831458 – Trials@Home

Centre of Excellence – Remote Decentralised Clinical Trials

WP6 – PROMS

D6.5 Open call for additional technology partners

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Document History

Version	Date	Description
V1.1	02.02.2021	First draft
V1.2	17.03.2021	Addition quality report drafted by WP2
V1.3	17.05.2021	First draft circulated internally for review
V1.4	21.06.2021	Final version
V2.0	04.10.2021	Final version with corrected links

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Abstract

The Trials@Home pan-European pilot (pan-EU pilot) study aims at comparing traditional clinical trial approaches to fully and hybrid RDCT approaches; as well as comparatively analyse the components (traditional clinical trial and hybrid and/or fully RDCT) in the pan-EU pilot and present and refine key performance indicators (KPIs) to qualify and quantify the flow of activities, subject perception, cost, quality and compliance.

Several technology/service providers were added to the Trials@Home project in order to ensure access to state-of-the-art technologies for the pilot Remote Decentralised Clinical Trial (RDCT) and to fulfil the relevant tasks identified in the Technology Package of WP2 TECH. This technology package and the proposed additional technology/service participants were selected through an external Request for Proposals (RfP).

The Trials@Home RfP has been developed in consultation with IMI to ensure compliance with the relevant EU and EU H2020 procedures and regulations. It described in detail the application requirements and procedures, timelines and templates to be used, as well as the eligibility and evaluation criteria and processes applied. A list of quality criteria was developed for the open call and published in "*D2.2 Detailed list of Quality assessment criteria and assessment procedures*".

This public report describes the process of selecting additional technology/service providers for providing technologies to be deployed in the Trials@Home pan-EU pilot study.

Acronyms and Definitions

Acronyms	Defined as
APIs	Application Programming Interface
BBB	Basic Building Blocks
CFR	Code of Federal Regulations
Clinpal	Internal clinical research platform
CRO	Contract Research Organization
EMA	European Medicines Agency
EU	European Union
ExBo	Executive Board
GDPR	General Data Protection Regulation
IIEP	The Independent Internal Expert Evaluation Panel OR Decision Committee
IMP	Investigational Medicinal Product
MyProjectPlaza	The project's internal collaboration platform
RDCT	Remote Decentralised Clinical Trial
RfI	Request for Information
RfP	Request for Proposals
SEO	Search Engine Optimization
SOPs	Standard operating procedure
TA	Therapeutic Area
WP	Work Package

Methods

The RfP process, including quality assessment and stepwise reduction/selection of technologies, is depicted in the figure 1. Prior to this process, which depicts the step-by-step approach and guidance for external technology/service providers, the Trials@Home consortium has developed an RfP package (Appendix 1).

Figure 1. RfP quality assessment process

The decision-making used to develop and launch this process responds to two objectives:

1) Objectively assess the extent to which the submissions meet the pre-defined quality criteria and BBB requirements.
2) Assess the extent to which the submissions are fit for purpose (as solution / as a technology/service provider) to support the Pan-European Pilot.

It has consisted of 6 steps, each of them being further detailed in this report:

1) RfP / Submission to Open call
2) Quality self-assessment survey
3) Reviewing materials including proposal, quality survey and supplementary documents
4) 1st Assessment committee meeting + rating
5) Technology/service provider pitch / demo
6) Decision / assessment report

Step 0 - Development of the Request for Proposals package (RfP)

In September 2020 a RfP working group combining expertise from all WPs was formed. One of the first tasks the working group started working on was the development of the RfP package for anticipated launch by the end of 2020.
The preparations to this external RfP included involving the technology scan WP TECH provided with a list of relevant technologies and solutions to be integrated to the pilot-study. This list was built from the conclusions of WP TECH internal knowledge on RDCTs, as well as external scanning conducted in 2020 via a Request for Information (RfI) available on the Trials@Home website (https://trialsathome.com/request-for-information/), in order to seek as many as possible candidate partners to submit their proposals in response to the Request for Proposals (RfP).

The RfI responders were also invited to apply to the RfP .

Open call
On 21 December 2021 an Open Call / Request for Proposals (Appendix 1) was launched on https://trialsathome.com. The scope of the RFP contained activities/functionalities that were not already familiar and/or contracted by the project partners and covered all Basic Building Blocks: *Data Acquisition & Processing, Participant Engagement, Setup & Design, Closeout & Reporting, Operation & Coordination, Intervention & Follow-up and Recruit & Enrolment*. This RfP was largely disseminated on public websites (including IMI), specialised websites, as well as circulated by partners and donor on social media.

A webinar with further explanation of the project & RfP was held on 6 Jan 2021.

The Open call closed on 15 January 2021.

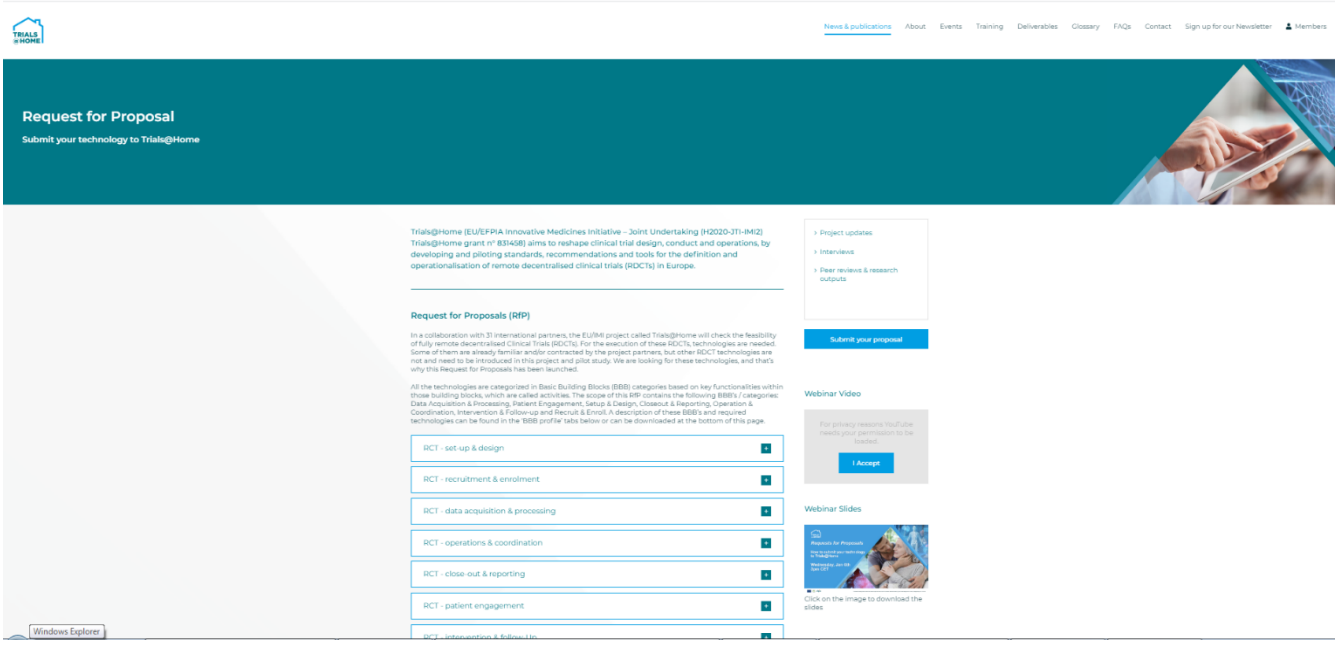


Figure 2. RfP as launched on the Trials@Home website

Step 1: RfP / Submission to Open call

First selection by pre-defined knock-out criteria
All submissions received, were checked for completeness and whether they met one or more of the pre-defined knock-out criteria. One (1) proposal was rejected for not meeting those pre-defined criteria.

Set-up & Design

- *Operational feasibility and site selection*

Submissions were rejected if:
1) Not able to demonstrate prior cases of at least two different clinical trials wherein Operational Feasibility and Site Selection systems were successful.
2) Not able to demonstrate prior cases of at least two different clinical trials wherein Operational Feasibility and Site Selection systems were successful and met GCP standards
3) Demonstration of above systems do not conform to reviewers' expectations.

- *IMP supply*

Submissions were rejected if:
1) Not able to demonstrate prior cases of at least two different clinical trials wherein IMP was purchased (from study drug assignment to drug destruction) and met EMA inspection standards.
2) Demonstration of IMP management systems do not conform to reviewers' expectations.

Recruitment & Enrolment

- *Peer-to-peer (Participant -to-Participant) Network*

Submissions were rejected if:
1) not GDPR compliant
2) does not allow for Member Password and Login Identity
3) does not provide membership eligibility check

- *Ability to integrate App Solutions to ensure (depending on drug used) / ability to integrate data from smart cap devices tracking drug intake*

Submissions were rejected if:
1) is not compatible for IMP used in PILOT

- *Calendar integration to Participant s calendars / email inbox*

Submissions were rejected if:
1) unable to integrate into iOS and Android and all current digital calendars
2) unable to run on all current mobile as well as stationery devices

- *Participant Recruitment Service Provider capable of both digital and non-digital Participant Recruitment specialized for diabetes/metabolic disorders*

Submissions were rejected if:
1) no previous experience/expertise in metabolic/diabetes (2 clinical trials)
2) unable to demonstrate experience in
    a) digital
    b) conventional recruitment (at least 2 trials in relevant TA)
3) unable to demonstrate experience/solutions for Behavioural Targeting/Retargeting, SEO, influencers.

Intervention & Follow-up

- *IMP Logistics*

Submissions were rejected if:

1) Not able to demonstrate prior cases of at least two different clinical trials wherein IMP was used (from study drug assignment to drug destruction) and met EMA inspection standards.
2) Demonstration of IMP management systems do not conform to reviewers' expectations.
3) Non-compliant with GDPR
4) Non-compliant with 21 CFR part 11

Data acquisition & Processing

- *Data Collection Middleware Technology*

Submissions were rejected if:

1) Data integration capabilities with Clinpal and other selected internal or external systems are missing (e.g. appropriate APIs)
2) Multiple data sources collection is not supported (monitoring devices, wearables, sensors and apps) Not compliant with Data Quality and Data Privacy regulations

- *Data Transformation and Standardisation*

Submissions were rejected if:

1) Data integration capabilities with Clinpal and other selected internal or external systems are missing (e.g. appropriate APIs)
2) Multiple data sources are not supported
3) Not compliant with Data Quality and Data Privacy regulations

- *Data Analysis*

Submissions were rejected if

1) Data integration capabilities with other internal or external systems are missing (e.g. appropriate APIs)
2) Analytics capabilities, streaming analytics (e.g. for devices), "Business" Intelligence and Reporting capabilities are not present
3) Not compliant with Data Quality and Data Privacy regulations

Operations & Coordination

- *Operational Analytics*

Submissions were rejected if:

1) Not able to demonstrate operational performance oversight dashboards functionality

- *Study Oversight*

Submissions were rejected if:

1) Not able to demonstrate operational performance oversight dashboards functionality

Participant Engagement

- *Participant / study data return*

Submissions were rejected if:

1) Not compatible with any/all mobile devices
2) Not compatible with any/all browsers (latest version + previous still-supported common versions)
3) Language limitations

- *Engagement consulting services*

Submissions were rejected if:
1) Inexperience in Diabetes TA

- *Social Media capabilities*

Submissions were rejected if:
1) Inexperience in Diabetes TA

- *Conversational Artificial Intelligence (Conversational AI)*

Submissions were rejected if:
1) Not compatible with any/all devices
2) Not compatible with any/all browsers (latest version + previous still-supported common versions)
3) Language limitations
4) Infant product

Results

In total n=30 technology/service providers initially responded to the RfP, with good coverage over all BBB's. Based on the number of submissions per activity and overlap of submissions over the technologies were distributed over n=10 Assessment Committee's. All committees consisted of specialists from the related BBB subteams, integration/architecture experts and representatives from our CRO: Julius Clinical. The composition of the assessment committees is listed in Appendix 2.

Committee name	BBB activities	Sub-missions	Committee lead (pref. Academic / public)	BBB lead	BBB rep- resentatives (aim for 4 reps)	Achitecture / integration	Julius Clinical	PMO
1. Setup & Design	"- Operational feasibility and site selection - Study branding"	5	Gerben Bekema	Gary Friedman	Viviane Rezende TBD: Serena Sidhu, Simon Guiver	Ian Carter	Laura Sitniakowsky	Philippe Bordes
2. IMP supply management + Logistics	"- IMP supply management - Logistics (IMP supply)"	8	David Dronneau	David Dronneau	Rebecca Jackson; Mirkovic Sanjin, Ioulietta Lazarou	Ian Carter		Philippe Bordes
3. Recruitment & Enrollment	"- Platform to host public TA information - Peer-to-peer (patient-to-patient) Network - Ability to integrate App Solutions/data capture - Calendar integration - Patient Recruitment Service Provider"	5	Jaime Fons	Tanja Keiper	Linda Rutgrink, Tina Bornemann and Vallivana Rodrigo Casares, Loic Noitelet	Karl Landert		Annemarijn Douwes
4. Middleware tech + telemedicine	"- Telemedicine tool - Data Collection Middleware Technology - Telemedicine visit management"	16	Sten Hanke	Gary Friedman	Cinzia Molendini, Lina Perez, Michael Bretschneider, Ken Bengtson, Lampros Mpaltadoros, Xavier Brusson, Viviane Rezende	Ian Carter & Bobby Davey	Kasper Bunschoten	Nathalie Vigot
5. Data transformation + analysis	"- Data Transformation and Standardization - Data analysis"	6	Sten Hanke	Lampros Mpaltadoros	Thanos Stavropoulos, Ioulietta Lazarou, Astrid Schmidt Xavier Brusson, Laetitia Dano	Bobby Davey	Lotte Smets	Annemarijn Douwes
6. Concierge / help desk	"- Help desk service - Participant concierge service"	5	Lyn Mitchell (Dundee	Keith Ware	Shelly Barnes, Viviane Rezende	Bobby Davey		Nathalie Vigot
7. Smart Medication solutions	- Smart medication solutions for an injectable IMP with near real-time connectivity (incl. adherence monitoring)	8	Hans Reitsma	Cinzia Molendini	Rebecca Jackson; David Dronneau	Bobby Davey		Philippe Bordes
8. Oversight	"- Operational oversight - Clinical oversight - Study oversight"	12	Bas Nieuwenhuis	Gary Friedman	Imane Brigui, Lampros Mpaltadoros, Yonni Shem-Tov	Ian Carter	Eric Houtman	Nathalie Vigot
9. Patient Engagement	"- Patient / study data return - Engagement consulting services - Social Media capabilites - Conversational AI"	10	Arnela Suman	Rebecca Jackson	Loic Notelet, Gary Friedman, Swapna Bapat, Lampros Mpaltadoros, Ioulietta Lazarou, Tina Bornemann, Rachel Copland	Karl Landert	Kasper Bunschoten	Annemarijn Douwes
10. Close-Out & Reporting	"- Archiving of study data - Automatic generation of study reports"	4	Bernhard Neumayer	Bernhard Neumayer	Imane Brigui, , Dimitrios Giannikopoulos, Simone Huber	Ian Carter	Eric Houtman	Nathalie Vigot

Figure 3. Overview of Assessment Committees, the included activities and RfP submission coverage. This overview includes the 7 additional submissions we received after the 1st assessment round, described later in this document.

Step 2: Quality assessment survey

Assessment of the received proposals
The selection of the technology package and associated technology/service partners was conducted according to the guiding principles of fairness, transparency and independency.

A custom-made digital self-assessment form (tailored set of quality criteria based on the specific building block / building block activity) was sent to the technology/service provider. This form contained questions addressing:

1) General information of the technology/service and the technology/service provider
2) Generic quality criteria
3) Quality criteria relevant to the specific technology/service, based on the relevant BBB and specific activities within that BBB.

The form was sent as an Excel sheet, with a provisional time-frame of 1 week to return. For each of the questions, the technology/service provider was requested to provide as much documentation/proof as possible to support their claim (e.g. certificates, SOPs, procedures). Returned surveys and documentation were stored in the related assessment committee folders on MyProjectPlaza.

Based on the self-assessment survey, one submission was rejected. The others proceeded to the next step

Step 3: Reviewing materials including proposal, quality survey and supplementary documents

The assessment committee received the self-assessment portfolio of each technology/service provider, which included the results of the self-assessment form and all related documentation. Each member of the assessment committee was asked to add their first observational notes in a committee PowerPoint template on MyProjectPlaza. Figure 4. Shows an example of how individual observations were collected into a single slide per technology/service provider:

Figure 4. Example showing how individual observations by committee members are collected

Company #019 – Key observations

	Generic	BBB-activity specific (Platform to host public TA information)	BBB-activity specific (Abillity to integrate app solutions)	BBB-activity specific (Patient Recruitment Service Provider)	Vendor-specific (incl. pricing)
TB Observations	Device agnostic, EU offices in UK, Italy, Germany, specialize in digital health and digital biomarkers, worked on COVID-19 studies, strong focus on their own data capture app, are approved as class 1 medical device, app enables remote monitoring and data capture, no P2P offerings, calendar integration only partly	Not fully clear, but seems like they don't offer anything in this area at all	Offer their own app and mention integration of a wide range (>200) of medical devices	Pre-screening and trial information is mentioned on one slide, but unclear what their actual offering is and whether it fits our needs, patient recruitment and outreach marked as "partly" in assessment form	Pricing includes Company #019 patient app, which will likely directly overlap with ClinPal Total costs £ xxx Per patient cost £ xxx Includes patient app, patient web portal and dashboard functionality
TB Questions	Proposal mentions e-Consent, ePRO, biometric capture, telemedicine visits and questionnaires modules, overlap with ClinPal unclear			See above	
Observation TK	Company #019 seems to focus more on Digital Health and Digital Biomarker Collection,eConsent, ePRO, Telehealth, focusing on pre-screener validation rather than digital recruitment activities (patient outreach, landing page, pre-screener not specificaly mentioned, only high level "can do")	Not shown in presi	Able to offer/integrate various apps/devices	focusing on pre-screener validation rather than digital recruitment activities (patient outreach, landing page, pre-screener not specificaly mentioned, only high level "can do")	
Observation 4	More patient engagement tools/capacities than recruitment activities				
Observation KL	Not really focussing on recruitment, capabilities unclear	Not covered	Own app, how does it fit	Not covered	Overlap with internal architect, not clear what they offer on top of it
Observation FIS	EU GDPR compliant. ISO 13485:2016 and ISO/IEC 27001 certified. Modular App. They seem to be capable to do some of the requirements, but they don't explain them	Not included in the slides	Modular App infraestructure anables to have different configurations tailored to the study. Integration to >200 devices	Mentioned but not well explained	

Step 4: 1st Assessment committee meeting + rating

Procedure + rating

For each assessment committee an online meeting was scheduled. In this meeting the members were informed about the process and ratings by the committee lead. First, for each of the submissions, the individual observations (collected in 1 slide) were discussed, and new observations added. This was followed by an individual rating of the following questions:

1. *What grade would you give to this solution with regards to meeting the [activity name 1] (quality, technical, functional) requirements?* 0-10 points
2. *What grade would you give to this solution with regards to meeting the [activity name 2] (quality, technical, functional) requirements?* 0-10 points

Etc.

And the following question:

3. *What is your general impression of them as a technology/service provider ?* (1-5 Net Promotor Score)

After all individual ratings are collected a median score was calculated and the committee asked to provide their top 3 (with 3, 2, 1 points respectively) solution for each activity and to provide argumentation. The three technology/service providers with the highest total scores (sum of scores of all committee members) will be selected for the pitch round.

Results
An example of the assessment per committee is listed below. As a result of the first rating, n=15 technologies were admitted to the next round, and 14 submissions were rejected.

Example - Committee 1. Set-up & Design

Submissions Overview

Overview submissions

		Operational feasibility & site selection	Study branding
Company 023	Solution #023		
Company 004	Solution #004.1 Solution #004.2 Solution #004.3		
Company 005	Solution #005		
Company 014	Solution #014		

Company 023 – Key observations

	Generic	BBB-activity specific (Operational feasibility & site selection)	Vendor-specific (incl. pricing)
VR(on-going)	Sounds a subscription-based cloud service only and info would be accessible by Sponsor to drive next steps. Unclear capabilities, strengths or successful cases .	No details provided on previous cases or sources of information (variety of information in the public domain?) Proposal does not detail: Investigational Site Master File system, rather qualification tr aining and tracking system, accessibility by clinical te ams, site initiation visit processes tracking etc.	Pricing not disclosed until CDA is completed
Observation 2			
Observation 3			

Company 023 – Rating

Note: Please start rating individually (filling in X's) and calculate mean and fill that in down here

	1	2	3	4	5	6	7	8	9	10
What grade would you give to this solution with regards to meeting the Operational feasibility & site selection (quality, technical, functional) requirements?		X (GF)								
						Remarks Too limited in scope compared to the more comprehensive proposals from other vendors				
What is your general impression of them as a vendor ?		X (GF)								

Company 004 – Key observations

	Generic	BBB-activity specific (Operational feasibility & site selection)	Vendor-specific (incl. pricing)
VR(on-going)	Mature vendor, huge database includes antidiabetes key players (e.g. Lilly), knowledgable sites on pLatform driven by experience with key sponsors may drive efficiencies	Provide the tool for site feasibility and site selection system, not the service	Additional capabilities : SIP Safety & SIP eISF included in the pricing
Observation 2			
Observation 3			
Observation 4			
Observation 5			
Observation 6			

Company 004 – Rating

Note: Please start rating individually (filling in X's) and calculate mean and fill that in down here

	1	2	3	4	5	6	7	8	9	10
What grade would you give to this solution with regards to meeting the Operational feasibility & site selection (quality, technical, functional) requirements?					X (GF)					
						**Remarks** Sufficiently comprehensive proposal				
What is your general impression of them as a vendor ?				X (GF)						

Company 005 – Key observations

	Generic	BBB-activity specific (Operational feasibility & site selection)	Vendor-specific (incl. pricing)
VR(on-going)	Digital and AI tool considering competitor landscape , historical and public data – digital healthcare system – for Study Planning and Recruitment	database of sites that have experience in conducting decentralized/remote support, not a tool for feasibility process neither a service	Not a service, except the country advisor network (additional cost)
Observation 2			
Observation 3			
Observation 4			
Observation 5			
Observation 6			

Company 005 – Rating

Note: Please start rating individually (filling in X's) and calculate mean and fill that in down here

	1	2	3	4	5	6	7	8	9	10
What grade would you give to this solution with regards to meeting the Operational feasibility & site selection (quality, technical, functional) requirements?					X(GF)					
						**Remarks** Very unique resourcing for conventional and remote site selection.				
What is your general impression of them as a vendor ?				X (GF)						

Company 014 – Key observations

	Generic	BBB-activity specific (Operational feasibility & site selection)	BBB-activity specific (Study Branding)	Vendor-specific (incl. pricing)
VR (on-going)	Predictive Analysis Tool and integated e-survey	Unclear the source of information to database and how to address investigational site selection (both arms). Very limited information on tool and e-survey functionalities. No details around: Investigational Site Master File system, rater qualification training and tracking system.		Wide range of services, but how much is just list of prior consutancy projects? Non-EU vendor Consulting-led approach with an ITS solutions and services
Observation 2				
Observation 3				

Company 014 – Rating

Note: Please start rating individually (filling in X's) and calculate mean and fill that in down here

	1	2	3	4	5	6	7	8	9	10
What grade would you give to this solution with regards to meeting the Operational feasibility & site selection (quality, technical, functional) requirements?									X (GF)	
What grade would you give to this solution with regards to meeting the Study Branding (quality, technical, functional) requirements?							X (GF)			
						**Remarks**				
What is your general impression of them as a vendor ?					X (GF)	Most comprehensive proposal				

Example - Committee 1. Set-up & Design / Final rating

1. Setup & design

	1	2	3	4	5	Comments	Rank
Company 023		☹				Solution is covering just a piece, not robust. Not meeting our requirements. Database only (unclear how it was build), but they do not provide the service.	4
Company 004				☺		Comprehensive platform, they have a lot of capabilities that we need for covering the scope. Pricing okay. However not fully clear if they are also able to provide the service. Promising, but in general some doubts about expertise related to time challenges in T@H. We should also have a look at the testimonials.	3
Company 005				☺		Comfortable with what they are capable of. True reach on site selection, good involvement of patients, user friendly. However: very generic text, would like to hear more and let them explain They are proposing the database, but not a tool for site feasibility process?	2
Company 014					☺	Impressive, they check all the boxes. They flex to our needs. Investigator friendly. However some things are unclear: we like to hear more how they will do it.	1

The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IM [2] Trials@Home grant n° 831458.

Step 5: Technology/service provider pitch and demo

Procedure

All remaining technology/service providers ranked in as top-3 within their activity were invited to give a pitch for assessment committee members and other Trials@home consortium members that were interested. The duration of this moderated session was tailored based on the number of activities covered by each technology/service provider, but usually took 1 hour, with 25 minutes of pitch and 30 minutes Q&A. All technology/service providers were instructed to provide a hands-on demo, to describe the integration process and to answer questions raised from during the 1st committee meeting. All pitch sessions were recorded.

Additional technology/service providers invited
After the 1st assessment round for specific activity gaps, five technology/service providers were pro-actively invited to submit a targeted proposal. To prevent too much delay in the process, these technology/service providers were offered a fast-track assessment process, which means that they:

1) Could submit their proposal and receive the self-assessment survey
2) No separate 1st assessment committee meeting
3) All technology/service providers were invited to provide a pitch/demo

From these five technology/service providers, three actually provided a pitch.

In addition, two technology/service providers handed in a late first submission. These two technology/service providers were included in a reserve pool and eventually they were not invited to pitch.

Results
All eighteen pitches were recorded; shared with the entire consortium and on MyProjectPlaza.

Step 6: The Independent Internal Expert Evaluation Panel (IIEEP, or 'Decision Committee')

Procedure
The evaluation of proposals was done by an independent internal expert evaluation panel, the **Decision Committee**, specifically installed for this purpose by the ExBo (with the agreement of the Partner Assembly), leading to recommendations for the final 'technology package' to be deployed in the pan-EU pilot.

Assessment process
Subject to further detailing as part of this task and the Technology assessment in WP2 TECH, the conditions and evaluation criteria included:
- Applicants – if selected - should be able to complete the necessary accession process in a timely manner;
- Applicants should have 'freedom to operate';
- Applicants should be eligible for participation in IMI2-JU projects;
- Applicants should adhere to the procedures and timelines set in the Open call;
- Proposals will be evaluated according to common evaluation criteria and procedures, developed by WP2 TECH (D2.2.) as published in the Open call.

Results:
Depending on the independent expert evaluation and selection, the outcome of the open call could be that (part of) the technology package will not require the accession of new partners (e.g. the technology can simply be purchased from an external technology/service provider or an existing consortium partner offers the technology).

In case the 30% of the IMI-JU funding which is reserved to fulfil the tasks and expertise identified in the technology package, including tech and other innovative operational solutions, will not be utilised for this purpose in full, this reservation will be reallocated to other activities and partners in Trials@Home, following procedures as established in the Consortium Agreement

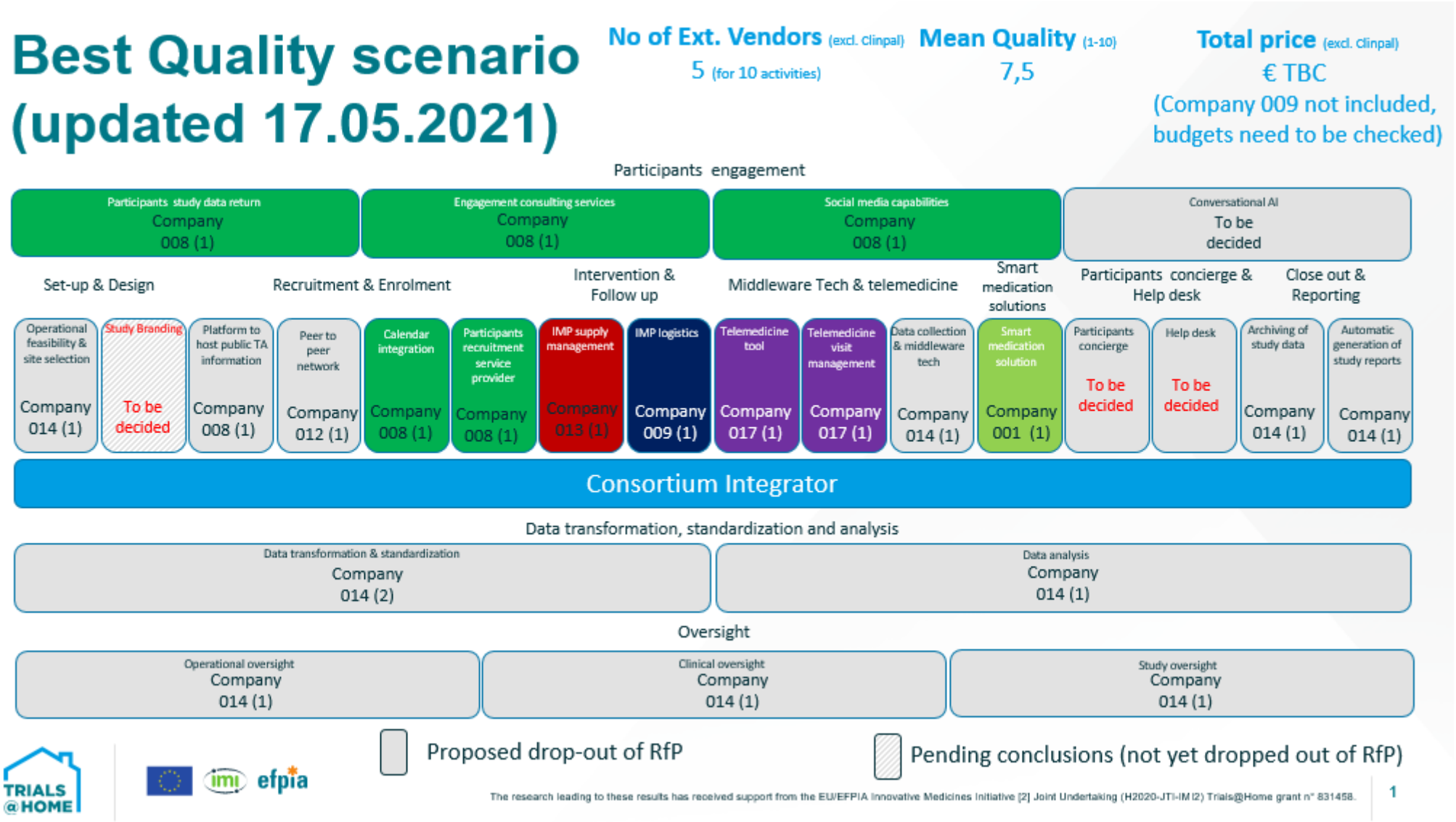
A preparatory session was held on March 26, 2021, to support the Decision Committee decision with additional insights about how companies were ultimately qualified (see step 1 to step 5 of the deliverable).

Following this meeting, the Decision Committee concluded, on 15 April 2021, to:

- run an additional benefit-risk assessment of the Telemedicine component to determine which of the two best qualified companies should be finally selected. The results of this assessment were submitted to a vote on 30 April 2021.
- agree to form an additional working group – composed of WP TECH, WP PILOT and WP PROMS members - to review whether some activities included in the RfP (labelled as "nice-to-have") could simply be purchase / delivered from an existing consortium partner and/or seem too immature to align with the pilot timelines, and thus should be excluded from the RfP. The recommendations from this working group were presented to the Decision Committee on 17 May 2021, and approved on 28 May 2021.

Conclusions

Figure 5. Example of likely final technological package with external technology/service providers



Appendix 1 - Trials@Home Request for Proposals full package

https://trialsathome.com/request-for-proposal/

831458 – Trials@Home

Center of Excellence – Remote Decentralised Clinical Trials

Introduction Request for Proposals (RfP)

In a collaboration with 31 international partners, the EU/IMI project called Trials@Home (T@H) will check the feasibility of fully remote Clinical Trials (RDCTs). For the execution of these RDCTs, technologies are needed. Some of them are already familiar and/or contracted by the T@H partners, but other RDCT technologies are not and need to be introduced in this project and pilot study. We are looking for these technologies, and that's why this Request for Proposals has been launched.
All the technologies are categorized in Basic Building Blocks (BBB) categories based on key functionalities within those building blocks, which are called activities. The scope of this RfP contains the following BBB's / categories: Data Acquisition & Processing, Patient Engagement, Setup & Design, Closeout & Reporting, Operation & Coordination, and Recruit & Enroll. A description of these BBB's and required technologies can be found in the 'BBB profile' documents, also attached on the T@H website.

Submitting your proposal
We request you to create a proposal for the technologies that you are able to deliver. Please be very clear about the functionalities of your proposal: what part of the scope can be covered?
Also we would like to receive a total price, that shows at least the following components:

- Give a clear definition of the scope and detailed assumptions
- Present an overview with costs per line item (no lump sum)
- Per task indicate the estimated hours and role per task (including hourly rates)
- If applicable, detailed information about license costs per month/year/user etc
- Transparency when you outsource parts to third parties
- Overview of other costs and pass though costs.

You will be able to upload your proposal on the T@H website by clicking the 'Submit a proposal' button. After you have submitted a proposal for one or more of the requested technologies from the RfP, your proposal will be quickly checked on the knock-out criteria per relevant BBB. After a positive conclusion, you will receive a survey including instructions from T@H. We kindly request you to fill in this survey, including remarks and documentation / proof to strengthen your answers, and return this form ultimately within 2 weeks.

Assessment process & criteria
After submitting a proposal and returning a completed survey, per BBB these documents per vendor will be assessed. First a check will be done on the knock-out criteria that apply. Then, if passed, the formal assessment will start. Per BBB, an assessment committee is composed, that will score all proposals including a self-assement survey, based on pre-defined quality criteria and vendor characteristics. You will find these quality criteria per BBB in the document 'Quality criteria per BBB'.

The self-assessment will result in a ranking per BBB. Numbers 1, 2 and 3 of this ranking per BBB will be invited for a pitch & interview. Their offer will be discussed, and the assessment team is allowed to adjust their scores per vendor after this pitch and interview.
The vendor that ranks number 1 after the pitch and interview, and is assessed as fit for purpose, will be nominated as candidate technology for the pan-European pilot study.

Please note that, due to different unforeseeable circumstances, T@H always has the possibility not to award a contract.

FYI, upon award of services, the attached contract template will be completed and executed. The standard terms and conditions are non-negotiable.

Questions
All interested vendors may ask questions during this RfP. You can do so by sending your question per e-mail to: trialsathome@umcutrecht.nl
Questions will be collected and answers will be – open to everybody - uploaded on the Trials@Home website.

Planning

Possibility to ask questions (e-mail) and submit a proposal:	18 Dec 2020 – 15 Jan 2021
Webinar with further explanation of the project & RfP:	6 Jan 2021, 3 PM CET
Deadline for submitting a proposal:	15 Jan 2021
Deadline for returning self-assessment form:	29 Jan 2021
Assessment of proposals by T@H assessment teams:	15 Jan – 15 Feb 2021
Pitch + interviews:	16 Feb – 1 March 2021
Awarding contracts:	From 1 March 2021

Please note that this planning could be subject to change. If changes occur, this will be communicated with all relevant parties.

Info on scope of T@H pilot study (assumptions):

- Aim of the T@H pilot study: to compare RDCT and hybrid (i.e. partly remote) clinical trial approaches with the conventional site-based clinical trial approach regarding several key performance indicators
- Indication: type 2 diabetes
- IMP: insulins (all participants will receive the same IMP intervention)
- Mode of administration: self-injection pen
- Arms: 3 (conventional, hybrid, remote clinical trial approach)
- Research question, operational: performance comparison of 3 arms, e.g. regarding data quality and KPIs
- Research question, clinical: does switching of uncontrolled type 2 DM patients from their current basal insulin to IMP improve diabetes control differentially between the three arms?
- Sites: 10 for remote arm (1 per country); 50 for traditional/hybrid arms in total
- Countries/languages: 10 European
- Study population: sample size 1000; adult, non-vulnerable subjects >
- Anticipated start April (FPFV) 2022, expect phasing of 6 months treatment, 6 months with a recruitment period of 6 months

The scope of this RfP contains the following BBB's / categories: Data Acquisition & Processing, Patient Engagement, Setup & Design, Closeout & Reporting, Operation & Coordination, and Recruit & Enroll.
For all these BBB's, quality criteria are defined, including some generic criteria that are applicable to all BBB's.

Generic criteria:

Nr	Criterion	BBB Label (first)	BBB Label (second)	BBB Label (third	Weight
1	Technology/system is compliant with applicable privacy and safety standards and regulations, such as FDA, GDPR, MDR, ISO.	NA	NA	NA	1
2	Technology allows multiple simultaneous accesses and edits from multiple locations (web/cloud-based access)	NA	NA	NA	1
3	Technology has strong password requirements (e.g. two-factor authentication, does not allow to save password on device).	NA	NA	NA	1
4	Unauthorized log-in attempts are limited and recorded	NA	NA	NA	1
5	Technology enables automatic log-off for long, idle periods (e.g. at least 15 minutes)	NA	NA	NA	1
6	Technology enables protection of records to enable their accurate and ready retrieval throughout the records retention period	NA	NA	NA	1
7	Technology enables restriction of user access to data with different levels of access permission	NA	NA	NA	1
8	Technology systematically considered human factors in the development of the device user interface (such as task/function analyses, user studies, prototype tests and mock-up reviews)	NA	NA	NA	1
9	The technology production units are tested under actual or simulated use conditions	NA	NA	NA	1
10	The system interface is at least in the local language (of the specific country, and approved by EC) and in English.	NA	NA	NA	1
11	Technology (visual information, language, design) is appropriate for the target audience	NA	NA	NA	1
12	Technology should allow participants to select preferred way of communication (phone, email etc.)	NA	NA	NA	1
13	Technology has adequate hardware quality: inconspicuous, small and noise-less, sufficient battery life (on full charge), charging time is short, includes country-specific electrical fittings/voltages, water resistant technology.	NA	NA	NA	1
14	Technology provider has a business continuity plan	NA	NA	NA	1
15	Technology manufacturer provides sufficient (e-)training tools such as user manual or instructional videos for the technology users	NA	NA	NA	1
16	Technology updates are seemless (without interruption of functionalities)	NA	NA	NA	1
17	Technology vendor maintains operational services related to tech equipment: a tracking system of distribution of the product, from which reports can be pulled by users/sponsor; delivery of devices to patients; replacement of defective devices	NA	NA	NA	0,5

BBB: Set up & design

Nr	Criterion	BBB Label (first)	BBB Label (second)	BBB Label (third	Weight
18	Technology is able to share documents with potential sites to analyze site feasibility	Operational Feasibility Assessment and Selection	Site Feasibility Documentation Database		1
19	Technology is able to perform and track online Investigator/Site Staff Training	Site start-up			1
20	Technology is able to track pre study visits	Site start-up	Study Start-up Data Repository		0,5
21	Technology enables automated site/patient payments	Study Payments Management	Study Reimbursement & Payments System		0,5

BBB: Rectruitment & enrollment

Nr	Criterion	BBB Label (first)	BBB Label (second)	BBB Label (third	Weight
22	Information materials given during informant consent process are accessible to participants.	Obtaining informed consent	Participant education		1
23	Technology allows PI oversight with regards to coordination and management of the informed consent procedure	Obtaining informed consent	Documentation management		1
24	Participant has access to the informed consent application and his/her signed consent form (not only members of the research team)	Obtaining informed consent			1
25	Technology verifies the authenticity of the informed consent document	Obtaining informed consent	Clinical monitoring		1
26	Technology allows the investigator to contact the participant directly	Obtaining informed consent	Patient-HCP interaction and communication		1
27	Technology allows the participant to contact the investigator directly	Obtaining informed consent	Patient-HCP interaction and communication		1
28	Technology saves information during the process (not only after completing steps)	Obtaining informed consent	Management of study-generated data		0,5
29	Technology allows adequate access for external monitors to check the informed consent procedure	Obtaining informed consent	Clinical monitoring		1
30	Technology evaluates/tracks metrics (i.e. time-of-use schedule, approval deadlines, number of findings during monitoring, revocation rate)	Obtaining informed consent	Performance Monitoring		0,5
31	Technology allows participant to choose the format/media for receiving a copy of the signed consent form	Obtaining informed consent			0,5
32	Technology has the possibility of signing with electronic signature	Obtaining informed consent	System approval facilitation		1
33	Technology has an official certificate for signing with electronic signature	Obtaining informed consent	System approval facilitation		1
34	Technology is adapted to use by low literate participants	Obtaining informed consent	Creation of ICF	Participant education	1
35	Technology is adapted/adaptable to use by participants with special needs (i.e. vision problems)	Obtaining informed consent	Creation of ICF	Patient technology enablement	1
36	Technology allows investigator/participant to change language	Obtaining informed consent	Creation of ICF	Patient technology enablement	1
37	Technology offers the possibility of re-consent after amendments to the protocol	Obtaining informed consent	Documentation management		1
38	In case of amendments and re-consent, the technology highlights relevant changes for participants for quick and easy identification of changes	Obtaining informed consent	Creation of ICF		1
39	Technology includes validated methods to verify inclusion and exclusion criteria of a subject for trial participation	Screening			1
40	The enrollment data allow for daily visualization of enrollment statistics such as eligibility and enrollment rates, stratified numbers and proportions	Performance monitoring			1
41	Steps from eligibility to enrollment for each subject are recorded in such a way that none of the eligible subjects (enrolled and not-enrolled) is lost in the data registration	Management of study-generated data			1
42	Technology includes a portal or landing page with outreach to patients via social media, technology platform	Participant outreach	Participant outreach	Pre-screening	1
43	Technology is able to setup recruitment plan based on add-on variables during the study (e.g. high percentage of non-recruiting sites; high drop out rate)	Pre-screening	Pre-screening	Management of study-generated data	0,5

BBB: Data acquisition & processing

Nr	Criterion	BBB Label (first)	BBB Label (second)	BBB Label (third	Weight
44	Technology is able to classify each data point (participant identification, endpoint or safety-related data)	Management of study-generated data			1
45	Technology allows integration of third party generated or maintained critical data (e.g. central laboratories, electronic health records, ePROs) to be integrated into the database	Management of study-generated data	eCRF and system query design		1
46	Technology safeguards that recording of a clinical observation is made at the same time as when the observation occurred or after it occurred (data entry for future not allowed). If real-time recording is not possible, the chronology of events is recorded, with pre-defined maximum delay	Clinical data repository management	Gathering and management of real-life data		1
47	Technology safeguards records to be retained and maintained for a period of time specified in the country-specific overseeing authorities and regulations (e.g. EMA; GCP)	Data reconcilliation & Query management	Gathering and management of real-life data		1
48	Technology safeguards records are available for country-specific regulatory inspections during the study	Data reconcilliation & Query management	Gathering and management of real-life data		1
49	Technology safeguards records are independently preserved at clinical site and/or some other designated site (e.g. technology provider)	Management of study-generated data	Data reconcilliation & Query management		1

50	Technology safeguards data generated is easily accessible for retrieval throughout the records retention period	Management of study-generated data	Data reconcilliation & Query management		0,5
51	Technology that needs calibration has calibration procedures in place to document when potential calibration errors are identified and how the calibration issue was resolved	Gathering and management of real-life data			1
52	Validation of data collection/measurements has been done in a controlled environment (the laboratory or clinic) and a real-world environment	Gathering and management of real-life data			1
53	If algorithms are used, the process by which the algorithm was developed is published or otherwise made freely available	Management of study-generated data	Gathering and management of real-life data	Clinical data repository management	0,5
54	The technology includes a system to collect and preserve clinical data which is pre-managed and validated according to SOP (Standard Operation Procedures)	Clinical data repository management	Gathering and management of real-life data		1
55	The technology is able to discern invalid or altered records	Management of study-generated data	Gathering and management of real-life data	eCRF and system query design	1
56	Technology generates electronic data that meets the same or better data quality and integrity as traditional/paper records	Data transformation & standardization	Data analysis		1
57	Technology allows collection of sufficient contextual information to understand the outcome data captured by mobile technologies while avoiding the collection of intrusive data	Gathering and management of real-life data	Data transformation & standardization		1
58	Technology allows collection of metadata indicating source of the data and a UTC time stamp	Clinical data repository management	Gathering and management of real-life data		1
59	Technology safeguards data monitoring occurs in an automated, centralized fashion so that discovery of irregular data calibration errors, can be flagged and investigated	Management of study-generated data	Gathering and management of real-life data	eCRF and system query design	1
60	Technology uses Electronic Prompts, Flags, and Data Quality Checks in the eCRF	Data transformation & standardization	Data analysis		1
61	Technology provides the possibility for clinical investigator to review and electronically sign the completed eCRF for each subject	eCRF and system query design	Gathering and management of real-life data		1
62	Technology provides the possibility for clinical investigator to be masked to specific data in the eCRF	eCRF and system query design	Management of study-generated data		0,5
63	Technology allows automated de-duplication, filtering, and parsing of data	Data reconcilliation & Query management	eCRF and system query design	Data transformation & standardization	1
64	Technology ensures that quality of data captured by mobile technologies is monitored centrally through automated processes	Clinical data repository management	Gathering and management of real-life data	eCRF and system query design	1
65	Technology automatically transfers individual participant data to a central server or other data gathering platform for the trial	Gathering and management of real-life data	Clinical data repository management		1
66	Technology includes a data transfer plan that specifically guides how data from participant, to data warehouse, to data monitoring and programming, to archiving must flow	Data reconcilliation & Query management	Clinical data repository management		1
67	Technology allows to demonstrate that the data have not been corrupted following creation	Gathering and management of real-life data	Management of study-generated data		1
68	Technology safeguards presence of data element identifiers	Data transformation & standardization	Clinical data repository management	Gathering and management of real-life data	0,5
69	Technology ensures secure, computer-generated, time-stamped, electronic audit trails of users' actions and changes to data	Data transformation & standardization	Management of study-generated data	Clinical data repository management	1
70	Technology ensures audit trails can not be overridden	Data transformation & standardization	Management of study-generated data	Database lock	1
71	Data elements are in line with clinical interchange standards such as CDISC (Clinical Data Interchange Standards Consortium)	Data transformation & standardization	Management of study-generated data		1
72	Technology restricts users' access to data so they cannot tamper with them	Management of study-generated data	Clinical data repository management	Data reconcilliation & Query management	1
73	Technology has includes a robust, risk-based data security system	Data transformation & standardization	Management of study-generated data	Data reconcilliation & Query management	1
74	Technology has limited amount of data stored on a mobile device	Clinical data repository management	Gathering and management of real-life data	Management of study-generated data	0,5
75	Technology includes "Certificate Pinning" software on the mobile technology and on the server (Internet security mechanism which allows websites to resist impersonation by attackers using misissued or otherwise fraudulent digital certificates)	Clinical data repository management	Gathering and management of real-life data	Management of study-generated data	0,5
76	Technology has data security measures in place such as data encryption, checksums and tokenization in place	Data transformation & standardization	Data reconcilliation & Query management	Management of study-generated data	1

77	Technology includes services such as backups and disaster recovery arrangements in service level agreements with outsourced electronic service vendors	Management of study-generated data	Clinical data repository management	Data reconcilliation & Query management	1
78	Devices into or onto which data are stored are "scrubbed" at a proscribed time interval by the app/programmer.	Data reconcilliation & Query management	Clinical data repository management	Gathering and management of real-life data	1
79	Technology uses a secure network encryption certificate, such as Secure Sockets Layer (SSL) or Transport Layer Security (TLS), and transmit data wirelessly over Hypertext Transfer	Data reconcilliation & Query management	eCRF and system query design		1
80	Technology uses a protocol Secure (HTTPS), or similar secure file transfer protocol such as SFTP (Secure File Transfer Protocol)	Data reconcilliation & Query management	eCRF and system query design		1
81	Technology includes firmware that maintains data equivalence	Management of study-generated data	Gathering and management of real-life data	eCRF and system query design	0,5
82	Firmware that ensures data security is optimized	Management of study-generated data	Gathering and management of real-life data	eCRF and system query design	1

BBB: Operations & Coordination

Nr	Criterion	BBB Label (first)	BBB Label (second)	BBB Label (third	Weight
106	Technology allows managing the timeline of study (e.g. regulatory complete)	Study oversight	Regulatory Management	Performance monitoring	1
107	Technology allows managing clinical trial contract information (contract timeline, stakeholders, negotiations, etc.)	Study oversight	Documentation management	Inspection facilitation	1
108	Technology allows managing all documents generated during clinical trials, separated by department	Documentation management	Clinical monitoring	Inspection facilitation	1
109	Technology allows identifying a protocol deviation/violation	Manage Protocol and GCP deviations	Safety Management	Inspection facilitation	1
110	Technology allows managing communication with a site or other organization	Vendor management (if other organization are vendors)	Study oversight		0,5
111	Technology allows managing information about interventional product, vendor or sponsor	Vendor management	Study oversight		0,5
112	Technology allow tracking and reporting of Green Light Approvals/Site Activations	Regulatory Management	Performance monitoring	Clinical monitoring	1
113	Technology allows managing patient schedule automatically and displayed in calendar form through the patient management function	Study oversight			1
114	Technology allows managing information about site visit status and results	Operational analytics	Clinical monitoring	Documentation management	1
115	Technology allows managing information related to site-specific SAE	Safety management	Operational analytics	Manage Protocol and GCP deviations	1
116	Technology provides clinical trial management functions related to medical devices from external organizations	Vendor Management	System approval facilitation		1
117	Technology allows managing the clinical drug import and export	Regulatory Management	Study oversight	Documentation management	1
118	Technology allows managing the biomaterial obtained during clinical trials	Vendor Management	Study oversight		1
119	Technology supports SOP management, training and automatic notification by the unit	Inspection facilitation	Documentation management	Study oversight	1
120	Technology provides management functions for tasks to be performed by each user.	Clinical monitoring			0,5
121	Technology allows managing the timeline of study (e.g. regulatory complete)	Study oversight	Regulatory Management	Performance monitoring	0,5

BBB: Close out & Reporting

Nr	Criterion	BBB Label (first)	BBB Label (second)	BBB Label (third	Weight
122	Technology enables effective storage, management, and tracking of electronic documents	Archiving			1
123	Technology allows to retrieve, display and re-configure systems parameters and choices made at implementation	Decommissioning			1
124	Technology enables generation of automated medical review summaries based on pre-defined parameters	Producing study report	Publishing of clinical study results	Scientific dissemination of study results	0,5
125	Technology enables generation of automated Clinical study report sections based on pre-defined parameters	Producing study report	Publishing of clinical study results	Scientific dissemination of study results	0,5
126	Technology enables data transfers, archiving, decommissioning of user accounts etc	Decommissioning			1
127	Technology enables creation of CSR appendices from electronic tool (deviations, list of staff (PI and SubI) and others potentially	Archiving			0,5
128	Technology enables tracking and reporting of Close-Out Visits	Study oversight	Operational analytics	Clinical monitoring	1

BBB: Patient engagement

Nr	Criterion	BBB Label (first)	BBB Label (second)	BBB Label (third	Weight
129	Technology provides information about the condition, the trial and the IMP	Educational Engagement	Disease Self-management		0,5
130	Technology enables the patient to start communication and collaboration with provider through the technology platform	Interactive Engagement	Disease Self-management	Safety Monitoring	0,5
131	Technology allows user input and contains prompts (reminders, sharing options, notifications, etc.)	Interactive Engagement	Disease Self-management		1
132	Technology enables that data are available online (almost) immediately	Management of study-generated data	Management of study-generated data	Gathering and management of real-life data	1
133	Technology provides rapid feedback available to patient	Educational Engagement	Disease Self-management	Gathering and management of real-life data	1
134	Technology allows to look at trends in patient engagement	Operational Analytics	Patient Adherance		0,5
135	Technology allows providing acknowledgment or thanks for patient participation.	Interactive Engagement			1
136	Technology is able to provide reminders/alerts about scheduled medication, testing, appointments, activities etc.	Interactive Engagement	Patient Adherance	Disease Self-management	1
137	Technology is able to record/track health information and to display and summarize it for patient	Educational Engagement	Disease Self-management	Patient Adherence	1

Basic Building Block Profile

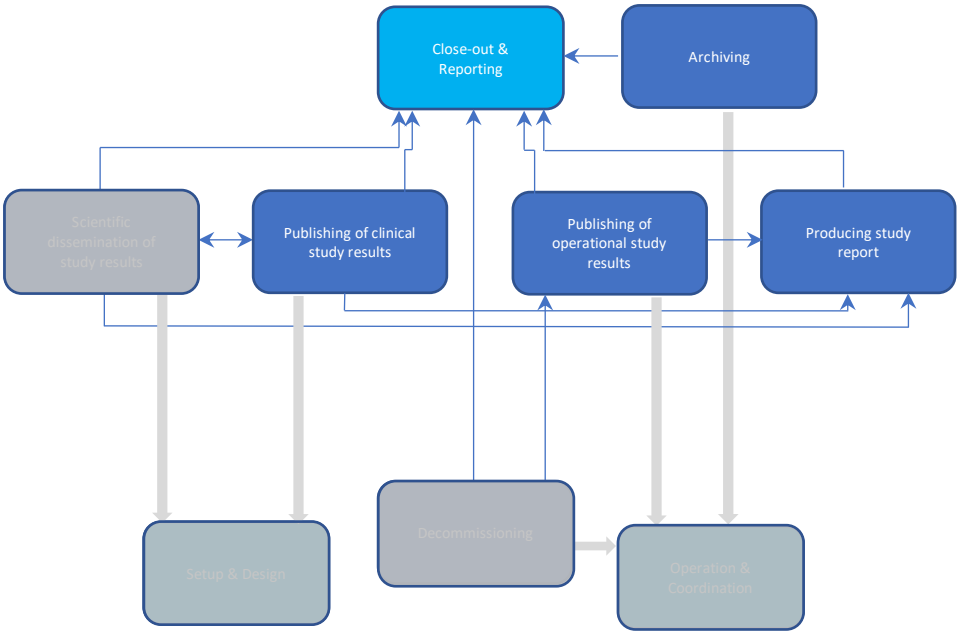
Building Block: Close-out & Reporting

Vision

Close-out & Reporting is responsible for external communication and provides information on Trials@Home in form of study reports and scientific communications. Additionally, archiving of study-relevant data and decommissioning of study-related software and hardware is also in this BBB's responsibility. A crucial prerequisite therefore is a solid data base. Based on the data, the compilation of final reports requires an envrionment which enables collaborative writing. The submission management should be integrated into the study's digital platform to use the study's central contact point for the publishing of study-relevant information.
One key aspect of Close-out & Reporting will be the publication of – optimally automatically generated – clinical and operational study reports based on the data provided by the shared digital platform and the clinical trials management system in form of raw data (for example eCRFs) or the TMF as well as clinical oversight data (provided by *Operation & Coordination*). As a version-controlled repository for key documents, the global document management system is also potentially suited for the archiving task of *Close-out & Reporting*. It must, however, also be available beyound the end of the study.

Activities involved

Activities not relevant for the RFP are greyed out.



The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IMI2) Trials@Home grant n° 831458.

Included activities in the RFP:

The following activities are included in the RFP:

- **Archiving of study data**
  - Clinical study data
  - Operational study data
  - Allow to exclude data (GDPR)
  - Data may have to be merged from several repositories
  - Options for cloud / physical archiving
  - Access mechanism to support remote audits
  - Automatic generation of overview/glossary file

- **Automatic generation of study reports**
  - Provide templates that meet requirements for study reports
  - Defined interfaces to access relevant data in data repository
  - Provide reasonable overview prior to report generation
  - Allow to select/unselect data
  - Automatic compilation of clinical study reports
  - Automatic compilation of operational study reports

Excluded activities from the RFP

The activities below are already covered by internal partner and **excluded from the RFP**:

- Decommissioning
- Environment: collaborative report writing

RFP - Knockout Criteria

For the activities included in the RFP we have identified a number of knockout criteria that will exclude the technology vendor in the case that one or more of them are not met.

Archiving of study data

The technology will be rejected if:
1) only providing one way of archiving (several options should be available/selectable)

Clinical study data

The technology will be rejected if:
1) it is not GDPR-compliant (e.g. needs to send data to unsecure servers)

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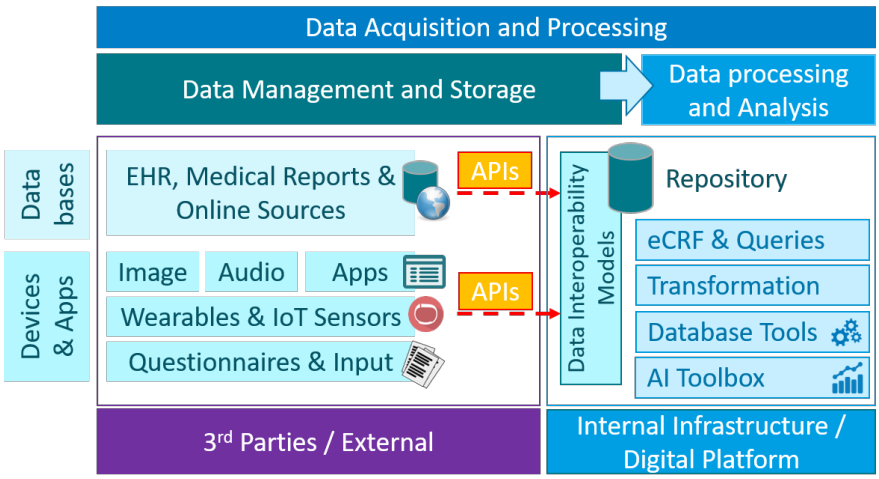
Basic Building Block Profile

Building Block: Data Acquisition and Processing

Vision

The Data acquisition and Processing Basic Building Block contains activities related to data acquisition and processing of acquired data. The vision includes **A) Data Collection, Management and Storage** of different data sources to an internal infrastructure. This category includes activities in which all study data are stored and managed. Both patient's and clinician's perspectives are taken into consideration. Both general Data bases and devices/apps data categories are going to be integrated using appropriate well-defined Application Programming Interfaces (APIs), through secure user authentication/authorization (OAuth protocol) and will be stored in the internal interoperable repository infrastructure, ensuring that data privacy and quality standards are met. In the next phase comes the **B) Processing and Analysis**, including activities in which data are checked, verified, transformed, and analysed. The RDCT concept is fully supported by service-oriented modular and remotely accessibly design: accessing data sources remotely through API web services and the infrastructure, as well as through data visualizations.



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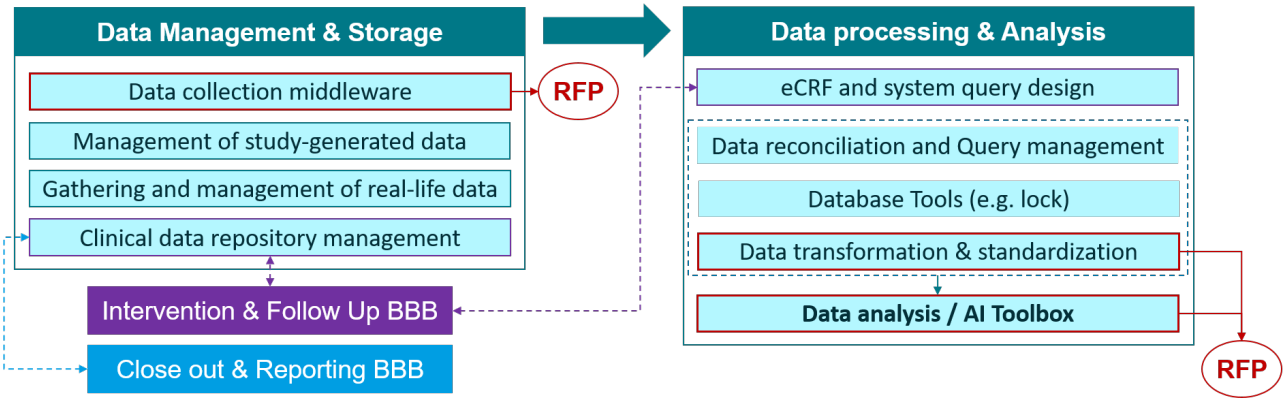
Activities



Included activities in the RFP

The following activities are included in the RFP:

Data Collection Middleware Technology

Middleware Technology system for active and passive data collection from data sources that will include monitoring devices, wearables, sensors and apps.

*Devices that might be used in the Pilot Study and will require such middleware:

- Smart dosing insulin pen device
- Continuous glucose monitoring device
- Insulin titration support app
- Adherence data capture app
- etc.

Data Transformation and Standardization

Capabilities for converting data from one format or structure into another format or structure via a mixture of manual and automated steps.

Data Analysis

Statistical testing for the protocol's underlying hypotheses and Analytics capabilites also by making use of AI technology - retrospective, statistic analysis, clustering etc.

Excluded activities from the RFP

The activities below are already covered by internal partners and **excluded from the RFP**:

- Management of study-generated data
- Gathering and management of real-life data
- Clinical data repository management
- eCRF and system query design
- Data reconciliation and Query management
- Database Tools (e.g. lock)

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RFP – Knockout Criteria

For the activities included in the RFP we have identified a number of knockout criteria that will exclude the technology vendor in the case that one or more of them are not met.

Data Collection Middleware Technology

The technology will be rejected if:

1) Data integration capabilities with Clinpal and other selected internal or external systems are missing (e.g. appropriate APIs)
2) Multiple data sources collection is not supported (*monitoring devices, wearables, sensors and apps*)
3) Not compliant with Data Quality and Data Privacy regulations

Data Transformation and Standardisation

The technology will be rejected if:

1) Data integration capabilities with Clinpal and other selected internal or external systems are missing (e.g. appropriate APIs)
2) Multiple data sources are not supported
3) Not compliant with Data Quality and Data Privacy regulations

Data Analysis

The technology will be rejected if

1) Data integration capabilities with other internal or external systems are missing (e.g. appropriate APIs)
2) Analytics capabilities, streaming analytics (e.g. for devices), “Business” Intelligence and Reporting capabilities are not present
3) Not compliant with Data Quality and Data Privacy regulations

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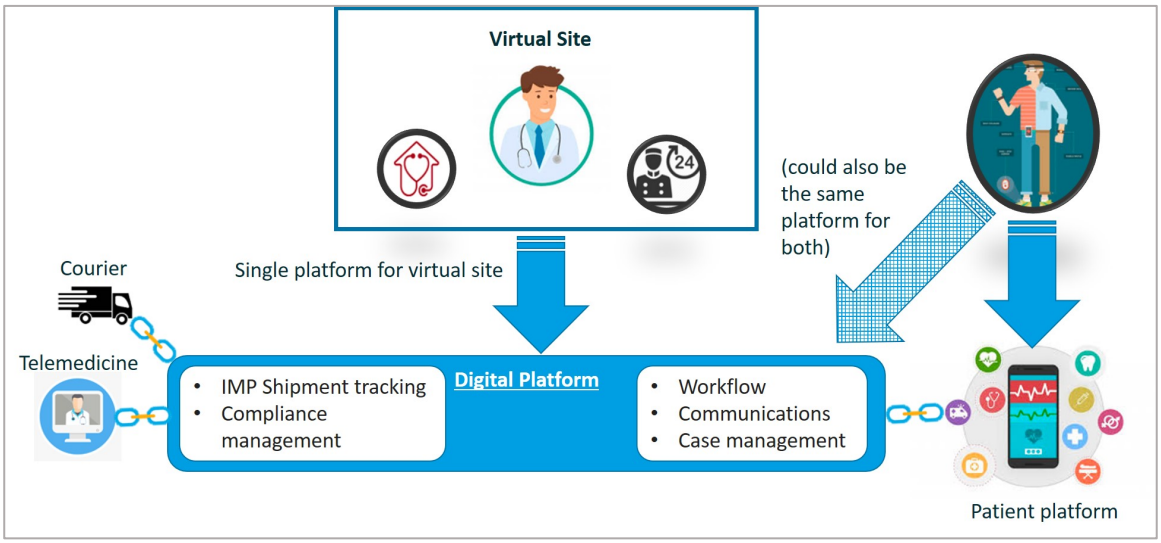
Basic Building Block Profile

Building Block: Intervention & Follow-Up

Vision

We envision a digital platform, containing multiple connected systems where all essential study records (e.g. eCRFs, uploaded eSource documents, electronic health records, scheduling), are contained under a single login. This digital platform connects the decentralised site resources (PI, Study Coordinator/Research Nurse, home health staff, concierge services) with each other. It facilitates a seamless workflow between investigational site personnel and promotes a well-integrated, positive patient-investigator experience. This is a platform for tracking biological samples, devices and IMP shipment, videocall connectivity with study participants, and allows for home and remote visit note taking (details to be captured for record keeping and for eCRF completion).



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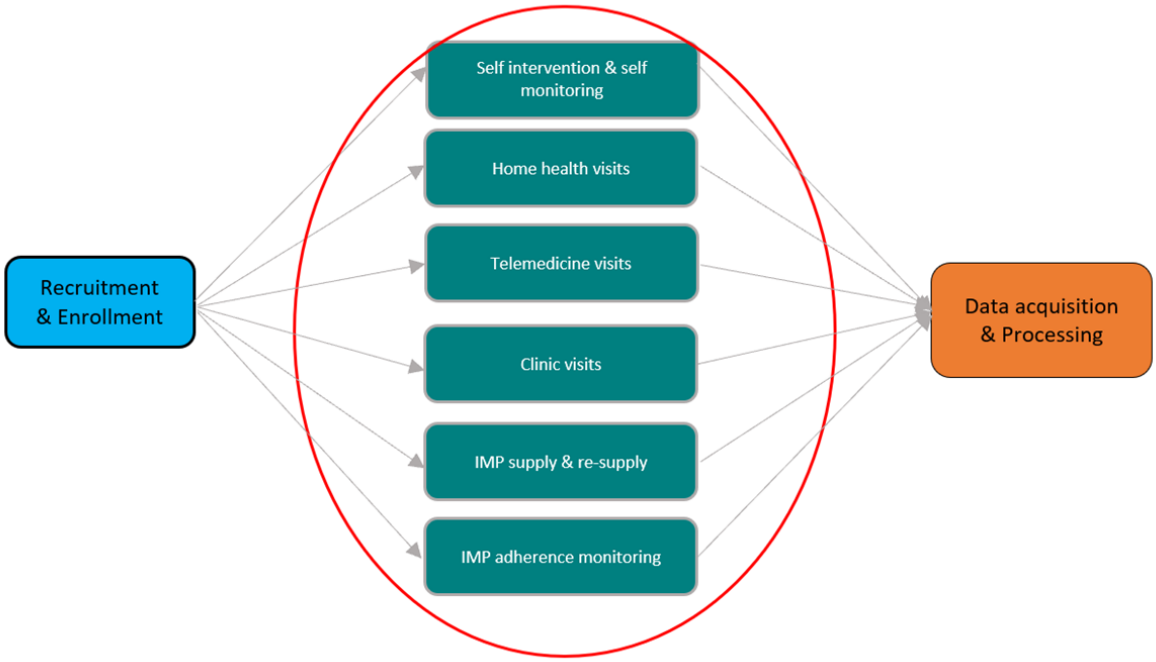
Activities involved in the BBB



Functional requirements

- **Help desk service,** to provide first point of contact for decentralised site staff technical support
- **Participant concierge service,** e.g. equivalent of a physical site front desk staff, first point of contact for participants, also making outbound calls to schedule and remind about visits, shipments, compliance management, etc.
- **Logistics**, e.g. IMP shipments direct-to-patient or local pick-up depot, possibility for affordable disposable / re-usable cold-chain tracking solution to be included. Biological sampling shipment from patient's home to local or central labs
- **Smart medication solutions for an injectable IMP** with near real-time connectivity:
  - Smart dosing solution (cap for insulin pen)
  - Adherence & inventory data capture app
- **Telemedicine tool,** to include the ability to connect external devices (i.e. cameras, vital sign monitoring systems, wearables)

The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IMI2) Trials@Home grant n° 831458.

Technical requirements

- **Recording and transciption capability (optional)** for video and phone calls (i.e. telemedicine visits, remote coordinators phone calls, etc.)
- Logistics, telemedicine, smart medication and Point of Care devices are required to **integrate into eClinicalHealth Clinpal platform**

Excluded activities from the RFP

Home Health Visits
Self-intervention & Self Monitoring
Clinic Visits

Knock-Out Criteria

Submissions will be rejected if:

- Not able to demonstrate prior cases of at least two different clinical trials wherein IMP (from study drug assignment to drug destruction) and met EMA inspection standards.
- Demonstration of IMP management systems do not conform to reviewers' expectations.
- Non-compliant with GDPR
- Non-compliant with 21 CFR part 11

The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IMI2) Trials@Home grant n° 831458.

Basic Building Block Profile

Building Block: Operation and Coordination

Vision

Operation & Coordination BBB requires a clinical and operational platform that provides critical, real-time oversight dashboards throughout the conduct of the Pilot Study and is compliant with EU/ECC Global Data Protection Regulation (GDPR) requirements as well as local regulations and laws. Oversight dashboards would be access controlled such that only study monitors, study/site auditors, EMA inspectors, and select clinical study team (CST) members would have an instantaneous, real-time overview of clinical site performance and study operations. Oversight dashboards would be positioned to support study conduct, internal audits to promote inspection readiness, and EMA inspector visits.

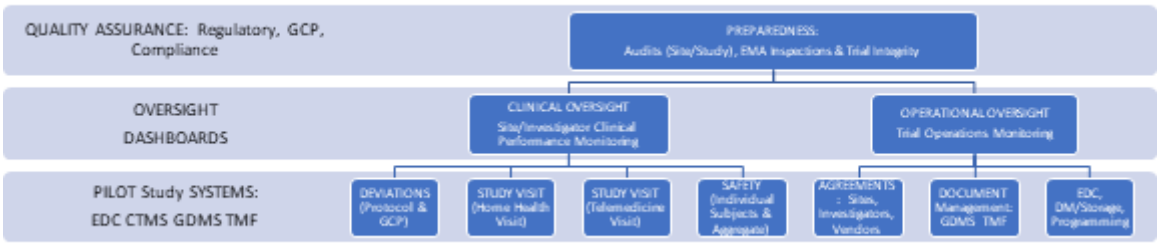
Activities

Functional Requirements

Operation & Coordination BBB activities encompass the following functions:

Technical Requirements

Operation & Coordination BBB



Functional requirements and Technical requirements

Systems must be configured to accommodate multiple, simultaneous end-users' access requirements (e.g. 2-factor authentication), and comply with protocol specified data/records protection and retention. System training, business continuity planning, user acceptance testing, automated functionality (e.g. auto-save; auto-log-off for idle periods), and tech support ("help desk") will be prerequisites.

To ensure participant data privacy, access-control systems for the integrated platform will only permit identity-authenticated end-users to access the systems and the dashboards drawing metrics from the systems complete all of the activities in the graphic above:

- clinical oversight tasks are **required** to be available prior to study start to monitor timeliness of direct data entry, timeliness of upload of electronic source documents,

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visualize compliance with completion of participant-reported and clinician-reported data, visualize wearable device(s) data, and visualize vendor-specific data; each with intact audit trails).

- study operational oversight tasks are **required** to be available prior to study start to comply with Study Monitoring Plan and complete site monitoring activities, protocol and GCP deviations identification and remediation, data management database maintenance (eCRF completion and cleaning; query issuance and time to query resolution, regulatory documents and other documents in TMF and GDMS).

Operation and coordination dashboards will be **required** to efficiently display all oversight metrics for internal auditors and EMA inspectors.

Included activities in the RFP

The following activities are included in the RFP:

OPERATIONAL OVERSIGHT

Any contracted vendor providing oversight dashboard analytics must be provided controlled access to assess study recruitment data, EDC and eSource data, source document locator completeness data, study visit scheduling data, Trial Master File (TMF) completeness data, regulatory document submission packet components in the Global Document Management System (GDMS), and any other relevant operational data as frequently as specified by the study sponsor.

CLINICAL OVERSIGHT

Any contracted vendor providing clinical oversight dashboard analytics must be provided controlled access to assess protocol and GCP compliance data, study visit scheduling and completion data, data entry timeliness and completeness data, query issuance and resolution data, and regularly scheduled safety data updates (timestamped and auditable).

TELEMEDICINE VISIT MANAGEMENT

Any contracted vendor providing telemedicine visit management must provide high quality audiovisual interactions between study participants and multiple (potentially simultaneous) investigational site personnel (e.g. investigator, study nurse, pharmacist). The vendor must provide efficient, scheduling solutions which account for participant and investigational site personnel availability. Following each telemedicine visit completed, the vendor must elicit technology satisfaction responses from all parties included in the study visit to identify and quantify satisfactory and non-satisfactory aspects of the study visit.

STUDY OVERSIGHT

Excluded activities from the RFP

The activities below are already covered by internal partner and **excluded from the RFP**:

- Performance monitoring
- Document management
- Home health visit management
- Inspection facilitation
- System approval facilitation
- Regulatory management

The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IMI2) Trials@Home grant n° 831458.

- Vendor management
- Safety management
- Manage protocol and GCP deviations
- Creation of informed consent forms

RFP - Knockout Criteria

For the activities included in the RFP we have identified a number of knockout criteria that will exclude the technology vendor in the case that one or more of them are not met.

Operational Analytics:

The technology will be rejected if:

1) Not able to demonstrate operational performance oversight dashboards functionality

Study Oversight:

The technology will be rejected if:

1) Not able to demonstrate operational performance oversight dashboards functionality

The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IMI2) Trials@Home grant n° 831458.

Basic Building Block Profile

Building Block: Patient Engagement vision

Vision

The Patient Engagement vision is defined by three core engagement areas:

Essential Engagement Services:

The starting point in the patient engagement journey, essential engagement services should provide a foundation of knowledge to support the other core engagement areas. Essential engagement tasks and services include:

- Consulting with patient engagement specialists, partners and services
- Working with patient support and advocacy groups to identify patient needs and desires
- Identification and active participation in patient communities
- Defining patient engagement evaluation criteria and metrics to engage with minimum burden
- Options and timing for return of data to the patient (patient and study)

Communication Engagement:

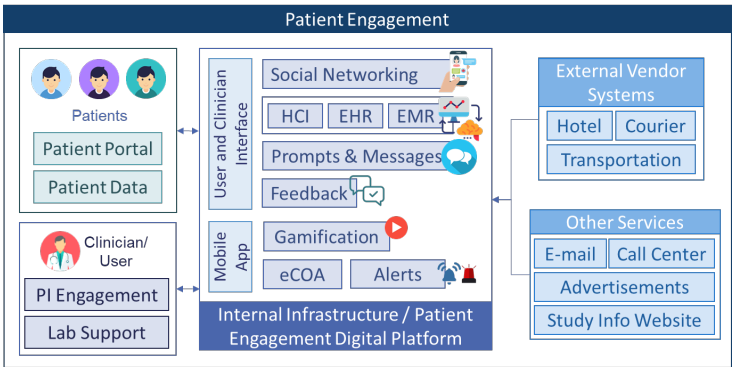
Taking knowledge from, and building on, the essential engagement services, communication engagement should define and include the most efficient and effective ways to communicate with our patients. Patient communication encompasses the bi-lateral sharing of information about the study itself, the planned interventions, general disease information, patient support resources, questionnaires, surveys and scales and logistics such as medication tracking.
Methods of communication engagement may include:
Central patient portal / environment / website / app(s)
Videos, digital leaflets and newsletters
Visit schedule / calendar downloads and syncing, visit alerts
Patient communities and outreach
Chat rooms, wikis, blogs, advocacy group links/FAQs
eCOA communication services e.g. compliance metrics/feedback, satisfaction surveys, reminders
Conversational AI and (digital) patient concierge services

Motivation Engagement

Motivating our patients to maintain engagement momentum is key to both patient adherence and successful study completion. Motivation engagement should include several methods including:
Provision of study devices such as wearables, monitors, digital health sensors etc
Mobile apps with potential for gamification / achievement tracking and sharing
Thanks and acknowledgments
Expense reimbursements where appropriate
Relevant and timely return of patient data to the patient via summaries, reports, achievements etc

The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IMI2) Trials@Home grant n° 831458.

Activities



Included activities in the RFP:

The following activities are included in the RFP:

- **Patient / study data return** - method of providing individual patient data back to the patient in a way that engages, empowers, provides insight into patient's personal health / disease state or progression etc.
    - Visuals, text, awards, recognitions
- **Engagement consulting services** - digital engagement program for duration of study
- **Social Media capabilites** - program for duration of study
- **Conversational AI**

Excluded activities from the RFP:

The activities below are already covered by internal partner and **excluded from the RFP**:

- Central patient portals / apps
- APIs, integrations, interoperabiltiies
- Calandar, schedule, visit management
- ECOA
- Patient concierge
- Device independence
- Messaging, rewards, thanks, achievements etc
- Compliance
- Clinical monitoring

Functional Requirements

Essential Engagement Services:

- Social media expertise with relevant advocacy groups, patient communities
- Ability to host, aggregate, consolidate, update and display patient's personal health data inaccordance with security and privacy requirements (safety/privacy, GDPR-compliant)
- Ability to request expense reimbursements where appropriate
- Relevant and timely return of patient data to the patient via summaries, reports, achievements etc
- Ability to host, aggregate, consolidate, update and display patient's personal health data inaccordance with security and privacy requirements (safety/privacy, GDPR-compliant)

The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IMI2) Trials@Home grant n° 831458.

Additional Non-Core Services:

- Conversational AI and/or chat-bot services through central portal and/or patient's own smart devices (Alexa, Bixby)

Technical requirements

1. Readily available APIs to enable integration / interoperability / single sign-on features
2. Device independence:
    - Can be accessed / run by both android and iOS fixed and mobile devices and operating systems
    - Support for all common browsers and browser release versions
    - Available and can be synced with desktop URL site
    - Can be used with incumbent smart devices such as Alexa, Bixby etc
3. Any companion apps, wearables and medical devices - if applicable - should allow:
    - Sufficient battery life with ease of recharge
    - Lightweight, unobtrusive/discreet design
    - Relevant safety certifications, documentation
    - FDA device classification and/or CE approval (and covering any companion mobile apps)
4. Compliance with:
    - GxP regulatory requirements
    - GDPR / Privacy requirements
    - 21CFR11 / EU CTR / ICH GCP

RFP – Knockout Criteria:

For the activities included in the RFP we have identified a number of knockout criteria that will exclude the technology vendor in the case that one or more of them are not met.

Patient / study data return

The technology will be rejected if:

1. Not compatible with any/all mobile devices
2. Not compatible with any/all browsers (latest version + previous still-supported common versions)
3. Language limitations

Engagement consulting services

The technology will be rejected if:

1. Inexperience in Diabetes TA

Social Media capabilites

The technology will be rejected if:

1. Inexperience in Diabetes TA

Conversational AI

The technology will be rejected if:

1. Not compatible with any/all devices
2. Not compatible with any/all browsers (latest version + previous still-supported common versions)
3. Language limitations
4. POC / infant product

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Basic Building Block Profile

Building Block: Patient Recruitment & Enrollment

Vision

The Vision is based on 3 pillars:
1) Diabetes Carousel:
Is an online public platform to share information about diabetes, diabtes treatment, QoL, R&D processes and clinical trials for diabetes patients with patients and the wider public interested in diabetes. Website enables peer-to-peer interaction/communication between platform users to increase overall value and time spent on portal. Patients interested in joining RDCT will be informed about and invited to the
2) My Patient/My Participant Portal:
Is an online platform hosting the landing page for patient digital pre-screening, digital recruitment and patient consenting into the RDCT. Through integration/intercation with EDC,eICF, tele-health, IRT/IWRS functionalities patients will be screened, consented recruited, treated and provided with study drug in both, remote and conventional arm.
3) Patient Recruitment Campaigns: digital and conventional

Included activities in the RFP

The following activities are included in the RFP:

- **Intelligent, interactive online platform** (cloudbased) to host public information on diabetes
- **Peer-to-peer (patient-to-patient) Network**
- **Ability to integrate App Solutions** to ensure (depending on drug used) / ability to integrate data from smart cap devices tracking drug intake
- **Calendar integration** to patients calendars / email inbox
- **Patient Recruitment Service Provider** capable of both digital and non-digital Patient Recruitment specialized for diabetes/metabolic disorders.
  Core competencies:
  Interaction with diabetes patient communities, patient organisations, influencer outreach, providing access to MHR/EHR data; comfortable to use of Algorithms/AI to pre-identify patients through aggregated data/digital footprint (data purchasing diabetes books/accessories via Amazon and others Vendors interacting with pharmacies for information on prescribed diabetes drugs), SEO capabilities.

The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IMI2) Trials@Home grant n° 831458.

Excluded activities from the RFP

The activities below are already covered by internal partners and **excluded from the RFP**:

- Differentiated access, functionality and content for patients, sponsor, CRO, investigator and site staff
- Storage and Tracking of patient, site/investigator trainings and training materials
- Patient engagement messaging as push out notifications
- Distribution of study/IP-related patient information based on treatment arm (starter pack)
- KPI/Metric tracking for use of Portal
- eICF/ePRO functionality built into platform, video storage, information sharing and storage/ all ICF material needs to be stored/be available at all times during the study (for video)

RFP – Knockout Criteria

For the activities included in the RFP we have identified a number of knockout criteria that will exclude the technology vendor in the case that one or more of them are not met.

Peer-to-peer (patient-to-patient) Network

The technology will be rejected if:

1. not GDPR compliant
2. does not allow for Member Password and Login Identity
3. does not provide membership eligibility check

Ability to integrate App Solutions to ensure (depending on drug used) / ability to integrate data from smart cap devices tracking drug intake

The technology will be rejected if:

1. is not compatible for IMP used in PILOT

Calendar integration to patients calendars / email inbox

The technology will be rejected if:

1. unable to integrate into iOS and Android and all current digital calendars
2. unable to run on all current mobile as well as stationery devices

Patient Recruitment Service Provider capable of both digital and non-digital Patient Recruitment specialized for diabetes/metabolic disorders

The technology will be rejected if:

1. no previous experience/expertise in metabolic/diabetes (2 clinical trials)
2. unable to demonstrate experience in a) digital
   b) conventional recruitment (at least 2 trials in relevant TA)
3. unable to demonstrate experience/solutions for Behavioral Targeting/Retargeting, SEO, interaction with PAGs, influencers, POLs

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4. no P4P (pay for randomization)

Intelligent, interactive online platform (cloudbased) to host public information on diabetes research, treatment, therapy i.e. / providing link to clintrial.gov/pubmed etc.

The technology will be rejected if:

1. not GDPR-compliant
2. no integration with CTIS
3. no interface to variety of external online platforms/systems

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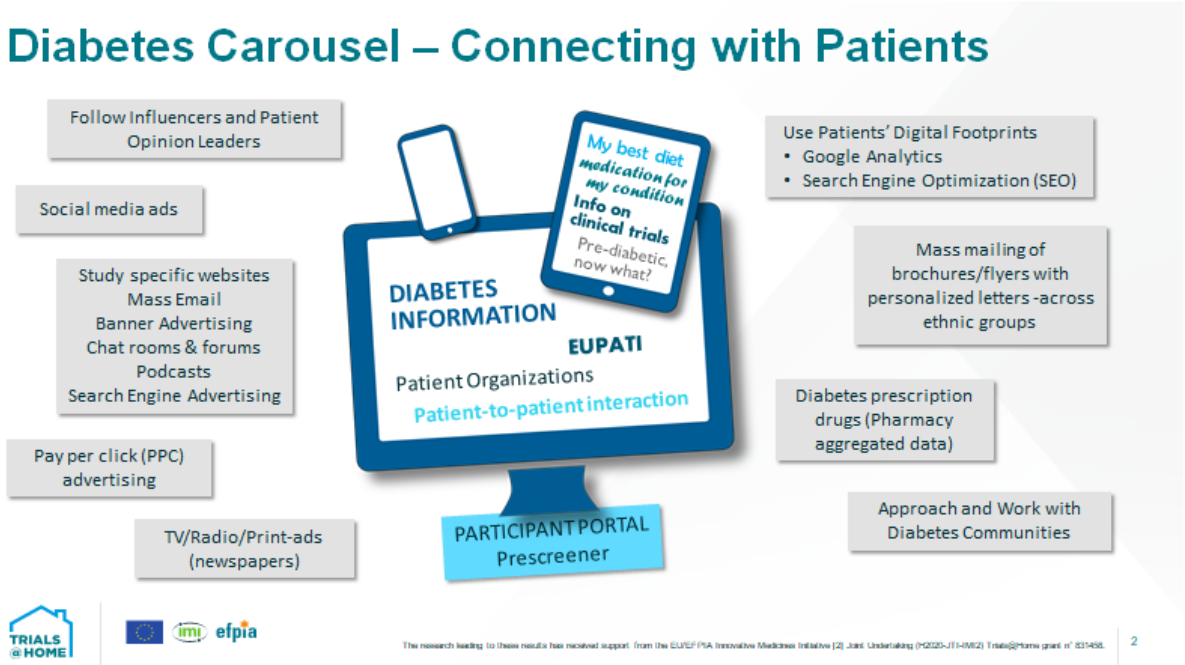
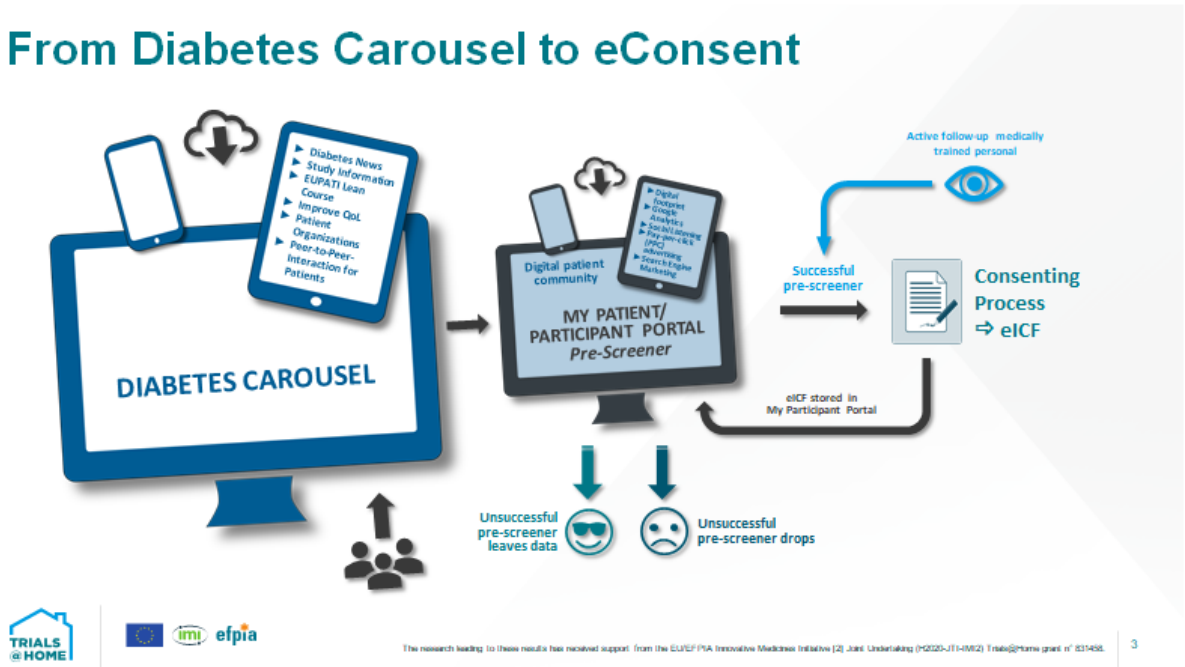
Graphs





The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IMI2) Trials@Home grant n° 831458.

Basic Building Block Profile

Building Block: Setup and Design

Vision

A compliant suite of access-controlled clinical and operational systems and document storage system which support site selection and initiation, GCP-compliant trial conduct, timely data entry and data integrity, and regulatory-filing documentation. This suite drives inspection-readiness by funneling all required clinical oversight and study operational oversight to performance monitoring and operational analytics dashboards.

Systems must be configured to accommodate multiple, simultaneous end-users access and meet GDPR adherence requirements (e.g. 2-factor authentication), and data/records protection and retention. System training, business continuity planning, user acceptance testing, automated functionality (e.g. auto-save; auto-log-off for idle periods), and tech support ("help desk") will be prerequisites.

Included activities in the RFP

The following activities are included in the RFP:

1. Operational feasibility and site selection
2. Study branding
3. IMP supply

OPERATIONAL FEASIBILITY AND SITE SELECTION

IMI/Trials@Home WP EAGLE has completed EU member country feasibility assessments. The contracted vendor would be required to demonstrate an access-controlled, fully-functional, electronic site feasibility and site selection system (including but not limited to site outreach survey; investigator trial experience; enrollment estimates; contracting timelines estimation), as well as site initiation visit processes tracking. These access-controlled systems must be accessible to the study operational oversight team.

The contracted vendor would be required to (1) conduct investigational site selection within IMI/Trials@Home selected countries for the classical clinical trial (CCT) arm and hybrid arm (Part A) portion of the study conduct and (2) pivot to recruitment of a purely decentralized arm, when necessary. The contracted vendor would be expected to provide solutions for recruitment of the purely decentralized arm that address current EU and local laws and regulations. For all selected investigational sites, the contracted vendor should be able to demonstrate a compliant Investigational Site Master File system, rater qualification training and tracking system.

IMP SUPPLY

Decentralized trials arms face unique challenges regarding Direct-to-Participant (DtP) IMP shipments based upon current EU and local laws and regulations. A contracted vendor must be able to demonstrate expertise executing the multi-step processes from (1) IRT/Drug Order to (2) Drug Delivery to Participants to (3) Drug Supply and Re-supply to (4) IMP returns to Central supplier assessment of drug compliance/exposure to (5) IMP destruction.

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STUDY BRANDING

While listed as a functionality under Setup and Design BBB, study branding activities have been relegated to Patient Engagement BBB and Recruitment and Enrollment BBB.

Excluded activities from the RFP

The activities below are already covered by internal partners and **excluded from the RFP**:

- Create participant and site education strategy
- Site Start-up
- Operational setup
- Obtain Ethics & Regulatory approvals
- Technology setup
- Protocol development
- Trial Registration
- Online platform for study specific information (landing page and pre-screener) in desktop and mobile functionality

RFP – Knockout Criteria

For the activities included in the RFP we have identified a number of knockout criteria that will exclude the technology vendor in the case that one or more of them are not met.

Operational feasibility and site selection

The technology will be rejected if:

1) Not able to demonstrate prior cases of at least two different clinical trials wherein Operational Feasibility and Site Selection systems were successful.
2) Not able to demonstrate prior cases of at least two different clinical trials wherein Operational Feasibility and Site Selection systems were successful and met GCP standards
3) Demonstration of above systems do not conform to reviewers' expectations.

IMP supply

The technology will be rejected if:

1) Not able to demonstrate prior cases of at least two different clinical trials wherein IMP (from study drug assignment to drug destruction) and met EMA inspection standards.
2) Demonstration of IMP management systems do not conform to reviewers' expectations.

The research leading to these results has received support from the EU/EFPIA Innovative Medicines Initiative [2] Joint Undertaking (H2020-JTI-IMI2) Trials@Home grant n° 831458.

Services Agreement

Trials@Home
Center of Excellence
Remote Decentralised Clinical Trials

Between

Legal Name Vendor
Address
Zip Code, Place
Country

And

Julius Clinical
a registered trade name of
Julius Clinical research B.V.
Broederplein 41-43
3703 CD Zeist
The Netherlands

All documents issued by the vendor (end-user agreements, general terms and conditions, etc.) except its tender are held inapplicable, unless explicitly mentioned in this agreement. In all circumstances, in the event of contradiction between this agreement and documents issued by the vendor, this agreement prevails, regardless of any provision to the contrary in the vendor's documents.

Services Agreement

This services agreement (hereinafter referred to as "**Agreement**") is made and entered into as of the Month Day, Year (hereinafter referred to as "**Effective Date**") by and between

Julius Clinical, *a registered trade name of Julius Clinical Research B.V.,* a limited liability company, incorporated and operating under the laws of the Netherlands, having its registered and principal office at Broederplein 41-43, 3703 CD Zeist, the Netherlands, with VAT number NL 8197.31.547 B01 and registered at the Chamber of Commerce under number 30244124, hereinafter referred to as "**Julius Clinical**".

and

Legal Name Vendor, a limited liability company, incorporated and operating under the laws of Country, having its registered and principal office at Street, Zip code, Place, Country, with VAT/tax identity number VAT Number OPTION and registered at the Chamber of Commerce under number Number, hereinafter referred to as "**Vendor**".

Vendor and/or Julius Clinical may also hereinafter be referred to individually as "**Party**" or collectively as "**Parties**".

WHEREAS further to a multi-beneficiary funding award by the Innovative Medicines Initiative 2 Joint Undertaking programme ("**IMI**") for the action "Trials@Home: Center of Excellence – Remote Decentralised Clinical Trials" ("**Action**"), a consortium has been formed by certain beneficiaries and a grant agreement has been signed between those beneficiaries (each a "**Beneficiary**" and collectively "**Beneficiaries**") and IMI ("**Grant Agreement**"), to which Universitair Medisch Centrum Utrecht ("**Sponsor**") and Julius Clinical are parties;

WHEREAS further to the Grant Agreement; (a) Sponsor is the coordinator of the Action and sponsor of the pan European clinical study pilot ("**Study**") undertaken as part of the Action; (b) Julius Clinical is a science driven Contract Research Organization, acting as an independent contractor of Sponsor and Sponsor has delegated some of Sponsor's responsibilities with respect to the Study to Julius Clinical;

WHEREAS Julius Clinical, acting as an independent contractor of Sponsor, would like to retain certain services of Vendor for the Study and Vendor desires to supply such services.

NOW THEREFORE, in consideration of the mutual covenants and undertakings herein contained, the Parties, intending to be legally bound, hereby agree as follows:

1. SCOPE OF AGREEMENT

1.1 Services. The services to be performed by Vendor to Julius Clinical under this Agreement are described in detail in Attachment A (hereinafter referred to as "**Services**"). Julius Clinical may request a change in the scope of the Services which will be agreed between the Parties in writing. Parties shall enter in good faith discussions to accommodate such changes.

1.2 Special conditions. Special conditions may apply to certain Services as included in [Attachment D]. In the event of a conflict between these special conditions and the terms and conditions of the main body of the Agreement, the Agreement's main body prevails, unless explicitly set forth otherwise in the respective special conditions.

1.3 Service standards. Vendor will perform the Services in accordance with this Agreement, all applicable laws, regulations and good practices, including but not limited to the applicable personal data protection legislation, the relevant protocol, Sponsor's and Julius Clinical's instructions and all applicable professional and ethical standards generally accepted in the clinical trial industry.

1.4 Grant Agreement. To the extent applicable, the articles of Attachment C, which flow down from the Grant Agreement, apply *mutatis mutandis* to the Vendor. In the event of a conflict between the articles of Attachment C and the terms and conditions of the Agreement (including the other Attachments of the Agreement), Attachment C prevails.

1.5 Data Processing Agreement. Parties shall separately conclude a data processing agreement to regulate the terms and conditions of any personal data processed by Vendor pursuant to this Agreement.

2. PAYMENT OF PROFESSIONAL FEES AND EXPENSES

2.1 Professional Fees. In consideration of the Services performed, Julius Clinical shall pay Vendor the compensation as specified in Attachment B ("**Professional Fees**"), in accordance with the terms of this Agreement. The Professional Fees are not subject to price revisions.

2.2 Expenses. Julius Clinical shall reimburse Vendor for travel and other reasonable out-of-pocket expenses incurred by Vendor staff in the performance of the Services as specified in Attachment B ("**Expenses**"). Julius Clinical shall reimburse only such Expenses which have been pre-approved in writing by Julius Clinical. Vendor will submit adequate documentation of such Expenses.

2.3 Payment Term. Invoices will be provided by Vendor to Julius Clinical on a monthly basis and will identify work performed for the invoiced month. Julius Clinical shall pay any undisputed invoice within forty-five (45) days of invoice date. If any portion of the invoice is disputed, then Julius Clinical shall notify Vendor within fourteen (14) days of invoice date and pay the undisputed amounts as set forth above. Parties shall use good faith efforts to reconcile the disputed amount

within thirty (30) days after the notification of Julius Clinical in accordance with the provisions of this Article 2.3.

2.4 Payment Schedule. Vendor shall invoice the Professional Fees and Expenses in accordance with the schedule set forth in Attachment B.

2.5 Currency. All amounts are calculated and paid in Euro (€). All Expenses incurred in a different currency shall be converted into Euro (€) amounts using the OANDA daily rate (http://www.oanda.com/currency/converter/) of the date of invoice by the concerning third party as specified on the concerning invoice provided to Julius Clinical.

2.6 Taxes. Payments under this Agreement include any taxes, social insurance, other premiums or contributions that Vendor is legally or contractually obligated to pay and Vendor shall be solely liable for payment of such costs.

3. CONFIDENTIALITY

3.1 Confidential Information. For the purposes of this Agreement, "**Confidential Information**" shall mean any and all data, information, documents or other material (in any form), irrespective of its form (i) received or obtained by Vendor from Julius Clinical or Sponsor or otherwise made accessible to Vendor by Julius Clinical or Sponsor (prior to or after the signature of this Agreement) whether directly or indirectly; and/or (ii) created by Vendor as a result of the performance of the Services under the Agreement, which if disclosed, could be harmful to Julius Clinical and/or a Beneficiary. Confidential Information shall further include the existence and content of this Agreement.

3.2 Obligations. During the term of this Agreement and for an additional period of ten (10) years following the expiration or termination of this Agreement or for any longer period as may be required by mandatory applicable law, Vendor shall:

(a) hold in strict confidence the Confidential Information and use the Confidential Information only for the purpose of performing the Services pursuant to this Agreement, and

(b) protect Confidential Information against unauthorized disclosure and access and to ensure the secured storage of any Confidential Information, whether in hard copy or electronically, and

(c) not use the Confidential Information to the detriment of Julius Clinical and/or Sponsor nor to compete with Julius Clinical or use it for any other purpose than performing its obligations or exercising its rights under this Agreement, without the prior written approval of Julius Clinical, and

(d) not reveal, publish or otherwise disclose any of the Confidential Information, in whole or in part, to any person or entity other than its own employees and consultants who have a need to know such Confidential Information and provided that Vendor has contractually bound the concerning employees or consultants by confidentiality, non-disclosure and non-use obligations equivalent to those contained in this Agreement.

(e) to notify promptly Julius Clinical management should any unauthorized disclosure of Confidential Information occur.

3.3 Exceptions. The obligations under Articles 3.2 shall not apply to Confidential Information to the extent that is clearly and convincingly shown, that such information:

(a) is or becomes generally available to the public other than as a result of a disclosure by the Vendor, and/or

(b) becomes available to the Vendor on a non-confidential basis from a source (other than Julius Clinical or Sponsor) which is not prohibited from disclosing the information, and/or

(c) was independently developed by the Vendor without the use of Confidential Information, as shown by contemporaneous evidence, and/or

(d) was in the Vendor's possession prior to receipt from Julius Clinical and/or Sponsor and which had not previously been obtained from Julius Clinical and/or Sponsor or any other party under an obligation of confidence; and/or

(e) is required by law to be disclosed, provided that Vendor immediately notifies Julius Clinical in writing of such requirement (to the extent permitted by law) and only discloses the information to the extent so required to be disclosed. Such disclosure shall not release the Confidential Information from its confidential status.

3.4 Ownership. Without prejudice to Article 4 below, all Confidential Information will remain the sole and exclusive property of Julius Clinical, Sponsor or any of the Beneficiaries, as applicable.

3.5 Vendor's confidential information. Julius Clinical will comply with nondisclosure obligations in accordance with articles 3.2 and 3.3 of this Agreement with respect to information that it receives from Vendor and which is marked "confidential", with the exception of information which Vendor explicitly or implicitly discloses to Julius Clinical for the purpose of being forwarded by Julius Clinical to one or several of Julius Clinical's clients, prospective clients or a Beneficiary.

3.6 Transfer of Documents. Each Party shall upon termination or expiration of this Agreement or upon request of the disclosing Party promptly transfer to the other Party all documents containing confidential information which by virtue of this Agreement is the property of the other Party, except for one archival copy in a secure place for reference and proof. The provisions of this article shall not apply to copies of electronically exchanged confidential information made as a matter of routine information technology backup and to confidential information or copies thereof which must be stored by the receiving Party according to provisions of mandatory law.

4. INTELLECTUAL PROPERTY

4.1 Julius Clinical Rights. All data and information generated or derived by Vendor as the result of Services performed by Vendor and/or its staff under this Agreement or through the use of or access to the Confidential Information shall be and remain the exclusive property of Julius Clinical, Sponsor and/or any Beneficiary, as applicable. All data, information, reports, and any discoveries,

inventions, works of authorship, ideas, suggestions that may evolve from the data and information described above or as the result of Services performed by Vendor under this Agreement or through the use of or access to the Confidential Information (collectively "**Developments**") shall belong to Julius Clinical, Sponsor and/or a Beneficiary, as applicable, and Vendor agrees and shall cause its staff, to promptly inform Julius Clinical of such Developments, and hereby fully assigns to Julius Clinical, Sponsor and/or the relevant Beneficiary all of its rights in all such Developments and any related patents, copyrights and other intellectual property rights.

4.2 Vendor obligations. Vendor shall ensure that any documents are executed and acts are performed by Vendor and/or its staff as are necessary for the assignment of the property of such Developments to Julius Clinical, Sponsor and/or the relevant Beneficiary, as applicable. Parties agree that the amounts due by Julius Clinical under the Agreement for the conduct of the Services by Vendor constitute full and sufficient consideration for the creation, development, conception or reduction to practice of any Developments by Vendor, and/or its staff. Therefore, neither Julius Clinical, Sponsor nor the relevant Beneficiary is liable for any additional payments to Vendor for Developments by Vendor, and/or its staff, their coming into existence. Any and all Developments shall be considered to be Confidential Information under this Agreement.

4.3 Vendor Rights. Without prejudice to the above, Julius Clinical acknowledges that Vendor possesses or may in the future possess certain inventions, processes, know-how, trade secrets, improvements, other intellectual properties and other assets, including but not limited to analytical methods, procedures and techniques, procedure manuals, personnel data, financial information, computer technical expertise and software, which have been independently developed by Vendor and which relate to the business or operations of Vendor and are not based on any Confidential Information or Developments (collectively "**Vendor's Property**"). Notwithstanding the above, Julius Clinical, Sponsor and the relevant Beneficiary shall have a non-exclusive, irrevocable, perpetual, worldwide, royalty-free license to use Vendor's Property in conjunction with the Development and Confidential Information and the commercial use by Julius Clinical, Sponsor, and the relevant Beneficiary and/or their respective affiliates of the subject matter of this Agreement and the Protocol, and with the right to sub-license.

5. TERM, TERMINATION AND SUSPENSION

5.1 Term. This Agreement shall be effective as of the Effective Date and expire upon completion or termination of the Study, termination of participation of Julius Clinical in the Action or early termination of the Consortium Agreement or Grant Agreement, whichever occurs sooner.

5.2 Early Termination by Either Party. Julius Clinical may terminate this Agreement at any time by giving a thirty (30) days written notice.

5.3 Payment upon Termination. Upon termination of this Agreement Julius Clinical shall pay any outstanding Professional Fees under this Agreement for the Services actually completed in accordance with the terms of this Agreement by Vendor up to the effective date of the termination.

Vendor shall promptly refund any payments made in advance by Julius Clinical to Vendor for work not completed or that are not due under the Agreement.

5.4 Suspension. Should the Action be suspended in accordance with the Grant Agreement, Julius Clinical reserves the right to suspend this Agreement. For the avoidance of any doubt no payments will be made by Julius Clinical during the period of the suspension.

5.5 Survival of terms. The rights and obligations of the Parties under Articles 2.3 (payment term), 3 (confidentiality), 4 (intellectual property), 5.3 (payment upon termination), 5.5 (survival of terms), 6 (indemnification), 7 (limitation of liability), 9 (notices), 10 (audits and inspections), 11.5 (assignment), 11.6 (waiver), 11.7 (severability), 11.8 (entire agreement and modification), 11.9 (law and jurisdiction) of this Agreement and Attachment C shall survive termination or expiration of this Agreement.

6. INDEMNIFICATION

Vendor hereby agrees to indemnify, defend, and hold Julius Clinical, its employees, directors, officers, contractors and agents harmless from any and all third party claims or demands for damages, liabilities, losses, actions and/or suits, including reasonable attorney's fees and court or arbitration costs (hereinafter referred to as "**Third Party Claims**") arising directly as a result of Vendor's negligence or intentional misconduct in the performance of its obligations under this Agreement or Vendor's breach of any data processing agreement agreed between the Parties, except to the extent that any such Third Party Claims are directly caused by Julius Clinical's negligence or intentional misconduct.

7. LIMITATION OF LIABILITY

Parties agree that, in the event of any breach or default by either Party with respect to this Agreement, the defaulting Party's damage liability to the non-defaulting Party for such breach or default (whether in tort, contract, strict liability or otherwise) shall be limited to the non-defaulting Party's direct damages. Under no circumstances shall either Party be liable towards the other Party for any form of consequential, special, punitive or indirect damages (to include loss of profit or business) for the breach of its obligations under this Agreement.

8. WARRANTIES

8.1 Warranties. Vendor warrants that:

(a) it has, or will have before doing so, all necessary authorisations to enter into and perform the Agreement; and

(b) it has sufficient, staff, equipment, facilities and resources to perform the Services in accordance with the Agreement; and

(c) its staff are sufficiently qualified, trained and experienced; and

(d) its staff are not debarred, disqualified, blacklisted or banned under any applicable law or regulation or otherwise prohibited by relevant authorities from performing the Services, nor are currently to the best of Vendor's knowledge, the subject of such debarment, disqualification, blacklisting or banning proceeding and that it will notify Julius Clinical

immediately after being informed of any debarment, disqualification, blacklisting or banning action, or investigation with regard to such, against any member of its staff; and

(e) in case of any failure to comply with Julius Clinical's and/or Sponsor's instructions, or Study protocol requirements, Vendor shall immediately inform Julius Clinical by telephone or fax, providing in addition any supplementary information available to Vendor. Julius Clinical s approval shall be required ahead of further processing; and

(f) the use by Julius Clinical of any software, documents, information or any other materials provided or made accessible by Vendor to Julius Clinical pursuant to this Agreement, does not infringe any third party rights, including but not limited to intellectual property rights.

9. NOTICES

Any notice, consent, request or other communication required or permitted hereunder shall be made in writing and shall be deemed given if

(a) delivered personally, on the date received, or

(b) by a reputable overnight delivery service, on the next business day after being placed in the possession of such service, or

(c) by facsimile or e-mail, when electronic confirmation of receipt is received, or

(d) by mail, three days after the date postmarked if sent by registered or certified mail, return receipt requested, postage paid, to the address specified in the Parties section above and to the attention of the person that has signed this Agreement on behalf of the addressed Party.

10. AUDITS AND INSPECTIONS

10.1 Audits. Upon reasonable notice, Vendor shall allow Julius Clinical, Sponsor and their authorized representatives to examine and audit Vendor's facilities, equipment, documents and records relating to the Services, this Agreement and the relevant Work Order, for the purpose of and to the extent reasonably necessary for determining Vendor's compliance with the terms of this Agreement. Vendor and Julius Clinical shall agree on appropriate measures to prevent the unconsented processing of personal data and the breach of any confidentiality and non-disclosure obligations which Vendor may have towards third parties in respect of information unrelated to the Services.

10.2 Inspections. To the extent allowed by law, each Party shall:

(a) notify the other Party by telephone, facsimile or e-mail with electronic confirmation of receipt, immediately after being informed of any inspection relating to the Services, this Agreement or the relevant Work Order and to be conducted by a governmental or other competent or purportedly competent authority; and

(b) allow the other Party and its authorized representatives to be present and to participate in the inspection; and

(c) provide the other Party promptly with copies of any correspondence or other documents related to such inspection.

11. MISCELLANEOUS

11.1 Third Party Beneficiary. The Vendor agrees that Sponsor is a direct beneficiary of the rights attributed to it by virtue of this Agreement and may, unless this would contradict explicit instructions of Julius Clinical, enforce its rights hereunder as a third party beneficiary. In the event that Sponsor is not able to do so for any reason, the Vendor agrees that Julius Clinical may have the benefit of Sponsor's rights hereunder (including those rights concerning Confidentiality and Intellectual Property) and may transfer such rights and benefits to Sponsor. The Vendor furthermore agrees that IMI, the European Commission, the European Court of Auditors and the European Anti-Fraud Office are direct beneficiaries of the rights attributed to it by virtue of articles 22 and 23 as laid down in Attachment C of this Agreement.

11.2 Insurance. Each Party will maintain insurance, with a financially sound and reputable insurer, in an amount that will be adequate to cover its obligations under this Agreement, and, upon request each Party shall provide to the other Party a certificate of insurance showing that such insurance is in place. Parties ensure that insurance premiums are duly paid in order to avoid any suspensions of the concerning insurance policies.

11.3 Independent Contractor Relationship. The Parties are independent entities engaged in independent businesses, and no Party shall be regarded as, act as or purport to be an agent or employee of the other Party. Nothing herein shall be construed as:

(a) reserving for a Party the right to control the other Party in the management of its employees or conduct of its business and/or;

(b) granting either Party the authority to make any promise, guarantee, warranty, representation, contract or commitment which would create any obligation or liability whatsoever, whether express or implied, on behalf of the other Party; and/or

(c) creating a partnership, joint venture, principal and agent relationship or employer-employee relationship.

11.4 Force Majeure. Neither Party shall be liable for the delay in performance or failure to perform this Agreement if such delay or failure is due to any occurrence which was not reasonably foreseeable to the respective Party at or before the date of execution of this Agreement and which is beyond the control of the respective Party such as fire, explosion, weather, pandemic, disease, war, insurrection, civil strife, riots, government action or power failure; provided, however, that the Party who is unable to perform resumes performance as soon as possible following the end of the occurrence causing delay or failure.

11.5 Assignment. Vendor shall not assign, delegate, subcontract or transfer any of its rights, obligations or performance under the Agreement ("**Assignment**") without Julius Clinical's explicit prior written consent. Any purported assignment or delegation in violation of the foregoing sentence is void. In the event of Assignment, Vendor shall remain responsible for full performance of this Agreement.

11.6 Waiver. The waiver of either Party or the failure by either Party to claim a breach of any provision of this Agreement shall not be deemed to constitute a waiver or estoppel with respect to any subsequent breach or with respect to any provision of this Agreement.

11.7 Severability. If any provision of this Agreement is found by a court of competent jurisdiction to be unenforceable, that provision will be severed and the remainder of this Agreement will continue in full force and effect. Any such provision shall be deemed to be replaced by a provision which, while in accordance with the applicable law, reflects the original provision as much as possible.

11.8 Entire Agreement and Modification. This Agreement shall enure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns. This Agreement, including the Preamble, Recitals and any attachments, amendments, if any, hereto, constitutes the entire agreement between the Parties and supersedes all prior oral or written agreements or understandings with respect to the subject matter of this Agreement. Any modifications to the provisions herein must be in writing and signed by the legally authorized representatives of the Parties.

11.9 Law and Jurisdiction. This Agreement will be governed by and construed in accordance with the laws of the Netherlands, without its conflict of laws provisions. In the event of any dispute between the Parties in respect of or in connection with this Agreement, Parties shall first endeavour to resolve it amicably. Should Parties fail to reach and amicable settlement, any such dispute between the Parties will be submitted to the competent courts of, Utrecht the Netherlands.

In witness whereof, the Parties hereto have caused this Agreement to be executed in two or more counterparts by their duly legally authorized representatives. Parties acknowledge and agree that each has read the Agreement and agrees to be bound by the terms and conditions hereof.

Legal Name Vendor		**Julius Clinical**	
Name		Name	Aize Smink
Title		Title	CEO
Place, Country		Place, Country	Zeist, The Netherlands
Date		Date	

ATTACHMENT A

[Description of Services]

ATTACHMENT B

[Professional Fees and Expenses]

ATTACHMENT C

Relevant clauses from the Grant Agreement

ARTICLE 22 — CHECKS, REVIEWS, AUDITS AND INVESTIGATIONS — EXTENSION OF FINDINGS

22.1 Checks, reviews and audits by the JU and the Commission

22.1.1 Right to carry out checks

The JU will — during the implementation of the action or afterwards — check the proper implementation of the action and compliance with the obligations under the Agreement, including assessing deliverables and reports.

For this purpose the JU may be assisted by external persons or bodies.

The JU may also request additional information in accordance with Article 17. The JU may request beneficiaries to provide such information to it directly.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

22.1.2 Right to carry out reviews

The JU may — during the implementation of the action or afterwards — carry out reviews on the proper implementation of the action (including assessment of deliverables and reports), compliance with the obligations under the Agreement and continued scientific or technological relevance of the action.

Reviews may be started up to two years after the payment of the balance. They will be formally notified to the coordinator or beneficiary concerned and will be considered to have started on the date of the formal notification.

If the review is carried out on a third party (see Articles 10 to 16), the beneficiary concerned must inform the third party.

The JU may carry out reviews directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). It will inform the coordinator or beneficiary concerned of the identity of the external persons or bodies. They have the right to object to the appointment on grounds of commercial confidentiality.

The coordinator or beneficiary concerned must provide — within the deadline requested — any information and data in addition to deliverables and reports already submitted (including information on the use of resources). The JU may request beneficiaries to provide such information to it directly.

The coordinator or beneficiary concerned may be requested to participate in meetings, including with external experts.

For on-the-spot reviews, the beneficiaries must allow access to their sites and premises, including to external persons or bodies, and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the review findings, a '**review report**' will be drawn up.

The JU will formally notify the review report to the coordinator or beneficiary concerned, which has 30 days to formally notify observations ('**contradictory review procedure**').

Reviews (including review reports) are in the language of the Agreement.

22.1.3 Right to carry out audits

The JU or the Commission may — during the implementation of the action or afterwards — carry out audits on the proper implementation of the action and compliance with the obligations under the Agreement.

Audits may be started up to two years after the payment of the balance. They will be formally notified to the coordinator or beneficiary concerned and will be considered to have started on the date of the formal notification.

If the audit is carried out on a third party (see Articles 10 to 16), the beneficiary concerned must inform the third party.

The JU or the Commission may carry out audits directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). It will inform the coordinator or beneficiary concerned of the identity of the external persons or bodies. They have the right to object to the appointment on grounds of commercial confidentiality.

The coordinator or beneficiary concerned must provide — within the deadline requested — any information (including complete accounts, individual salary statements or other personal data) to verify compliance with the Agreement. The JU or the Commission may request beneficiaries to provide such information to it directly.

For on-the-spot audits, the beneficiaries must allow access to their sites and premises, including to external persons or bodies, and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the audit findings, a 'draft audit report' will be drawn up. The JU or the Commission will formally notify the draft audit report to the coordinator or beneficiary concerned, which has 30 days to formally notify observations ('contradictory audit procedure').

This period may be extended by the JU or the Commission in justified cases.

The 'final audit report' will take into account observations by the coordinator or beneficiary concerned. The report will be formally notified to it.

Audits (including audit reports) are in the language of the Agreement.

The JU or the Commission may also access the beneficiaries' statutory records for the periodical assessment of unit costs or flat-rate amounts.

22.2 Investigations by the European Anti-Fraud Office (OLAF)

Under Regulations No 883/201316 and No 2185/9617 (and in accordance with their provisions and procedures), and Article 50 of the JU Financial Rules18, the European Anti-Fraud Office (OLAF) may — at any moment during implementation of the action or afterwards — carry out investigations, including on-the-spot checks and inspections, to establish whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the EU.

22.3 Checks and audits by the European Court of Auditors (ECA)

Under Article 287 of the Treaty on the Functioning of the European Union (TFEU) and Article 50 of the JU Financial Rules, the European Court of Auditors (ECA) may — at any moment during implementation of the action or afterwards — carry out audits.

The ECA has the right of access for the purpose of checks and audits.

22.4 Checks, reviews, audits and investigations for international organisations
Not applicable

22.5 Consequences of findings in checks, reviews, audits and investigations — Extension of Findings

22.5.1 Findings in this grant

Findings in checks, reviews, audits or investigations carried out in the context of this grant may lead to the rejection of ineligible costs (see Article 42), reduction of the grant (see Article 43), recovery of undue amounts (see Article 44) or to any of the other measures described in Chapter 6.

Rejection of costs or reduction of the grant after the payment of the balance will lead to a revised final grant amount (see Article 5.4).

Findings in checks, reviews, audits or investigations may lead to a request for amendment for the modification of Annex 1 (see Article 55).

Checks, reviews, audits or investigations that find systemic or recurrent errors, irregularities, fraud or breach of obligations may also lead to consequences in other JU, EU or Euratom grants awarded under similar conditions ('extension of findings from this grant to other grants').

Moreover, findings arising from an OLAF investigation may lead to criminal prosecution under national law.

22.5.2 Findings in other grants

The JU or the Commission may extend findings from other grants to this grant ('**extension of findings from other grants to this grant**'), if:

(a) the beneficiary concerned is found, in other JU, EU or Euratom grants awarded under similar conditions, to have committed systemic or recurrent errors, irregularities, fraud or breach of obligations that have a material impact on this grant and

(b) those findings are formally notified to the beneficiary concerned — together with the list of grants affected by the findings — no later than two years after the payment of the balance of this grant.

The extension of findings may lead to the rejection of costs (see Article 42), reduction of the grant (see Article 43), recovery of undue amounts (see Article 44), suspension of payments (see Article 48), suspension of the action implementation (see Article 49) or termination (see Article 50).

22.5.3 Procedure

The JU or the Commission will formally notify the beneficiary concerned the systemic or recurrent errors and its intention to extend these audit findings, together with the list of grants affected.

22.5.3.1 If the findings concern **eligibility of costs**: the formal notification will include:

(a) an invitation to submit observations on the list of grants affected by the findings;

(b) the request to submit **revised financial statements** for all grants affected;

(c) the **correction rate for extrapolation** established by the JU or the Commission on the basis of the systemic or recurrent errors, to calculate the amounts to be rejected if the beneficiary concerned:

(i) considers that the submission of revised financial statements is not possible or practicable

or

(ii) does not submit revised financial statements.

The beneficiary concerned has 90 days from receiving notification to submit observations, revised financial statements or to propose a duly substantiated **alternative correction method**. This period may be extended by the JU or the Commission in justified cases.

The JU or the Commission may then start a rejection procedure in accordance with Article 42, on the basis of:

- the revised financial statements, if approved;
- the proposed alternative correction method, if accepted

or

- the initially notified correction rate for extrapolation, if it does not receive any observations or revised financial statements, does not accept the observations or the proposed alternative correction method or does not approve the revised financial statements.

22.5.3.2 If the findings concern **substantial errors**, **irregularities or fraud** or **serious breach of obligations**: the formal notification will include:

(a) an invitation to submit observations on the list of grants affected by the findings and

(b) the flat-rate the JU or the Commission intends to apply according to the principle of proportionality.

The beneficiary concerned has 90 days from receiving notification to submit observations or to propose a duly substantiated alternative flat-rate.

The JU or the Commission may then start a reduction procedure in accordance with Article 43, on the basis of:
- the proposed alternative flat-rate, if accepted
or
- the initially notified flat-rate, if it does not receive any observations or does not accept the observations or the proposed alternative flat-rate.

22.6 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, any insufficiently substantiated costs will be ineligible (see Article 6) and will be rejected (see Article 42).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 23 — EVALUATION OF THE IMPACT OF THE ACTION

23.1 Right to evaluate the impact of the action

The JU or the Commission may carry out interim and final evaluations of the impact of the action measured against the objective of the EU programme.

Evaluations may be started during implementation of the action and up to five years after the payment of the balance. The evaluation is considered to start on the date of the formal notification to the coordinator or beneficiaries.

The JU or the Commission may make these evaluations directly (using its own staff) or indirectly (using external bodies or persons it has authorised to do so).

The coordinator or beneficiaries must provide any information relevant to evaluate the impact of the action, including information in electronic format.

23.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the JU may apply the measures described in Chapter 6.

ARTICLE 35 — CONFLICT OF INTERESTS

35.1 Obligation to avoid a conflict of interests

The beneficiaries must take all measures to prevent any situation where the impartial and objective implementation of the action is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest ('**conflict of interests**').

They must formally notify to the JU without delay any situation constituting or likely to lead to a conflict of interests and immediately take all the necessary steps to rectify this situation. The JU may verify that the measures taken are appropriate and may require additional measures to be taken by a specified deadline.

35.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43) and the Agreement or participation of the beneficiary may be terminated (see Article 50). Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 38 — PROMOTING THE ACTION — VISIBILITY OF JU FUNDING AND SUPPORT FROM JU MEMBERS

38.1 Communication activities by beneficiaries

38.1.1 Obligation to promote the action and its results

The beneficiaries must promote the action and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner.

This does not change the dissemination obligations in Article 29, the confidentiality obligations in Article 36 or the security obligations in Article 37, all of which still apply.

Before engaging in a communication activity expected to have a major media impact, the beneficiaries must inform the JU (see Article 52).

38.1.2 Information on JU funding and support from JU members — Obligation and right to use the logos and the EU emblem

Unless the JU requests or agrees otherwise or unless it is impossible, any communication activity related to the action (including in electronic form, via social media, etc.) and any infrastructure, equipment and major results funded by the grant must:

(a) display the JU logo, the logo of EFPIA and
(b) display the EU emblem and
(c) include the following text:

For communication activities:
"This project has received funding from the Innovative Medicines Initiative 2 Joint Undertaking (JU) under grant agreement No 831458. The JU receives support from the European Union's Horizon 2020 research and innovation programme and EFPIA".

For infrastructure, equipment and major results:

"This *[infrastructure][equipment][insert type of result]* is part of a project that has received funding from the Innovative Medicines Initiative 2 Joint Undertaking (JU) under grant agreement No 831458. The JU receives support from the European Union's Horizon 2020 research and innovation programme and EFPIA".

When displayed together with another logo, the logos and the EU emblem must have appropriate prominence.

For the purposes of their obligations under this Article, the beneficiaries may use the logos and the EU emblem without first obtaining approval from the JU, the Commission or the JU Members .

This does not, however, give them the right to exclusive use.

Moreover, they may not appropriate the logos and the EU emblem or any similar trademark or logo, either by registration or by any other means.

38.1.3 Disclaimer excluding JU responsibility

Any communication activity related to the action must indicate that it reflects only the author's view and that the JU is not responsible for any use that may be made of the information it contains.

38.2 Communication activities by the JU

38.2.1 Right to use beneficiaries' materials, documents or information

The JU may use, for its communication and publicising activities, information relating to the action, documents notably summaries for publication and public deliverables as well as any other material, such as pictures or audio-visual material received from any beneficiary (including in electronic form). This does not change the confidentiality obligations in Article 36 and the security obligations in Article 37, all of which still apply.

If the JU's use of these materials, documents or information would risk compromising legitimate interests, the beneficiary concerned may request the JU not to use it (see Article 52). The right to use a beneficiary's materials, documents and information includes:
(a) **use for its own purposes** (in particular, making them available to persons working for the JU or any other EU institution, body, office or agency or body or institutions in EU Member States; and copying or reproducing them in whole or in part, in unlimited numbers);
(b) **distribution to the public** (in particular, publication as hard copies and in electronic or digital format, publication on the internet, as a downloadable or non-downloadable file, broadcasting by any channel, public display or presentation, communicating through press information services, or inclusion in widely accessible databases or indexes);
(c) **editing or redrafting** for communication and publicising activities (including shortening, summarising, inserting other elements (such as meta-data, legends, other graphic, visual, audio or text elements), extracting parts (e.g. audio or video files), dividing into parts, use in a compilation);
(d) translation;
(e) giving **access in response to individual requests** under Regulation No 1049/200125, without the right to reproduce or exploit;

(f) **storage** in paper, electronic or other form;
(g) **archiving**, in line with applicable document-management rules, and
(h) the right to authorise **third parties** to act on its behalf or sub-license the modes of use set out in Points (b), (c), (d) and (f) to third parties if needed for the communication and publicising activities of the JU.

If the right of use is subject to rights of a third party (including personnel of the beneficiary), the beneficiary must ensure that it complies with its obligations under this Agreement (in particular, by obtaining the necessary approval from the third parties concerned). Where applicable (and if provided by the beneficiaries), the JU will insert the following information:
"© – [year] – [name of the copyright owner]. All rights reserved. Licensed to the Innovative Medicines Initiative 2 Joint Undertaking under conditions."

38.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43). Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 46 — LIABILITY FOR DAMAGES

46.1 Liability of the JU

The JU cannot be held liable for any damage caused to the beneficiaries or to third parties as a consequence of implementing the Agreement, including for gross negligence. The JU cannot be held liable for any damage caused by any of the beneficiaries or third parties involved in the action, as a consequence of implementing the Agreement.

46.2 Liability of the beneficiaries

Except in case of force majeure (see Article 51), the beneficiaries must compensate the JU for any damage it sustains as a result of the implementation of the action or because the action was not implemented in full compliance with the Agreement.

ATTACHMENT D

Special Conditions

[eg. Software Services]

Appendix 2 - Trials@Home Decision Committee Members

831458 – Trials@Home

Center of Excellence – Remote Decentralised Clinical Trials

Trials@Home Decision Committee members

	Role/expertise	
1	Project management academic	Annemarijn Douwes / Nathalie Vigot
2	PILOT industry lead	Megan Heath (& Linda Rutgrink)
3	PILOT academic lead + project lead	Mira Zuidgeest (& Arnela Suman)
4	TECH industry lead	Rebecca Jackson
5	TECH academic lead	Sten Hanke
6	Operational expert / CRO	Bas Nieuwenhuis
7	TECH platform	Karl Landert (& Bobby Davey)
8	GDPR/legal expert	Evert-Ben van Veen
9	Ethicist	Ghislaine van Thiel
10	Regulatory specialist	Tim de Smedt
11	Clinician/Investigator	Manuel Castro Cabezas
12	Trial budget specialist	Patrick Tierney
13	Project management industry	Philippe Bordes
14	BEST industry lead + project lead	Kim Hawkins
15	CODE industry lead	James Brook
16	Julius Clinical	Anton Bonefaas
17	Julius Clinical	Eric Houtman
18	Procurement specialist	Gerben Bekema
19	TECH RFP coordinator	Jaap Trappenburg
20	COVANCE	Joann Tundidor
22	Project PI	Rick Grobbee
21	Janssen	Rob Luscombe