

# IHI6<sup>th</sup> Call for proposalsTwo-stage call













## **TABLE OF CONTENTS**

Introduction3
Topics overview4
Call conditions for single stage and two-stage calls5
Topic 1: Support healthcare system resilience through a focus on persistency in the treatment of chronic diseases
Topic 2: Development of evidence based practical guidance for sponsors on the use of real-world data / real-world evidence

### Introduction

The Innovative Health Initiative Joint Undertaking (IHI JU) is a partnership between the European Union and industry associations representing the sectors involved in healthcare, namely COCIR (medical imaging, radiotherapy, health ICT and electromedical industries); EFPIA, including Vaccines Europe (pharmaceutical industry and vaccine industry); EuropaBio (biotechnology industry); and MedTech Europe (medical technology industry).

IHI JU aims to pioneer a new, more integrated approach to health research and builds on the experience gained from the Innovative Medicine Initiative 2 Joint Undertaking (IMI2 JU).

IHI JU aims to translate health research and innovation into real benefits for patients and society, and ensure that Europe remains at the cutting edge of interdisciplinary, sustainable, patient-centric health research. Health research and care increasingly involve diverse sectors. By supporting projects that bring these sectors together, IHI JU will pave the way for a more integrated approach to health care, covering prevention, diagnosis, treatment, and disease management.

As current health challenges and threats are global, IHI JU should be open to participation by international academic, industrial and regulatory actors, in order to benefit from wider access to data and expertise, to respond to emerging health threats and to achieve the necessary societal impact, in particular improved health outcomes for Union citizens.

## **Topics overview**

HORIZON-JU-IHI-2024-06-01- two-stage Support healthcare system resilience through a focus on persistency in the treatment of chronic diseases	The maximum financial contribution from IHI JU is up to EUR 11 300 000.  The indicative in-kind contribution from industry partners is EUR 11 300 000.	Research and Innovation Action (RIA) Two-stage submission and evaluation process. Only the applicant consortium whose proposal is ranked first at the first stage is invited for the second stage.
	The indicative in-kind contribution from industry partners may include in-kind contributions to additional activities (IKAA).	
HORIZON-JU-IHI-2024-06-02- two-stage  Development of evidence based practical guidance for sponsors on the use of real-world data / real-world evidence	The maximum financial contribution from IHI JU is up to EUR 13 300 000.  The indicative in-kind and financial contribution from industry partners is EUR 13 300 000.  The indicative in-kind contribution from industry partners may include in-kind contributions to additional activities (IKAA).	Research and Innovation Action (RIA) Two-stage submission and evaluation process. Only the applicant consortium whose proposal is ranked first at the first stage is invited for the second stage

## Call conditions for single stage and two-stage calls

#### \*For Call 6 please refer to the conditions relevant to the two-stage call

The submission deadline for short proposals (SPs) will be 16/04/2024, and the deadline for full proposals (FPs) will be 10/10/2024.

Scientific evaluation of the SPs and FPs under the two-stage call will be completed by 2024. Grant Agreement Preparation (GAP) will be completed within 3 months from the notification to applicants of the evaluation results of the full proposal, and maximum eight months from the final date of submission of the FPs, in line with the applicable time to grant (TTG).

#### Conditions of the calls and call management rules

For call management, IHI JU will utilise the EC IT infrastructure available under Funding & Tender opportunities – Single Electronic Data Interchange Area (SEDIA).

The General Annexes of the Horizon Europe Work Programme 2023-2024 shall apply *mutatis mutandis* to the calls for proposals covered by this Work Programme. In accordance with Article 5(2)(a) of the Council Regulation (EU) 2021/2085, in duly justified cases, derogations related to the specificities for IHI JU may be introduced in the relevant Work Programme. Where necessary, this will be done when the topic texts are identified in this Work Programme.

To maximise the efficiency of the calls management, IHI JU will continuously explore and implement simplifications and improve its processes while maintaining the highest standards of the evaluation process, in line with the applicable Horizon Europe rules.

All proposals must conform to the conditions set out in Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination.

#### **GENERAL CONDITIONS RELATING TO THE IHI JU CALLS**

Admissibility conditions	The conditions are described in General Annex A.
Eligibility conditions	The conditions are described in General Annex B.
Financial and operational capacity and exclusion	The conditions are described in General Annex C.
Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the grant agreements	The conditions are described in General Annex G.

Any specificity for IHI JU is highlighted in the below sections:

#### STANDARD ADMISSIBILITY CONDITIONS, PAGE LIMITS AND SUPPORTING DOCUMENTS

General Annex A ('Admissibility') to the Horizon Europe Work Programme 2023-2024 shall apply *mutatis mutandis* for the calls for proposals covered by this Work Programme.

In addition, page limits will apply to proposals as follows:

- for a single-stage call, the limit for RIA full proposals is 50 pages;
- at the first stage of a two-stage call, the limit for RIA short proposals is 20 pages;
- at the second stage of a two-stage call, the limit for RIA full proposals is 50 pages.

#### STANDARD ELIGIBILITY CONDITIONS

General Annex B to the Horizon Europe Work Programme 2023-2024 shall apply *mutatis mutandis* for the calls for proposals covered by this Work Programme unless otherwise provided in this Work Programme.

Per the above and by way of derogation from General Annex B of the Horizon Europe Work Programme 2023-2024:

According to Article 119 of the Council Regulation (EU) 2021/2085, for indirect actions selected under calls for proposals covered by this Work Programme:

- applicant consortia must ensure that at least 45% of the action's eligible costs and costs for additional
  activities related to the action are provided by contributions (IKOP, FC, IKAA) from private members
  which are members of IHI JU, their constituent or affiliated entities, and contributing partners;
- While the constituent or affiliated entities of the members other than the union of IHI JU can contribute any of those contribution types, contributing partners can only contribute IKOP and FC, not IKAA;
- further to the above, the applicant consortium must submit a self-declaration that the required percentage of 45% contributions will be provided;
- the eligibility condition above and the self-declaration requirement do not apply to the first stage of a two-stage application;
- at project level, the maximum amount of non-EU IKOP is set to:
  - One hundred percent (100%) for IHI JU Call 6
  - Twenty percent (20%) for IHI JU Call 7¹

This is justified as a means to ensure the achievement of project objectives based on Article 119(5) of Council Regulation (EU) 2021/2085, and to ensure full openness to non-EU IKOP in these calls<sup>2</sup>.

#### **ENTITIES ELIGIBLE FOR FUNDING**

In relation to the single stage calls for proposals covered by this Work Programme, the relevant

<sup>&</sup>lt;sup>1</sup> Even if this threshold of 20% is not intended as an eligibility condition *per se*, proposals recommended for funding that will feature a non-EU IKOP amount higher than the 20% of IKOP, will be requested to remove the exceeding part. If this is the case, this non-EU IKOP reduction exercise will need to comply with eligibility criteria whereby at least 45% of the action's eligible costs and costs for additional activities related to the action are provided by contributions (IKOP, FC, IKAA) from private members which are members of IHI JU, their constituent or affiliated entities, and contributing partners.

<sup>&</sup>lt;sup>2</sup> It has to be noted that, pursuant to Article 119(4) of Council Regulation (EU) 2021/2085, at the level of the IHI JU programme, non-EU IKOP must not exceed 20% of in-kind contributions to operational costs provided by private members which are IHI JU members, their constituent or affiliated entities, and contributing partners. Furthermore, at the level of the IHI JU programme, IKAA shall not constitute more than 40% of in-kind contributions provided by private members which are IHI JU members.

provisions of the General Annex B to the Horizon Europe Work Programme 2023-2024 shall apply *mutatis mutandis*.

By way of derogation, in relation to the two-stage calls for proposals covered by this Work Programme, the following provisions shall apply:

- Legal entities identified in the topic text of the call for proposals shall not be eligible for funding from IHI JU. Nevertheless:
- These entities will be entitled to provide contributions as IHI JU members other than Union or contributing partners or as constituent or affiliated entities of either.
- Legal entities participating in indirect actions selected under this type of calls for proposals shall not be eligible for funding where:
  - (a) they are for-profit legal entities with an annual turnover of EUR 500 million or more;
  - (b) they are under the direct or indirect control of a legal entity described in point (a), or under the same direct or indirect control as a legal entity described in point (a);
  - (c) they are directly or indirectly controlling a legal entity referred to in point (a).

In line with Article 5(2)(a) (additional conditions in duly justified cases) and Article 119(3) (private contributions to amount of at least 45% of an indirect action's eligible costs and costs of its related additional activities) of the Council Regulation (EU) 2021/2085, under two-stage submission procedures, the following additional condition applies:

The applicants which are IHI JU members other than the Union, or their constituent entities and
affiliated entities, and contributing partners and that are pre-identified in the topics – under the section
'Industry consortium' – of a call for proposals shall not apply at the first stage of the call. The applicant
consortium selected at the first stage shall, in preparation for the proposal submission at the second
stage, merge with the pre-identified industry consortium.

In addition, in line with Articles 11 and 119(1) and (3) of the Council Regulation (EU) 2021/2085, legal entities providing in-kind contributions as constituent entities or affiliated entities of IHI JU private members or as contributing partners that are:

- Not eligible for funding in two-stage calls for proposals; or
- Not established in a country generally eligible for funding in accordance with Part B of the General Annexes to the Horizon Europe Work Programme 2023 – 2024,

may exceptionally sign the grant agreement.

This is subject to the following conditions:

- Their participation is considered essential for implementing the action by the granting authority; and
- They participate without requesting any funding.

The essentiality of non-EU legal entities for implementing the action shall be ascertained by the granting authority.

#### LIST OF COUNTRIES AND APPLICABLE RULES FOR FUNDING

With reference to Article 23 of the Council Regulation (EU) 2021/2085, the eligibility of participants in a proposal submitted to a call for proposals for any of the topics in this Work Programme will take into account any application of Art 22(5) of the Horizon Europe Regulation as well as Union legislation and guidance relevant for its application triggered for topics from other Horizon Europe Work Programmes for proposals with similar scope.

#### TYPES OF ACTION: SPECIFIC PROVISIONS AND FUNDING RATES

General Annex B ('Eligibility') to the Horizon Europe Work Programme 2023-2024 shall apply *mutatis mutandis* for the calls for proposals covered by this Work Programme.

#### **TECHNOLOGY READINESS LEVELS (TRL)**<sup>3</sup>

TRL definitions included in General Annex B ('Eligibility') to Horizon Europe Work Programme 2023-2024 shall apply *mutatis mutandis* for the calls for proposals covered by this Work Programme.

#### **EVALUATION RULES**

General Annex D ('Award Criteria') to the Horizon Europe Work Programme 2023-2024 shall apply *mutatis mutandis* for the calls for proposals covered by this Work Programme with the following additions: The relevant calls for proposals launched under this Work Programme shall specify whether the call for proposals is a single-stage or two-stage call, and the predefined submission deadline.

Award criteria and scores:

Experts will evaluate the proposals on the basis of criteria of 'Excellence', 'Impact' and 'Quality and efficiency of the implementation' according to the type of action, as follows:

For all evaluated proposals, each criterion will be scored out of 5. Half marks may be given.

For the evaluation of proposals under both single-stage and two-stage submission procedures:

- the threshold for individual criteria will be 3;
- the overall threshold, applying to the sum of the three individual scores, will be 10;
- proposals that pass individual thresholds and the overall threshold will be considered for funding,
   within the limits of the available budget. Proposals that do not pass these thresholds will be rejected.

Under the single-stage evaluation process, evaluated proposals will be ranked in one single list. The highest ranked proposals, within the framework of the available budget, will be invited to prepare a Grant Agreement.

Under the two-stage evaluation procedure, and on the basis of the outcome of the first stage evaluation, the applicant consortium of the highest ranked short proposal (first stage) for each topic will be invited to discuss with the relevant industry consortium the feasibility of jointly developing a full proposal (second stage).

If the first-ranked consortium and industry consortium decide that the preparation of a joint full proposal is not feasible, they must formally notify IHI JU within 30 days from the invitation to submit the second stage proposal. This notification must be accompanied by a joint report clearly stating the reasons why a second stage proposal is considered not feasible. In the absence of a joint notification within the deadline, it is deemed that the first ranked applicant consortium and the industry consortium are going to submit the joint second stage proposal. Accordingly, the second and third-ranked short proposals will be formally rejected.

If the preliminary discussions with the higher ranked proposal and the industry consortium fail, the applicant consortia of the second and third-ranked short proposals (first stage) for each topic may be invited by IHI JU, in priority order, for preliminary discussions with the industry consortium. The decision to invite lower-ranked consortia to enter into discussions with the industry consortium will take into account the content of the report from the joint report from the first-ranked consortium and industry consortium.

Under the two-stage evaluation procedure, contacts or discussions about a given topic between potential applicant consortia (or any of their members) and any member of the relevant industry consortium are prohibited throughout the procedure until the results of the first stage evaluation are communicated to the applicants<sup>4</sup>.

<sup>&</sup>lt;sup>3</sup> The TRL is not utilised for IHI calls 6 and 7, however, it might be used in future IHI JU calls.

<sup>&</sup>lt;sup>4</sup> Failure to observe this restriction may result in IHI JU rejecting either the breaching participant or the full proposal per Article 141 point 1, letter (c) of the REGULATION (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision.

As part of the panel deliberations, IHI JU may organise hearings with the applicants to:

- 1. clarify the proposals and help the panel establish their final assessment and scores, and/or
- 2. improve the experts' understanding of the information presented.

In cases clearly identified in the relevant call for proposals where a given topic is composed of two or more sub-topics, one short proposal per sub-topic will be invited.

The IHI JU evaluation procedure is confidential.

The members of the applicant consortia shall avoid taking any actions that could jeopardise confidentiality.

Following each evaluation stage, applicants will receive an ESR (evaluation summary report) regarding their proposal.

#### INDICATIVE TIMETABLE FOR EVALUATION AND GRANT AGREEMENT PREPARATION

Information on the outcome of the evaluation (single-stage, or first stage of a two-stage):

- Single-stage: Maximum 5 months from the submission deadline at the single-stage.
- Two-stage: Maximum 5 months from the submission deadline at the first stage.

Information on the outcome of the evaluation (second stage of a two-stage):

Maximum 5 months from the submission deadline at the second stage.

Indicative date for the signing of grant agreement:

- Single-stage: Maximum 8 months from the submission deadline.
- Two-stage: Maximum 8 months from the submission deadline at the second stage.

General Annex G ('Legal and Financial setup of the Grant Agreements') to the Horizon Europe Work Programme 2023-2024 shall apply *mutatis mutandis* for the calls for proposals covered by this Work Programme.

#### **BUDGET FLEXIBILITY**

General Annex F to the Horizon Europe Work Programme 2023-2024 shall apply *mutatis mutandis* to the calls for proposals covered by this Work Programme.

#### **SUBMISSION TOOL**

Proposals in response to a topic of an IHI JU call for proposals must be submitted online, before the call deadline, by the coordinator via the Submission Service section of the relevant topic page available under Funding & Tender opportunities – Single Electronic Data Interchange Area (SEDIA). No other means of submission will be accepted.

#### PROPOSALS INCLUDING CLINICAL STUDIES<sup>5</sup>

Under the single-stage submission procedures and for the second stage of the two-stage submission procedures: Applicants envisaging including clinical studies must provide details of their clinical studies in the dedicated annex using the template provided in the submission system<sup>6</sup>.

<sup>&</sup>lt;sup>5</sup> Clinical study covers clinical studies/trials/investigations/cohorts and means, for the purpose of this document, any systematic prospective or retrospective collection and analysis of health data obtained from individual patients or healthy persons in order to address scientific questions related to the understanding, prevention, diagnosis, monitoring or treatment of a disease, mental illness, or physical condition. It includes but is not limited to clinical studies as defined by Regulation 536/2014 (on medicinal products), clinical investigation and clinical evaluation as defined by Regulation 2017/745 (on medical devices), performance study and performance evaluation as defined by Regulation 2017/746 (on *in vitro* diagnostic medical devices).

<sup>&</sup>lt;sup>6</sup> Template for providing essential information in proposals involving clinical studies - <a href="https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/information-on-clinical-studies\_he\_en.docx">https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/information-on-clinical-studies\_he\_en.docx</a>

#### SPECIFIC CONDITIONS ON AVAILABILITY, ACCESSIBILITY AND AFFORDABILITY (3A)7

When the specific topic condition so requires, the following conditions shall apply:

- The participants must, during the lifetime of the project and for a period of four years after project end, use their best efforts to ensure that those products or services that are developed by any of the participants and are totally or partly based on the results of clinical studies performed as part of the activities of the selected project, will be broadly<sup>8</sup> available and accessible, at fair and reasonable conditions.
- In particular, and always to the extent permitted by applicable competition law:
  - a) At the proposal stage<sup>9</sup>, and as part of the Plan for the Dissemination, Exploitation, and Communication Activities ('PDECA') which forms part of the proposal, the applicant consortium must identify potential and expected project results that may be subject to the 3A conditions and broadly outline their strategy to achieve the above objectives.<sup>10</sup>
  - b) At the project interim review stage, if relevant<sup>11</sup>, the PDECA should be updated with a revised 3A strategy. This update should be based on the progress of the clinical studies conducted or to be conducted as part of the project and include any pertinent action to be implemented both during the project and over the four years after project end.
  - c) At the end of the project, the PDECA should be updated, to provide the expected planning for further product development and (if already scheduled) product launch, within the timeframe of four years after the project end and in order to meet those objectives laid out under point 1 above.<sup>12</sup>
  - d) Within 12 months from the project end date, and on a yearly basis thereafter for a period of 3 years (totalling four years from project end), a confidential report<sup>13</sup> must be submitted to IHI JU by the owner of the project result describing the status of the development of the product and of any other exploitation actions, planned or undertaken, concerning the products/services.

- 1. A high-level abstract, to be made publicly available (not containing confidential information), comprising:
  - a) Broad summary of the result's development to this point, including a detailed description of the result and the potential product or service that could incorporate or partly incorporate the result;
  - b) Broad description of expected downstream actions (including product and service applications);
  - broad assessment of expected impact of the above downstream actions towards ensuring affordability, availability, and accessibility.

#### A Confidential Annex in which:

- The owning beneficiary explains if the result is a product or service (or is expected to become one within 4 years) or not, and if yes, further confirms:
  - i. The planned measures to be taken to effect the 3A obligations;
  - ii. That the owning beneficiary will undertake all necessary actions to adhere to the 3A provisions to the best of its capacity;
  - iii. That the owing beneficiary will keep the IHI JU updated on a yearly basis on the progress.

<sup>&</sup>lt;sup>7</sup> Article 125(3) of the Council Regulation (EU) 2021/2085.

<sup>&</sup>lt;sup>8</sup> This covers EU Member States and countries that are associated to Horizon Europe at the time of call opening.

<sup>&</sup>lt;sup>9</sup> As mentioned, for those 3A specific projects, the 3A content in the PDECA will be checked during the evaluation stage. Omission/inadequate treatment of 3A would be identified as a shortcoming. The content however, once considered adequate, will not be utilised for positive scoring and will not contribute towards any evaluation criteria.

<sup>10</sup> Suggested components would be 1) Identification of planned clinical studies that might generate results for which the provisions are relevant; 2) Confirmation that the consortium members are aware of the provisions and will consider them accordingly.
3)Tentatively identifying markets/areas where the product/service could be made affordable, accessible, available. These points could be checked at the evaluation stage.

<sup>11</sup> As discussed, this interim point allows a realistic appraisal of the 3A possibilities during the project lifetime, particularly as to the viability of specific expected 3A results.

<sup>&</sup>lt;sup>12</sup> Per the Model Grant Agreement ('MGA') Article 16, the beneficiaries must complete the Results Ownership List ('ROL') which identifies each result generated in the project and the owner thereof. The ROL should inform on the relevant results for which owners implement the 3A strategy in the PDECA for the four years following the project.

<sup>&</sup>lt;sup>13</sup> Cognisant of IP sensitivities, confidential info, and commercial realties, the IHI JU suggests that the confidential report PDECA could, if needed, be composed of two parts:

#### JU RIGHT TO OBJECT TO TRANSFER/EXCLUSIVE LICENSING

According to the Horizon Europe rules, and in order to protect Union interests, the right for IHI JU to object to transfers of ownership of results or to grants of an exclusive licence regarding results should apply to participants. Therefore, the provisions set out in General Annex G to the Horizon Europe Work Programme 2023-2024 on the right to object apply generally. It should be noted that in accordance with the Council Regulation (EU) 2021/2085 and the Horizon Europe model Grant Agreement, the right to object applies also to participants that have not received funding from IHI JU and for the periods set therein. In choosing whether to exercise the right to object, IHI JU will, on a case-by-case basis, make a reasoned decision in compliance with the legal basis.

#### **COUNTRY SPECIFIC ELIGIBILITY RULES**

Following the Horizon Europe Programme Guide, participation in IHI JU indirect actions will be open but eligibility for funding will be however limited to legal entities established in an EU Member State, Associated Country or Low- and Middle-Income Countries (please consult the list in the Horizon Europe Programme Guide<sup>14</sup>).

Given the invasion of Ukraine by Russia and the involvement of Belarus, legal entities established in Russia, Belarus or in any occupied territory of Ukraine are not eligible to participate in any capacity. Exceptions may be granted on a case-by-case basis for justified reasons, such as for humanitarian purposes, civil society support or people-to-people contacts.

<sup>14</sup> https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide\_horizon\_en.pdf

# Topic 1: Support healthcare system resilience through a focus on persistency in the treatment of chronic diseases

#### **Expected outcomes**

The main outcome of this research collaboration is to better understand why significant advances in technology in recent years have not contributed to widespread improvements in healthcare systems, which still struggle to keep more than 50 % of people on chronic disease treatment for longer than 12 months. The goal is to develop and pilot innovative and multi-stakeholder approaches leveraging social innovation activities and scalable technology to improve the health outcomes of people living with chronic diseases by supporting treatment persistency with a particular focus on diabetes, obesity, and cardiovascular disease. Persistency is part of drug adherence and is defined as the length of time between starting treatment and the last dose which immediately precedes discontinuation of medication.

Although novel treatments are becoming more available with major improvements in convenience and efficacy, poor persistency to treatment is still a major challenge in the healthcare system. Insights from pilots under this topic will be shared with relevant stakeholders of the healthcare ecosystem to improve outcomes for people living with chronic diseases. The pilots should include cardiometabolic diseases, such as diabetes, obesity, and cardiovascular disease. Other chronic diseases may be considered in this collaboration if they contribute to the overall understanding of barriers and opportunities. Moreover, it is not the goal to develop new technologies and/or pharmaceutical drugs during the course of the project, but rather to address how insights and new approaches can be applied in clinical practice and implemented in guidelines and recommendations.

The action under this topic must contribute to all of the following outcomes:

- map and share insights from existing projects, pilots and datasets to get to a shared understanding of what the barriers and opportunities in the respective healthcare systems are in order to improve persistency and health outcomes for people living with chronic diseases;
- develop and implement new/revised collaborative models between public and private organisations with the aim of improving persistency and health outcomes;
- generate clinical and scientific evidence to demonstrate results in order to show the value of these new approaches and technologies;
- integrate new insights into the treatment regimen in close collaboration with people living with chronic diseases to improve disease outcomes;
- develop a consistent methodology/framework for measuring persistency using real-world data;
- develop recommendations and consensus reports with relevant healthcare stakeholders;
- optimise communication between healthcare systems and patients to improve persistency.

#### Scope

The scope of this topic is to improve treatment persistency among people living with chronic diseases. According to the <a href="MEDI-VOICE">MEDI-VOICE</a> project funded by the European Commission, non-adherence to medication accounted for approximately 200 000 deaths annually in the European Union, and according to a World Health Organisation (WHO) report from 2003, around 50 % of people living with a chronic disease do not adhere to the prescribed medication. From a recent analysis by Kvarnström et al (2018) [[1]], the major barriers for adherence to medication range from a lack of disease knowledge by the patient to logistical barriers like availability of medication and price (see list below), ultimately leading to discontinuation of medication.

The major categories of barriers identified are:

- patient specific, e.g. lack of knowledge, lack of routines, poor health literacy, gender, transition from paediatric to adult care, socioeconomic background;
- disease specific, e.g. lack of symptoms, lack of improvement, illness fatigue;
- treatment specific, e.g. side effects, complexity in dosages, inconvenience;
- healthcare and system specific, e.g., poor communication among stakeholders including e.g. physicians, patients, pharmacies, insurance providers, service providers, policy makers;
- social and culture specific, e.g. stigmas, religious belief, other alternatives;
- logistic and finance specific, e.g., price, renewal of prescription.

To address these barriers, this topic is expected to focus on the healthcare- and system-specific categories. The barriers to persistency identified in the list above are strongly interlinked, and in an effort to better understand the healthcare ecosystem in relation to persistency, it is the goal to especially explore the interface between the patient and healthcare providers. It is well-described that a lack of timely and accurate interaction/communication between patient and healthcare provider is key. Patients may lack education about their disease(s) and when support is minimal and there is insufficient patient counselling available, it can leave the patient with unanswered questions which might lead to discontinuation of their medication. In addition, social components, in particular health equalities including stigma and financial barriers, will also be in focus.

In this topic we propose a strong public-private coalition to help define and drive new models for collaboration across the healthcare ecosystem to improve persistency. This is to the benefit of patients as well as healthcare system sustainability by leveraging scalable technology that may hold the key to improving healthcare at the same time as providing it to many more individuals projected to have chronic diseases. A key component to successful implementation will be the patient voice and user experience.

#### It is planned to:

- share experiences and insights from existing pilots in specific healthcare environments and disease areas;
- use both observational and diverse clinical research methodologies to demonstrate impact, including health economics and outcomes research;
- drive fit-for-purpose studies to secure the evidence needed to maximise impact particularly moving from test to scale;
- foster close collaboration between industry and academia within this field to ensure fast and feasible execution in real-world settings;
- build internal understanding & competencies within persistency to inform drug, study and service development;
- build training programmes for healthcare stakeholders;
- analyse how the new learnings/insights might be implemented in clinical treatment guidelines.

#### **Expected impacts**

The action under this topic is expected to achieve the following impacts and contribute to the following EU policies/initiatives:

- improving outcomes for patients with chronic diseases by supporting them to stay on the recommended and most efficient treatment, reducing symptoms and side-effects in the best way;
- less co-morbidities for patients on chronic disease treatment;
- reducing inefficiencies and costs in healthcare systems.

These impacts are in alignment with objective 2 and 3 in the IHI JU.

Results from the IMI BEAMER project are expected to be taken into account and incorporated. The action resulting from this topic is expected to reach out and work together with other initiatives, e.g. IMI Gravitate Health and those funded through the <a href="Horizon Health">Horizon Health</a> call on "Ensuring access to innovative, sustainable and high-quality health care". Data collection will be in agreement with recommendations from the European Health Data Space (EHDS).

#### Why the expected outcomes can only be achieved by an IHI JU action

Persistency in chronic disease care is one of the major known cost drivers in the healthcare system. Addressing the underlying barriers and potential improvements requires co-development by a number of different players in the healthcare system. It also requires a neutral platform to discuss solutions and insights to co-create and adopt solutions. It is expected that this is a multidisciplinary and cross-sectorial collaboration between pharma and technology companies, service and platform providers, insurance providers, healthcare professionals and patients.

#### Pre-identified industry consortium and contributing partners

The pre-identified industry consortium that will contribute to this cross-sectoral IHI JU project is composed of the following pharmaceutical and medical technology industry beneficiaries ('constituent or affiliated entities of private members'):

- Abbott
- Eli Lilly
- Menarini
- Novo Nordisk (Lead)
- Pfizer
- Sanofi
- Servier

In the spirit of partnership, and to reflect how IHI JU two-stage call topics are built upon identified scientific priorities agreed together with a number of proposing industry beneficiaries (i.e., beneficiaries who are constituent or affiliated entities of a private member of IHI JU), it is envisaged that IHI JU proposals and actions may allocate a leading role within the consortium to an industry beneficiary. Within an applicant consortium discussing the full proposal to be submitted for stage 2, it is expected that one of the industry beneficiaries may become the project leader. Therefore, to facilitate the formation of the final consortium, all beneficiaries, affiliated entities, and associated partners are encouraged to discuss the weighting of responsibilities and priorities regarding such leadership roles. Until the role is formalised by execution of the Grant Agreement, one of the proposing industry beneficiaries shall as project leader facilitate an efficient drafting and negotiation of project content and required agreements.

#### **Indicative budget**

The maximum financial contribution from the IHI JU is up to EUR 11 300 000.

This budget is expected to cover four pilots in different disease areas (including diabetes, obesity, and cardiovascular disease) in different geographies and healthcare systems. It is expected that infrastructure for data collection, de-identification, harmonisation, user interfaces, apps, and other relevant tools will have to be set up and customised. Also, the number of required stakeholders and parties for this collaboration is large and will require a solid governance setup and well-functioning stakeholder management.

The indicative in-kind and financial contribution from industry beneficiaries is EUR 11 300 000.

Due to the global nature of the participating industry partners, it is anticipated that some elements of the contributions will be in-kind contributions to operational activities (IKOP) from those countries that are neither part of the EU nor associated to the Horizon Europe programme.

The indicative in-kind contribution from industry beneficiaries may include in-kind contributions to additional activities (IKAA).

#### Indicative duration of the action

The indicative duration of the action is 60 months.

This duration is indicative only. At the second stage, the consortium selected at the first stage and the predefined industry consortium and contributing partner(s) may jointly agree on a different duration when submitting the full proposal.

#### Contribution of the pre-identified industry consortium and contributing partners

The pre-identified industry consortium and contributing partner(s) expect to contribute to the IHI JU project by providing the following expertise and assets:

- results and insights from existing pilots and studies;
- real-world evidence (RWE) and clinical trial data;
- expertise in medical & science, data collection, epidemiology, evidence generation, publication support, digital health, market access, patient voice, health economics and outcomes research;
- data platforms, digital tools, apps, remote monitoring technology.

#### **Applicant consortium**

The first stage applicant consortium is expected, in the short proposal, to address the scope and deliver on the expected outcomes of the topic, taking into account the expected contribution from the pre-identified industry consortium and contributing partner(s).

This may require mobilising the following expertise and/or resources:

- access to relevant data on persistency and treatments, such as access to electronic health records and public data;
- expertise in patient journey, clinical practice, and chronic disease management, health economics and outcomes research and health technology assessment within relevant disease areas.

At the second stage, the consortium selected at the first stage and the predefined industry consortium and contributing partner(s) will form the full consortium. The full consortium will develop the full proposal in partnership, including the overall structure of the work plan and the work packages, based upon the short proposal selected at the first stage.

#### Dissemination and exploitation obligations

The specific obligations described in the conditions of the calls and call management rules under 'Specific conditions on availability, accessibility and affordability' do not apply.

#### References

[1] Kvarnström K, et al. Barriers and facilitators to medication adherence: a qualitative study with general practitioners. BMJ Open. 2018

# Topic 2: Development of evidence based practical guidance for sponsors on the use of real-world data / real-world evidence

#### **Expected outcomes**

- Industry, sponsors, and other stakeholders have access to structured, evidence-based and practical guidance and recommendations on the use of real-world data / real world evidence (RWD/RWE)<sup>15</sup> that could be followed to support the development, and regulatory, health technologies assessment (HTA), and payer decision-making of innovative medicines and health technologies with a focus on medicinal products, medical devices, and therapeutic products that combine a medicinal product with a medical device (drug-device combinations).
- Regulators, HTA bodies and payers will receive more structured and consistent RWD/RWE submissions to inform their decision making.

#### Scope

The use of real-world evidence to support decision making on the safety of medicinal products is already well established. More recently, RWE has also been used to complement evidence and support marketing authorisation, conformity assessments and HTA submissions. While high-level guidance on the use of RWD/RWE exists, the practical implementation is left up to individual sponsors. Currently, RWD/RWE submissions are usually custom-made to a specific use-case and require significant expertise and effort from the sponsor to prepare, and from the healthcare decision-maker to assess. Much knowledge exists within individual sponsors on these use-cases, but, to date, this has not been leveraged to develop practical guidance which could act as a baseline for future submissions.

To leverage the learning from individual use cases and facilitate the efficient use of RWD/RWE for regulatory, HTA, and payer submissions and to inform healthcare decision-making, structured, evidence-based, and practical guidance is needed.

To address this challenge, the action funded under this topic should:

- Map relevant RWD/RWE initiatives across Europe and their (expected) outcomes. Where
  relevant, build on, align, and complement these initiatives, including the European Medicines
  Agency's vision to establish the value of RWE across the spectrum of regulatory use cases by
  2025<sup>16</sup>.
- Identify the main challenges faced by industry, sponsors, non-commercial sponsors, health
  professionals, prescribers, and other stakeholders in the routine use of RWD/RWE for regulatory
  and HTA decision-making. This is to be done by also taking into account the differences in the
  regulatory frameworks of medicinal products and medical devices and how stakeholders'
  experiences, needs, and situations are reflected in these.
- In collaboration with the relevant stakeholders, identify, review, and evaluate existing methodologies, guidelines, and practices for the use of RWD/RWE in healthcare decisionmaking.
- Focus on an in-depth study of a broad range of use cases where RWD/RWE has been previously
  assessed for decision-making for medicinal products, medical devices, and combinations. This
  should include an analysis of methods, designs, and defining variables that enable the grouping

<sup>&</sup>lt;sup>15</sup> Real World Data (RWD) are defined as "routinely collected data relating to a patient's health status or the delivery of health care from a variety of sources other than traditional clinical trials." Real-world evidence (RWE) is defined as the information derived from analysis of RWD. <a href="https://doi.org/10.1002/cpt.1426">https://doi.org/10.1002/cpt.1426</a>

<sup>&</sup>lt;sup>16</sup> Arlett P. et al. Real-World Evidence in EU Medicines Regulation: Enabling Use and Establishing Value. Clinical Pharmacology & Therapeutics 2021: <a href="https://doi.org/10.1002/cpt.2479">https://doi.org/10.1002/cpt.2479</a>

- and thereafter the utilisation of RWD/RWE sources. Particular attention should be paid to the features that enable efficient assessments.
- Using the results of the study as a foundation, develop a draft of the practical guidance document
  and recommendations on the use of RWD/RWE to support submissions and decision-making
  processes, taking into consideration the specific needs of medicinal products and medical
  devices. Considerations on how RWD/RWE can be used within an ethical framework and
  respects EU values should be included. In addition, ensure that the guidance respects the EU
  data quality framework and the relevant RWD specialisation (which is currently under
  development).
- Test the draft guidance in several pilots to ensure validity and broad acceptability.
   The precise scope of these pilots should be selected by the full consortium during preparation of the full proposal and should address multiple contexts and areas that are not already being addressed, including but not limited to: chronic serious diseases, oncology, and auto-immune diseases. They should also cover clinical development and the regulatory, HTA, and payer assessment of medicinal products and medical devices including combinations.
- Based on the learnings from the pilots, finalise the practical guidance document and recommendations on the use of RWD/RWE to support clinical development, regulatory, HTA and payer submissions and inform decision-making processes.
- Broadly disseminate the guidance and recommendations to the stakeholder community. Create training plans to enable dissemination.

Applicants should develop a strategy and plan for generating appropriate evidence as well as for engaging and formally consulting with regulators, HTA agencies and payers in a timely manner, in particular on the draft guidance (e.g. through national competent authorities, the EMA Innovation Task Force, qualification advice).

In addition, while the project will focus on supporting the development of a recommendation for a structured, practical and evidence based guidance, the funded project is also expected to explore synergies with complementary initiatives to advance RWD/RWD in Europe such as the GetReal Institute, REDDIE, More-EUROPA, Oncovalue, Real4Reg, RWE4Decisions, TEHDAS, QUANTUM, CORE-MD, REALM<sup>17</sup> and projects under the ongoing call for proposals HORIZON-HLTH-2024-IND-06-08. It should also be aligned with the ambitions and guidelines set out for the European Health Data Space (EHDS)<sup>18</sup>.

#### **Expected impacts**

The action under this topic is expected to achieve the following impacts:

- Improved access to innovations that meet the increasingly diverse needs of patients and those of the healthcare systems.
- Better informed decision-making at different levels of the healthcare system (authorities, organisations) using RWD/RWE that will in turn contribute to a better allocation of resources towards cost-effective innovations as well as representation of different patient populations and needs.
- Faster entry to the market of cost-effective medicinal products and devices (including combinations)
  developed by industry or public not-for-profit developers, which could translate to a positive effect on
  their R&I investments.

#### Why the expected outcomes can only be achieved by an IHI JU action

<sup>&</sup>lt;sup>17</sup> www.getreal-institute.org, www.reddie-diabetes.eu, cordis.europa.eu/project/id/101095479, oncovalue.org, www.real4reg.eu, realm-ai.eu

health.ec.europa.eu/ehealth-digital-health-and-care/european-health-data-space\_en

Translating current RWD/RWE standards into practical guidance that can be accepted and implemented by decision-makers is a significant challenge. The active involvement of many stakeholders working collaboratively in partnership is needed to ensure such guidance has broad applicability and adds value to the broader initiatives already underway. The diverse nature of these stakeholders, which includes patients, real world data custodians, academics, and SMEs with expertise in RWD, industry, regulators, HTA agencies, and payers, means that a public-private partnership is the ideal framework for such a collaboration.

#### Pre-identified industry consortium

The pre-identified industry consortium that will contribute to this cross-sectoral IHI JU project is composed of the following pharmaceutical and medical technology industry beneficiaries ('constituent or affiliated entities of private members'):

- Bristol Meyers Squibb
- Edwards Lifesciences
- GE HealthCare
- Medtronic
- Mölnlycke
- Novo Nordisk (Lead)
- Pfizer
- Sanofi
- Servier
- WL Gore

In the spirit of partnership, and to reflect how IHI JU two-stage call topics are built upon identified scientific priorities agreed together with a number of proposing industry beneficiaries (i.e. beneficiaries who are constituent or affiliated entities of a private member of IHI JU), it is envisaged that IHI JU proposals and actions may allocate a leading role within the consortium to an industry beneficiary. Within an applicant consortium discussing the full proposal to be submitted for stage 2, it is expected that one of the industry beneficiaries may become the project leader. Therefore, to facilitate the formation of the final consortium, all beneficiaries, affiliated entities, and associated partners are encouraged to discuss the weighting of responsibilities and priorities with regard to such leadership roles. Until the role is formalised by execution of the Grant Agreement, one of the proposing industry beneficiaries shall as project leader facilitate an efficient drafting and negotiation of project content and required agreements.

#### **Indicative budget**

- The maximum financial contribution from the IHI JU is up to EUR 13 300 000.
- The indicative in-kind and financial contribution from industry beneficiaries is EUR 13 300 000.

Due to the global nature of the participating industry partners, it is anticipated that some elements of the contributions will be in-kind contributions to operational activities (IKOP) from those countries that are neither part of the EU nor associated to the Horizon Europe programme.

The allocation of the EUR 200 000 financial contribution (FC) from industry beneficiaries will be decided by the full consortium at the second stage when preparing the full proposal.

The indicative in-kind contribution from industry beneficiaries may include in-kind contributions to additional activities (IKAA).

#### Indicative duration of the action

The indicative duration of the action is 60 months.

This duration is indicative only. At the second stage, the consortium selected at the first stage and the predefined industry consortium and contributing partner(s) may jointly agree on a different duration when submitting the full proposal.

#### Contribution of the pre-identified industry consortium

The pre-identified industry consortium expects to contribute to the IHI JU project by providing the following expertise and assets:

- industry expertise in real world evidence, clinical development, benefit risk evaluation, regulatory affairs, HTA, health economics and market access for medicinal products, medical devices, and combination products;
- previously assessed and utilised use cases that can be utilised to evaluate existing methodologies, encountered challenges, explored pathways and practices for the use of RWD/RWE in healthcare decision-making;
- leverage synergies with existing initiatives, including H2O, EHDEN, ConcePTION, IDERHA, REDDIE, REALM, Real4Reg, EHR2EDC, GetReal Institute, TransCelerate, Duke Margolis Real World Evidence Collaborative, CIOMS, RWE4Decisions, CORE-MD, REALM, projects under the ongoing call for proposals HORIZON-HLTH-2024-IND-06-08, TEHDAS, QUANTUM, and relevant EFPIA committees<sup>19</sup>.

#### **Applicant consortium**

The first stage applicant consortium is expected, in the short proposal, to address the scope and deliver on the expected outcomes of the topic, considering the expected contribution from the pre-identified industry consortium.

This may require mobilising the following expertise and/or resources:

- comprehensive expertise in RWD/RWE including data science, standards & guidance;
- expertise in the access, linkage, and use of RWD and/or synthetic data to evaluate medicinal products, medical devices, and combinations;
- expertise in the technical, legal, and ethical requirements to access and use patient data in Europe;
- knowledge of medicinal product and/or medical device development regulations;
- expertise in interacting with regulatory authorities, national competent authorities, HTA bodies, notified bodies and payers;
- experience with consumer-directed communications and/or patient advocacy (social media reach and expertise in health sector communications);
- expertise in managing multi-stakeholder cross-sectoral projects;
- citizens and/or patient representatives;
- real-world data sources (healthcare providers, clinical sites, contract research organisations (CROs), vendors, national/regional databases);

<sup>&</sup>lt;sup>19</sup> www.iderha.org, www.i-hd.eu/rd-and-collaborative-projects/ehr2edc, www.getreal-institute.org, www.transceleratebiopharmainc.com, https://cioms.ch/

 previous use cases that can be used evaluate existing methodologies, guidelines, and practices for the use of RWD/RWE in healthcare decision making.

The applicant consortium is expected to enable effective collaboration with regulatory authorities, national competent authorities, HTA bodies, notified bodies and payers, and may consider, for instance, engaging them as consortium partners, or in an advisory capacity.

At the second stage, the public consortium selected at the first stage and the predefined industry consortium will form the full public-private consortium. The full consortium will develop the full proposal in partnership, including the overall structure of the work plan and the work packages, based upon the short proposal selected at the first stage.

#### Dissemination and exploitation obligations

The specific obligations described in the conditions of the calls and call management rules under 'Specific conditions on availability, accessibility and affordability' do not apply.

#### **Glossary**

Acronym	Meaning
CIOMS	Council for International Organizations of Medical Sciences
EFPIA	European Federation of Pharmaceutical Industries and Associations
EHDEN	European Health Data & Evidence Network
EHDS	European Health Data Space
EHR2EDC	Electronic Health Records to Electronic Data Capture
ЕМА	European Medicines Agency
EU	European Union
GetReal Institute	GetReal Initiative for Real-World Evidence Assessment and Learning
H2O	Healthcare to Outcomes
НТА	Health Technologies Assessment
IDEHRA	Integrated Data Environment for Health Research and Analytics
IHI JU	Innovative Medicines Initiative Joint Undertaking
IMI	Innovative Medicines Initiative
REALM	Real-world evidence analytics for life and health market
REDDIE	Real World Data in Decision-Making in Europe

RWD/RWE	Real-World Data/Real-World Evidence	
RWE4Decisions	Real-World Evidence for Decisions	
SMEs	Small and Medium-sized Enterprises	
WHO	World Health Organization	