded**.

7.4 Funding decision

Based on the ranking list established by the SEC and on available funding, the CSC will suggest the projects to be funded to the national/regional funding organizations. Final decisions will be made by the national/regional funding organizations and will be subject to budgetary considerations.

If necessary, the CSC will determine a priority order for proposals which have been awarded the same score within a ranked list. This will be based on:

- Availability of national funding;
- Maximization of use of national funding;
- Proposals with participation of underrepresented or undersubscribed countries;
- Proposals that address diseases not otherwise covered by more highly ranked proposals.

The JCS will notify all project coordinators of the final funding decision and disseminate the SEC consensus report.

8. Responsibilities, Reporting requirements and Dissemination

The Joint Call Secretariat (JCS) is the Foundation for Rare Diseases (FFRD, France) to assist the CSC and the national/regional funding bodies during the implementation of the call. The JCS will be responsible for the administrative management of the call. It will be the primary contact point between the research consortia, the funding organizations, and peer reviewers with regard to call procedures. **The project coordinator is the point of contact for consortia during the application procedure and is responsible for forwarding relevant information from the JCS to their consortium members.** CSO-MOH, Israel, will be responsible for the monitoring phase until the funded research projects have ended.

The **coordinators** of all funded projects must submit a **brief annual scientific project report** (due on the 28th of February 2023 and subsequent years) **and a final scientific project report** (due within six months of the end of the project). All reports must be in English and must use the reporting templates provided. The research partners are jointly responsible for delivery of the reports. Only reports delivered on behalf of the consortium, via the project coordinator, will be accepted.

If required, each beneficiary should submit financial and scientific reports to their **national/regional funding organizations**, according to national/regional regulations. The progress and final results of each individual contract/letter of grant will be monitored by the respective national/regional funding organizations.

The coordinators and national/regional group leaders will be asked to present the results of their projects at an **intermediate status symposium** organized by EJP RD. The presence of at least one representative (coordinator and/or partner) per project will be mandatory. Therefore, **the coordinator and respective partners must budget a sufficient amount for the expenses related to these events**.

Please read the "Guidelines for Applicants" document for further information including national/regional information and eligibility requirements.

9. Contacts and further information

Further information on the EJP RD, the Call, and follow-up is available at the EJP RD website (http://www.ejprarediseases.org/).

Call Contacts

Role	Organization	Contact Details
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10. National and regional contacts

Applicants should refer to the guidelines document for country-specific information including national/regional rules that may apply. Applicants are strongly advised to contact the national/regional contact person to ensure eligibility before submitting their projects.

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Annex 1 – areas and topics examples

Transnational research proposals must cover at least one of the following areas, which are equal in relevance for this call. The description below is not exhaustive, other research topics in the described areas are possible as long as they focus on SSH research and are not in the excluded topics list.

Research on health & social care systems to improve rare disease patient and familial/household health outcomes

Research on challenges and solutions for improvement of the **care pathways**; integrated social and holistic care service models for people with rare disease, including transition from pediatric to adults' services and including psychosocial services for patients.

Patients, families and carers' involvement in research on health & social services; participative research, patient-research partnerships & patient and stakeholders engagement models; emphasis on outcomes related to patient experience (patients' descriptions and/or evaluations of the care they receive).

Research on **accessibility (equity of access)** and appropriateness of healthcare/ social services; their impact on Quality of Life (QoL). Research on transnational and/ or transcultural measurements, comparison and improvement of well-being/quality of life of patients with rare disease through **non-medical/non-pharmacological intervention.**

Sustainability and resilience of health and social care for patients with rare diseases; implementation of care management, coordination and clinical practice guidelines, including palliative care, financial assistance and ERNs support; **equity, access and sustainability** of social and health care systems. Impacts of legal and public administration system set-ups. Impact of international disease organizations, their role in improving equity and their interaction with national and local politics.

Economic impact of Rare diseases

Economic impact of living with rare diseases; modelling of care pathways including studies with cost measures (e.g. healthcare costs, out of pocket payments, productivity, transportation costs, education costs, loss of earnings, home adaptions, etc.).

Cost-effectiveness evaluation of healthcare treatments pathways for rare diseases, assistive technologies, costs of inappropriate/low-quality care, evaluation of (lack of) centralization, spillover effects, use of HTA (Health Technology Assessment), key challenges to develop cost-effectiveness models in RD research and orphan drugs indication.

Development of new **health outcomes measures** that can be translated into cost-effectiveness, QoL, burden of disease or the use of existing disease progression models

or models like Markov models for reimbursement submissions or outcome-based managed entry agreements, etc.

Development of new models and methods for assessing rare disease treatments that are useful to reimbursement or funding or financing of therapies, especially highly innovative therapies (including cellular and gene therapies) that defy conventional HTA parameters, such as Quality of Life scales, calculation of pharmacoeconomic value using conventional ICERs or ICURs, uncertainty in long-term outcomes and reliance on future-facing real-world evidence. Ethical issues surrounding the cost of experimental treatments.

Economic impact of the delay in diagnosis and in the lack of therapeutic intervention, on rare disease patients, their families or the society; economic impact of bottlenecks and limiting factors hindering access to available diagnostic tools or therapies for rare disease patients.

Identification of **cost-effective and useful social interventions and health care best practices.** Patient and/or family/carer preferences over management/therapeutic interventions.

Psychological and social impact of living with a Rare disease

Research on **everyday life** improvement and reduction of **psycho-social burden** for people with rare diseases, their families and caregivers; psycho-social impact and support, mental health, relationships, social integration, school integration, employment, impact on family, siblings, etc.

Identification of barriers and facilitators in social care or health care for patients coming to medical attention with a rare disease; comparison/mapping between countries regarding useful social and health care systems best practices; assessment of social equity, ethical considerations, and identification of bottlenecks for rare disease patients to access to services and to enter a globally coordinated diagnostic and research pipeline.

Research on **social inequalities, Human rights** and **Forms of Discriminations** and for rare diseases patients and their families in the society: exploring the links between discrimination and social, economic, territorial and cultural diversity. Perception of the term or category of "rare disease" by public and by rare disease patients/families themselves.

Studies addressing the impact/burden of the delay in diagnosis and of the lack of therapeutic intervention

Research on **adequate** (effective, reproducible, reliable or innovative) **tools to assess impacts** of the lack of diagnosis or therapy.

Impact of delayed diagnosis or lack of effective therapies for rare disease patients and their families including ethical perspectives: their impact on quality of life,

psychological burden, patients and family relations (care givers and non-care givers/ impact on siblings), including school integration, employment, etc.

Prenatal and neonatal screening impact and access to early therapeutic intervention. Research on **available, achievable, accessible, affordable and sustainable routes to avoid delays in diagnosis and treatment** (including roles of ERNs, registries, biobanks, infrastructures, centers of excellence, innovative and shared resources technologies, combination of diagnostic approaches-integrated genotype and phenotype analysis, equity and heterogeneity of patient access, development strategies for open science approaches, etc.).

e-Health in rare diseases: Use of innovative technology systems for care practices

Research on the application of digital health focused on rare diseases health and social care services: eHealth, telemedicine and related technologies (for e.g., diagnosis, genetic counselling and clinical management, equity of access, electronic records, self-management of the care pathway towards a chronic model of care, issues of implementation and reimbursement, etc.); its impact on QoL of the patient, PROMs, impact on diagnosis, care pathways and support. This may include research on the innovative use of existing technology, and models for registries with patient's involvement.

Research on e-learning for rare diseases: evaluation of effectiveness and impact of e-learning opportunities for healthcare and social services in rare diseases management, learning healthcare systems.

Digital literacy: Practices/Uses of e-health technologies applied to rare diseases, acceptance of these technologies, capacity to understand such technologies.

Development and enhancement of health outcomes research methods in rare diseases.

Methodologies to study the qualitative natural history data including research on factors influencing progression and prognosis of rare disease.

Methodologies to investigate, collect and use real world data, e.g.: Health technology assessments of new interventions, dynamic registries, use of digital technology to gather real world evidence using the patient-centered outcome measures (PCOMs), patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs), etc.

Impact of patient access to personalized digital tools on patient empowerment and health outcomes. Inequities reduction across jurisdictions. Ethical and equity considerations, and transparency enhancement in the use of digital tools.

Big data Analysis to improve health outcomes: exploration in a wide range of SSH fields including anthropology, economics, history, psychology, public health etc. including

computational approaches, the data acquisition workflow, data storage, metadata construction and translating text into knowledge.

Effects of pandemic crisis, of the global outbreak alert, response on the rare disease field and the emergence of innovative care pathways

Effects of COVID-19, of the global outbreak alert and response on specific rare diseases diagnosis, treatment and follow-up of patients with rare diseases, accessibility to health/social services and education, care, costs, research, etc. Effects of prevention measures on patients, carers and families.

Shared **success factors and barriers** (and opportunities for collaboration) between the global endemic of rare diseases and epidemics. Methods to assess impact of future epidemics.

Learnings from reliance on e-health, e-learning, e-collaboration, e-communication in the era of COVID-19 that could and should be applied on regular basis, perhaps in anticipation of or preparation for COVID-19 redux.