DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiatives

Monthly ‘all hands’ meeting

May 25, 2023

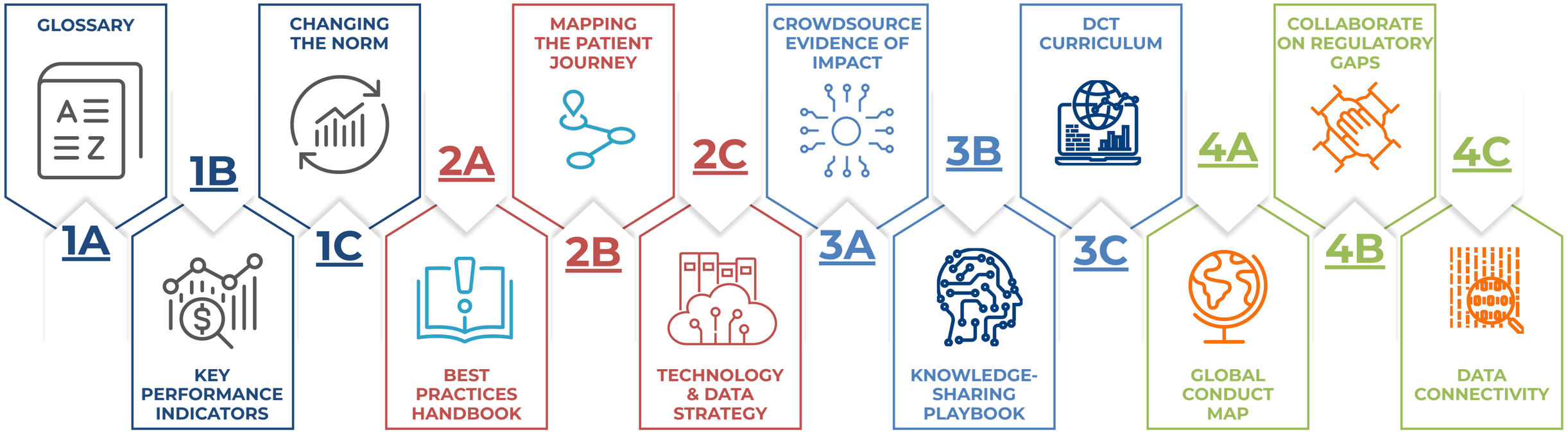
DTRA INITIATIVES AGENDA

- **Welcome & Agenda** – Claudine
- 4A Global Conduct Insight Map – Ami
- Update from team 2C Data & Technology Strategy – Toni
- 4B Collaborate on Regulatory Gaps – Steve/Jonathan
- Regulatory Forum update - Jane
- Circles and CoLabs – Jane

DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA INITIATIVES AGENDA

Initiative Overview



The 12 Priorities delve deeper into each of the Priorities to identify the framework to pursue our shared goals and develop strategic solutions. Click on each Initiative for more information, or access at www.dtra.org.

Initiative Teams

12

Priorities

315

Leaders in Decentralized Research

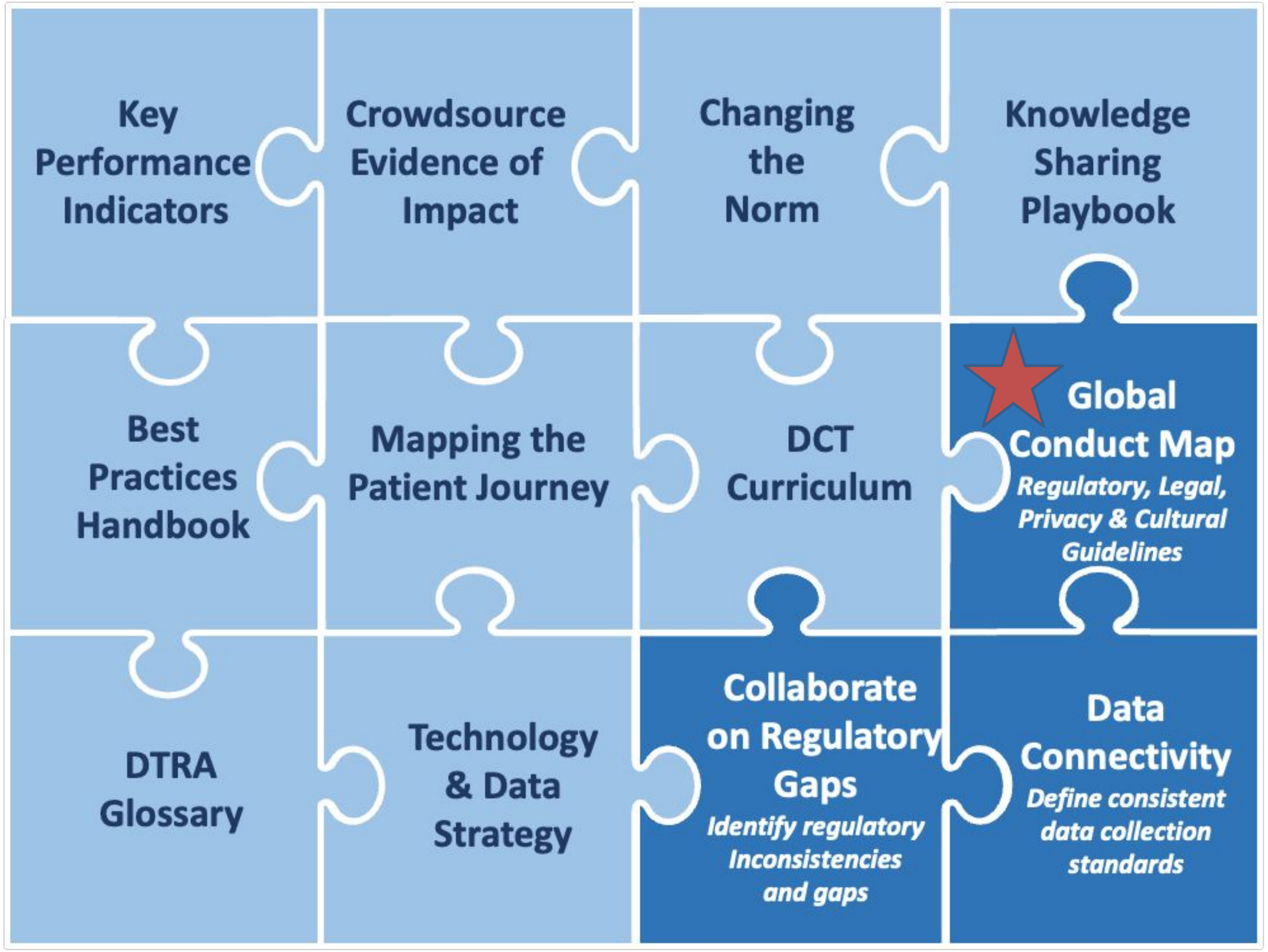
125

Global Organizations

Volunteers from our Member Organizations are assembled on Initiative Teams to work together to achieve a deliverable that contributes to the larger goal of the Priority.

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

REMOVING BARRIERS TO ADOPTION



DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4A Global Conduct Insights

Map

May 2023

PM/Co-Lead: Ami Balakumar

Co-Lead: Jennifer Aquino, IQVIA

PM/Co-Lead: Tom Brazier, Patient Primary

DTRA Initiatives

- **Section 1:** Overview on Initiative
- **Section 2:** Overall approach taken to reach deliverable (ie surveys, key inputs, etc.
- **Section 3:** Summary of Deliverable
- **Section 4:** Call to action and/or DTRA next steps

DTRA Initiative 4A

Overview

Problem:

- Create a single hub of information for anyone looking for Regulatory, Legal, Privacy and Cultural guidelines related to DCT in the respective regions (US, Europe, APAC, Japan, China, Africa.
- Ensure the collected information is up-to-date with an established mechanism for ongoing updates

Deliverable:

The Global Conduct Map aims to provide a centralized library of regulatory, legal, and privacy, and cultural insights for decentralized clinical trials (DCT). The resource contains dynamic links to relevant regulatory reference sites to make it easier for stakeholders to find the information they need to make decisions about executing DCTs globally.

Actions Taken:

- ✔ Comprehensive analysis of information sets across regions, curated a shorter list of published guidelines, reviewed with Experts to confirm the approach
- ✔ Captured links to “Regulatory” information pertaining to DCT in EU, US and APAC
- ✔ Expanded EU references
- ✔ Assembled an updated file for Steering Co 4A Review - Obtain directional guidance on the progress and plan next steps
- ✔ Post Steering committee feedback – final offline file translated into an interactive Web Page that contains information consumable from the DTRA site

DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4A

Recognition of Team Members

Team Member Name	Initiative Role	Company
Ami Balakumar	PM/Co-Lead	Accenture
Jennifer Aquino	Co-Lead	IQVIA
Canan Bilgin	Past Co-Lead	Roche (Genentech)
Tom Brazier	PM/Co-Lead	Patient Primary
John Storey	Contributors	MRN
Amber Bickford	Contributors	Agios
Antonella Cambareri	Contributors	Vertex
Heather Cripps	Contributors	Advanced Clinical
Geraldine Delzanno	Contributors	Sanofi
Judy Konnath	Contributors	Accellacare
Lauren Turso	Contributors	Greenphire
Anton Mihic	Contributors	McKinsey
Gerard Ong	Contributors	J&J
Tiffany Valentine	Contributors	BMS
Karen Keeley	Contributors	Medocity

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4A

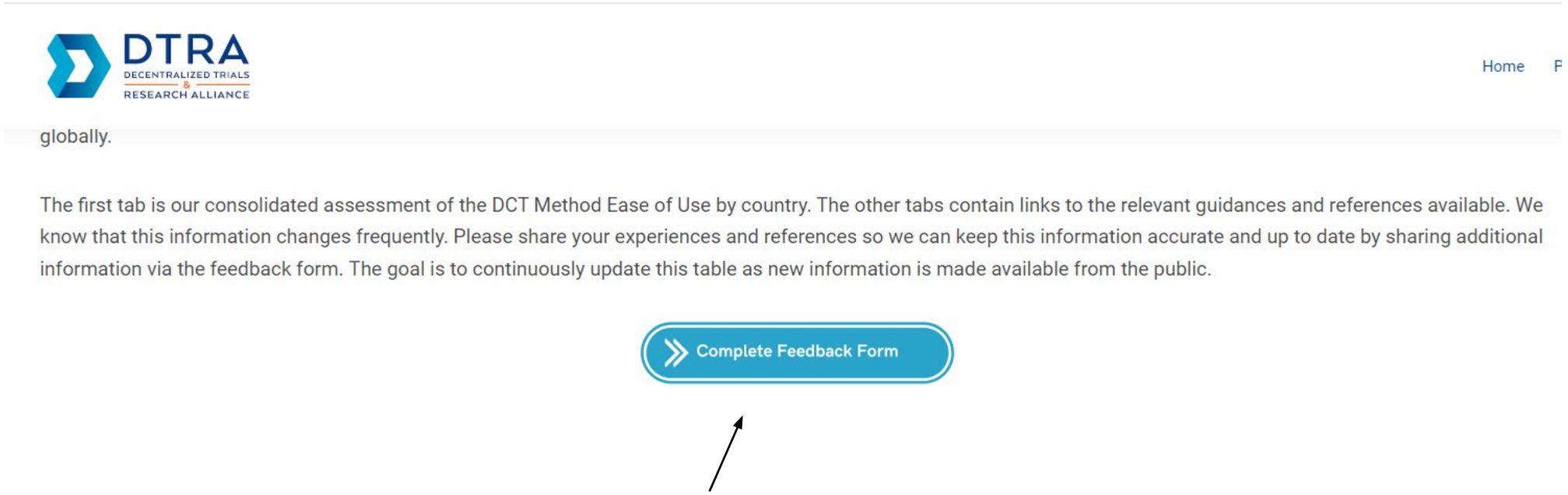
Overall Approach

- As the team assembled for the first time, we brainstormed and laid down a foundational approach that will help us ensure a comprehensive review and analysis of all the existing published guidelines.
- A project plan was put together that focused on initial pilot that focuses on “EU” as a region, “Switzerland, France and UK” as countries and “Regulatory” and “Privacy” as the information assets.
  - Focus Geo EU (Switzerland, France, UK)
  - Regulatory – Geraldine, Antonella, John, Christi
  - Privacy – Heather, Tiffany
- The Co-Leads together with the PM pulled a quick DRAFT that was socialized with the Core Team – to obtain feedback/ clarify the approach and demonstrate the “how-to-do”. Eventually the pilot exercise was expanded for US and other regions.
- We also planned this methodology in agile/ scrum cycles over 2 weeks – so we’re able to breakdown the tasks, identify risks/ gaps early before a complete deliverable is presented. Planned for the Regulatory and Privacy to go as parallel work streams.
- Brought in Team 4B to see a potential for a new guideline to be crafted
- Defined the platform template & temporary hosting space (DTRA community page).
- Interim review with the Steering Co were setup to review progress and seek feedback.
- Cadence: Weekly/ Bi-Weekly catch up for 30 mins as per everyone’s availability.
- An excel workbook was created that highlighted by region: Health Authorities (FDA, CFR, EMA, MHRA, …), Initiatives under DCT (ie Technology, IMP, Telemed, Home nursing, eConsent, ..), Status and links to documents.

DTRA Initiative 4A

Output

Will include instructions on how to use the table.



Feedback form will be used to allow for information to be dynamic and gain additional input from others

DTRA Initiative 4A

Output

The first tab is our consolidated assessment of the *DCT Method use by country*.

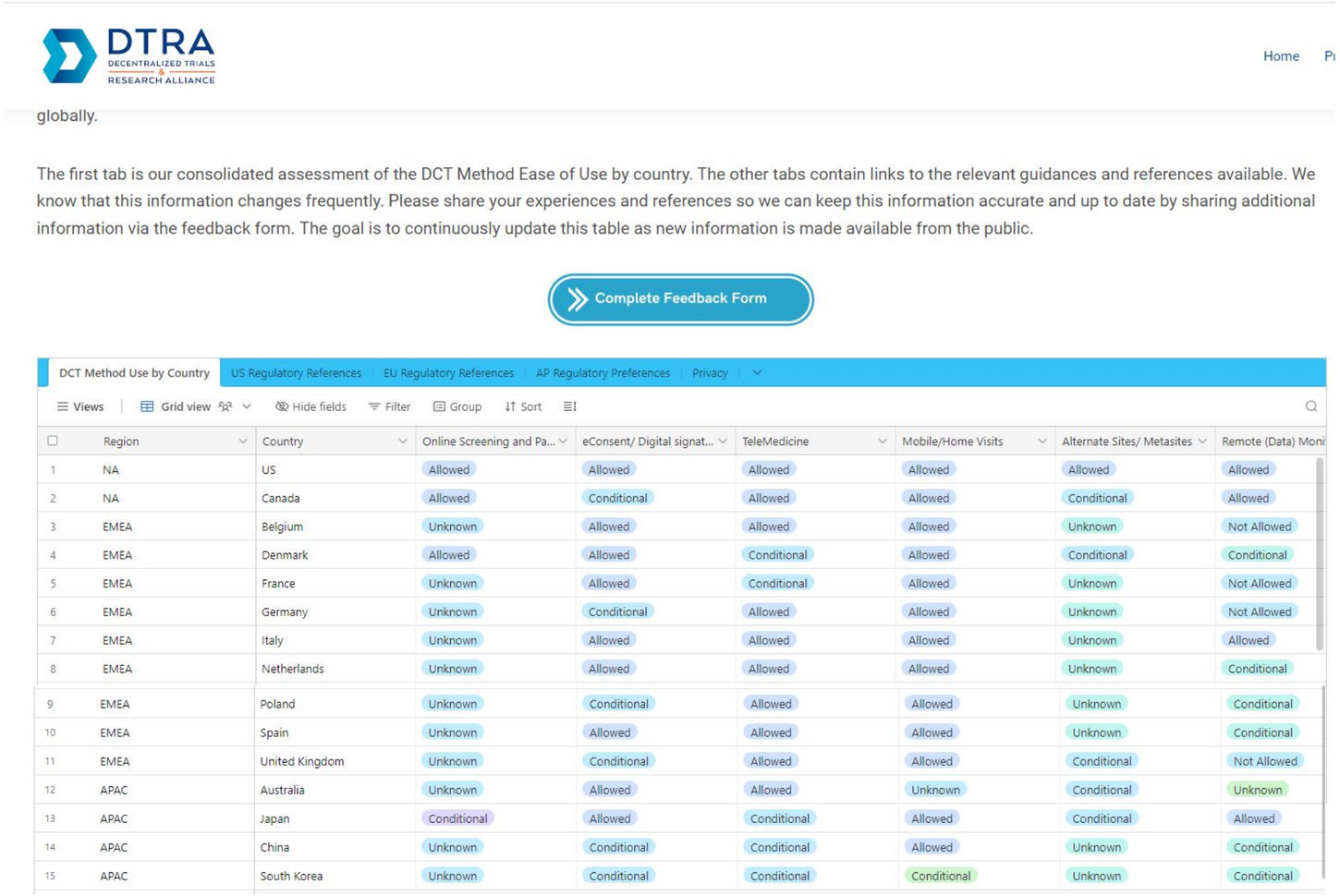
The Regions covered are:

- **North America**
  1. US
  2. Canada

- **EMEA**
  1. Belgium
  2. Denmark
  3. France
  4. Germany
  5. Italy
  6. Netherlands
  7. Poland
  8. Spain
  9. United Kingdom

- **APAC:**
  1. Australia
  2. Japan
  3. China
  4. South Korea

This chart shows which are '*Allowed', 'Conditionally allowed', 'Not allowed'* and *'Unknown'*



DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

Home Pr

globally.

The first tab is our consolidated assessment of the DCT Method Ease of Use by country. The other tabs contain links to the relevant guidances and references available. We know that this information changes frequently. Please share your experiences and references so we can keep this information accurate and up to date by sharing additional information via the feedback form. The goal is to continuously update this table as new information is made available from the public.

Complete Feedback Form

DCT Method Use by Country | US Regulatory References | EU Regulatory References | AP Regulatory Preferences | Privacy

Views | Grid view | Hide fields | Filter | Group | Sort

	Region	Country	Online Screening and Pa...	eConsent/ Digital signat...	TeleMedicine	Mobile/Home Visits	Alternate Sites/ Metasites	Remote (Data) Moni
1	NA	US	Allowed	Allowed	Allowed	Allowed	Allowed	Allowed
2	NA	Canada	Allowed	Conditional	Allowed	Allowed	Conditional	Allowed
3	EMEA	Belgium	Unknown	Allowed	Allowed	Allowed	Unknown	Not Allowed
4	EMEA	Denmark	Allowed	Allowed	Conditional	Allowed	Conditional	Conditional
5	EMEA	France	Unknown	Allowed	Conditional	Allowed	Unknown	Not Allowed
6	EMEA	Germany	Unknown	Conditional	Allowed	Allowed	Unknown	Not Allowed
7	EMEA	Italy	Unknown	Allowed	Allowed	Allowed	Unknown	Allowed
8	EMEA	Netherlands	Unknown	Allowed	Allowed	Allowed	Unknown	Conditional
9	EMEA	Poland	Unknown	Conditional	Allowed	Allowed	Unknown	Conditional
10	EMEA	Spain	Unknown	Allowed	Allowed	Allowed	Unknown	Conditional
11	EMEA	United Kingdom	Unknown	Conditional	Allowed	Allowed	Conditional	Not Allowed
12	APAC	Australia	Unknown	Allowed	Allowed	Unknown	Conditional	Unknown
13	APAC	Japan	Conditional	Allowed	Conditional	Allowed	Conditional	Allowed
14	APAC	China	Unknown	Conditional	Conditional	Allowed	Unknown	Conditional
15	APAC	South Korea	Unknown	Conditional	Conditional	Conditional	Unknown	Conditional

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4A

Output

Each Region's Regulatory References tab includes the Type of regulation, Category, Health Authority, Document name, Document type, Status, Effective date, Last update , source link and any applicable *comments*

DCT Method Use by Country | US Regulatory References | EU Regulatory References | AP Regulatory Preferences | Privacy

Views | Grid view | Hide fields | Filter | Group | Sort

	Type of Regulation	Category	Health Authority	Document Name	Document Type	Status (Active, Amended...	Effective Date (M/D/YY)	Last Updated Date	Source Link	Comment
1	DCT	Clinical Trial Operations	FDA	FDA Guidance on Conduct ...	Guidance/ Recomm	Active	4/1/2020		https://www.hhs.gov/ohrp/...	
2	DCT	Clinical Trial Operations	FDA	Conduct of Clinical Trials of...	Guidance/ Recomm	Active	3/1/2020	2021-08-30 02:00	https://www.fda.gov/media...	This guidance is intended t...
3	DCT	Clinical Trial Operations	Clinical Trials Transforma...	Legal, Regulatory, and Prac...	Guidance/ Recomm	Active	12/9/2019		https://link.springer.com/ar...	
4	DCT methods	Technology	Code of Federal Regulati...	21 CFR Part 11 – Electronic ...	Regulation	Active	3/20/1997	2023-03-30 02:00	https://www.ecfr.gov/curre...	
5	DCT methods	Technology	FDA	Use of Electronic Records a...	Guidance/ Recomm	Draft		2023-03-01 02:00	https://www.fda.gov/regula...	Submit Comments by 05/1...
6	DCT methods	Technology	Center for Connected H...	State Telehealth Laws and ...	Guidance/ Recomm	Active	10/1/2021		https://www.cchpca.org/20...	
7	DCT methods	Technology	Clinical Trials Transforma...	Advancing the Use of Mobi...	Guidance/ Recomm	Active	11/1/2019		https://www.ncbi.nlm.nih.g...	
8	DCT methods	Technology	JMIR Mhealth and Uheal...	Investigator Experiences Us...	Guidance/ Recomm	Active	2021		https://mhealth.jmir.org/20...	
9	DCT methods	Technology	FDA	Digital Health Technologies...	Guidance/ Recomm	Draft	N/A	2021-12-01 02:00	Digital Health Technologies...	Submit comments anytime
10	Clinical Trial	Clinical Trial Operations	FDA	Oversight of Clinical Investi...	Guidance/ Recomm	Active	8/1/2013		https://www.fda.gov/regula...	
11	Clinical Trial	Clinical Trial Operations	FDA	U.S. Food and Drug Admini...	Guidance/ Recomm	Active	3/1/2018		https://www.fda.gov/regula...	
12	Clinical Trial	Clinical Trial Operations	FDA	U.S. Food and Drug Admini...	Guidance/ Recomm	Active	9/1/2013		https://www.fda.gov/media...	
13	Clinical Trial	Clinical Trial Operations	Code of Federal Regulati...	21 CFR Part 312 – Investiga...	Regulation	Active	3/19/1987		https://www.ecfr.gov/curre...	
14	Clinical Trial	Clinical Trial Operations	Code of Federal Regulati...	21 CFR Part 812 – Investiga...	Regulation	Active	1980		https://www.ecfr.gov/curre...	
15	Clinical Trial	Clinical Trial Operations	FDA	Requests for Feedback and...	Guidance/ Recomm	Active	5/7/2019	2021-01-06 02:00	https://www.fda.gov/media...	
16	Clinical Trial	Clinical Trial Operations	CFR	21 CFR Part 50 – Protection...	Regulation	Active	Effective May 30, 1980		https://www.ecfr.gov/curre...	
17	Clinical Trial	Clinical Trial Operations	CFR	21 CFR Part 56 – Institution...	Regulation	Active	Effective Jan. 27, 1981		https://www.ecfr.gov/curre...	

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4A

Output

DCT Method Use by Country | US Regulatory References | **EU Regulatory References** | AP Regulatory Preferences | Privacy | AP Regulatory Preferences | Privacy

Views | Grid view | Hide fields | Filter | Group | Sort | Sort

	Region	Type of Regulation	Category	Health Authority	Document Name	Document Type	Status (Active, Amended...	Effective Date (M/D/YY)	Last Updated Date	Source Link	Comment
1	EU	DCT methods	Technology	EMA	Guideline on computerised...	Guidance/ Recomm	Active	9/7/2023	3/7/2023	Guideline on computerised...	This guideline replaces the ...
2	UK	DCT methods	Technology	MHRA	Is your eSystem actually an...	Guidance/ Recomm	Active	5/11/2021		Is your eSystem actually an...	Blog post
3	EU	Clinical Trials	Clinical Trial Operations	EMA	Guideline on the responsibi...	Guidance/ Recomm	Active	8/31/2018		https://www.ema.europa.e...	Shipping of IMP directly to ...
4	EU	Clinical Trials	Clinical Trial Operations ...	EMA	Clinical Trials Regulation	Regulation	Active	2014	5/12/2022	Clinical Trials Regulation | E...	Page links to updated regul...
5	EU	Clinical Trials	Clinical Trial Operations ...	EMA	Questions and answers – Cl...	Guidance/ Recomm	Active	2/8/2023		https://www.ema.europa.e...	
6	EU	DCT	Clinical Trial Operations	EMA	RECOMMENDATION PAPE...	Guidance/ Recomm	Active	12/1/2022		https://health.ec.europa.eu...	
7	France	Clinical Trials	Clinical Trial Operations	France	Decret d'application Décret...	Regulation	Active	10/19/2010	10/19/2010	Décret n° 2010-1229 du 19...	No specific rules for DCTs
8	EU	Clinical Trials	Clinical Trial Operations	EMA	Q&A: Good clinical practic...	Guidance/ Recomm	Active	3/1/2022	3/1/2022	https://www.ema.europa.e...	
9	EU	DCT Methods	Clinical Trial Operations	EC/PWC	Market study on telemedici...	Guidance/ Recomm	Active	10/2018		https://ec.europa.eu/health...	
10	EU	Clinical Trials	Clinical Trial Operations		(EU) Regulation 536/2014 o...	Regulation	Active	Jan 2022		Clinical trials - Regulation E...	
11	EU	DCT Methods	Technology	EU	REGULATION (EU) No 910/...	Regulation	Active	31-Jan-22		https://eur-lex.europa.eu/le...	eSignature
12	Switzerland	DCT	Clinical Trial Operations	Swissmedic Swissethics	Position paper by Swissme...	Guidance/ Recomm	Active	1-Nov-21		https://swissethics.ch/en/n...	DCT in Switzerland
13	Switzerland	DCT Methods	Clinical Trial Operations	Swissmedic Swissethics	This document attempts to...	Guidance/ Recomm	Active	25-Oct-21		https://www.swissethics.ch/...	Informed Consent
14	Denmark	DCT	Clinical Trial Operations	Denmark	The Danish Medicines Age...	Guidance/ Recomm	Active	Sept 2021		https://laegemiddelstyrelse...	
15	EU	DCT	Clinical Trial Operations	British Pharmacological So...	When innovation outpaces ...	Guidance/ Recomm	Active	8/13/2021		https://bpspubs.onlinelibra...	

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4A

Output

DCT Method Use by Country | US Regulatory References | EU Regulatory References | AP Regulatory Preferences | Privacy

Views | Grid view | Hide fields | Filter | Group | Sort

	Region	Health Authorities	Initiatives under DCT	Name	Status	Link to the Document P...	Comment
1	China	NMPA		China GCP	effective	https://www.nmpa.gov.cn/...	
2	China	CDE		China Drug Registration Law	effective	https://www.cde.org.cn/ma...	Includes requirements for t...
3	China	MoST		HGR Regulation	effective	http://www.most.gov.cn/xx...	HGR = Human Genomic Re...
4	China	MoST		HGR Regulation implement...	effective	http://www.most.gov.cn/tzt...	
5	China	CDE		China Drug Administration ...	effective	https://www.cde.org.cn/ma...	Requires clinical trials of dr...
6	China	NMPA		Guidance for clinical trials ...	effective	https://www.nmpa.gov.cn/...	
7	China	NHC		Home Nursing	effective	http://www.nhc.gov.cn/yzy...	
8	China	CDE		Management of Clinical Tri...	effective	https://www.cde.org.cn/ma...	
9	China	CDE		Guidance for patient-repor...	draft	https://www.cde.org.cn/zdy...	
10	China	GOV		Privacy		http://www.gov.cn/xinwen/...	
11	China	NHC		Home Healthcare		http://www.gov.cn/zhengc...	
12	Australia	TGA		Clinical Trial Handbook	effective	https://www.tga.gov.au/res...	
13	Australia	DoH		Privacy Checklist for Telehe...	effective	http://www.mbsonline.gov....	
14	Australia	ADHA		Online Conferencing Techn...	effective	https://www.digitalhealth.g...	
	Australia	OAIC		Health Privacy	effective	https://www.oaic.gov.au/pr...	
16	Australia	DoH		Prescriptions via telehealth	effective	https://www.health.gov.au/...	
17	Australia			e-Signatures	effective	https://helpx.adobe.com/a...	
18	Australia	DoH		National Standard Operatin...	effective	https://www.health.gov.au/...	
19	Australia	NHMRC		Australian Government Clin...	effective	https://www.australianclinic...	
20	Australia	DoH		National Teletrials Compen...	effective	https://www.health.gov.au/...	(Based on the ICH-GCP E6 ...
21	Australia	nhmrc		Decision-making for Pande...	effective	https://www.nhmrc.gov.au/...	

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4A

Output

DCT Method Use by Country | US Regulatory References | EU Regulatory References | AP Regulatory Preferences | Privacy

Views | Grid view | Hide fields | Filter | Group | Sort

	Region	Health Authorities	Initiatives under DCT	Name	Status	Link to the Document P...	Comment
22	Japan			Pharmaceutical Industry As...		https://www.jpma.or.jp/inf...	
23	Japan	PMDA		Japan GCP	effective	https://www.pmda.go.jp/fil...	
24	Japan	MHLW		Clinical Trial Act	effective	https://www.mhlw.go.jp/fil...	
25	Japan			Japan Health Policy	effective	https://japanhpn.org/en/se...	
26	Japan	PMDA		Ministerial ordinance on st...	effective	https://www.pmda.go.jp/in...	
27	Japan	PMDA		Pharmaceutical GCP	effective	https://www.pmda.go.jp/re...	
28	Japan	MHLW		standards for personnel an...	effective	https://www.mhlw.go.jp/we...	
29	Japan	MHLW		criteria, etc. of home-visit n...	effective	https://www.mhlw.go.jp/we...	
30	Japan	PMDA		COVID-19 guidance	effective	https://www.pmda.go.jp/fil...	
31	Japan	PMDA		DTP-MP related	effective	https://www.pmda.go.jp/fil...	see Para 6.
32	Japan	PMDA		DTP-MP related	effective	https://www.pmda.go.jp/fil...	see Qn 1.
33	Japan	PMDA		Home Healthcare	effective	https://www.pmda.go.jp/fil...	see Qn 8.
34	Japan	PMDA		Community Clinics for Visits	effective	https://www.pmda.go.jp/fil...	see Qn 6.
35	Japan	PMDA		Telemedicine	effective	https://www.mhlw.go.jp/stf...	
36	Japan	PMDA		Online visits	effective	https://www.pmda.go.jp/fil...	see Qn 9.
37	Japan	PMDA		eConsent	effective	https://www.pmda.go.jp/fil...	
38	Japan	PMDA		eConsent	effective	https://www.pmda.go.jp/fil...	
39	Japan	MHLW		wearables	effective	https://www.mhlw.go.jp/ho...	
40	Japan			Regulation of e-signature	effective	https://elaws.e-gov.go.jp/d...	
41	Japan	MHLW		eConsent Guidance	effective	www.mhlw.go.jp/hourei/do...	
42	Australia	Australia		Virtual Clinical Trials in Asia...	effective	https://novotech-cro.com/f...	
43	Australia	Australia		COVID-19: Guidance on cli...	effective	https://www.nhmrc.gov.au/...	
44	Australia	Australia		SaMD	effective	https://www.tga.gov.au/ho...	
45	Australia	Australia		National Standard Operatin...		https://www.health.gov.au/...	

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4A

Output

DCT Method Use by Country | US Regulatory References | EU Regulatory References | AP Regulatory Preferences | **Privacy**

Views | Grid view | Hide fields | Filter | Group | Sort

	Region	Health Authorities	Initiatives under DCT	Name	Status	Link to the Document P...
1	China	China	Tech and Operations	Data Security Law of the P....	Went into effect Sept 1 2021	中华人民共和国数据安全法...
2	China	China	Tech and Operations	Personal Information Prote...	Nov 1 2021	
3	All	GDPR	Tech and Operations	Schrems II	Court case driving addition...	

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4A

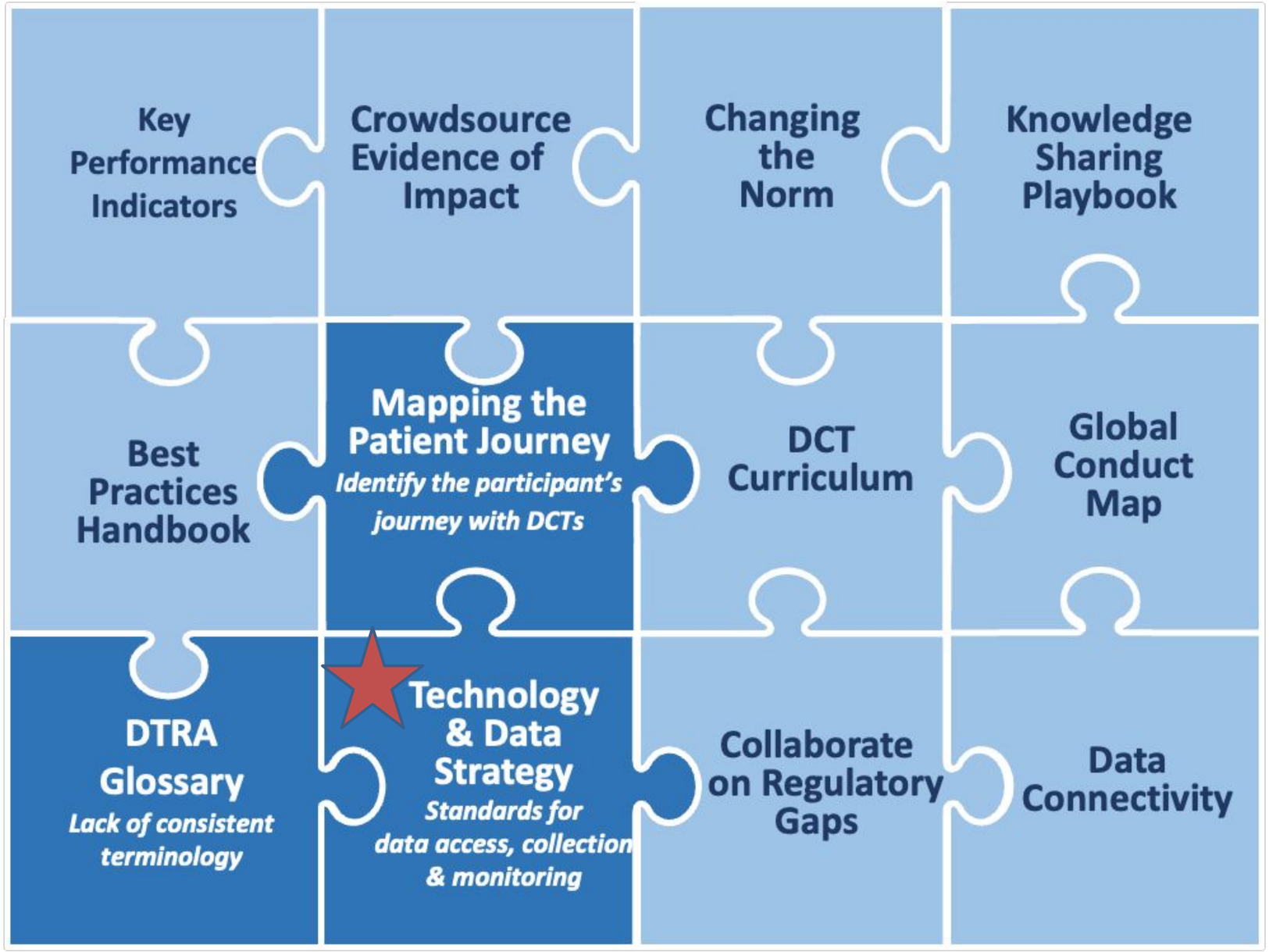
Next Steps

Key Recommendations:

- Establish a mechanism to review and update information on the page as we see it change.
  - Quarterly/ Bi-Annual review of the content.
  - Assign content ownership who will drive this process.

DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE

SETTING FOUNDATIONAL DCT STANDARDS



DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE

2C Priority Initiative Status Updates

May 2023

Co-lead: Toni Hofhine, CardieX

Co-Lead: Kim Williams, Datacubed

DTRA Initiative 2C Technology & Data Strategy

Deliverable:

'DCT Clinical Data Strategy' framework that outlines modern data requirements, data flow, data channels, data curation and insight generation to improve end-to-end data accessibility, reliability, integrity, and traceability across study phases

Key Initiatives/Focus Areas – 4 of 4 Completed with 2

Focus Area	DTRA Definition Provided	Notes
DCT Technology	Outline of established (and novel) technologies used to support decentralized trial execution	2C initiative
User Ecosystem	Outline of relevant users/personas that can comprise the execution of decentralized trials	2C initiative
Privacy, Ethical & Legal Considerations	Outline of key considerations (globally) related to data capture and data use in decentralized trials	2C initiative + input/feedback from interested 4C
Data Capture & Accessibility	Outline of diffe and associated accessibility for effective execution of clinical trial activities in a remote setting	2C initiative + input/feedback from interested 4C

No different for DCT from Conventional Trial Designs

2C Team Members:

- ✔ PM: Open
- ✔ Co-lead: Toni Hofhine, CardieX
- ✔ Co-Lead: Kim Williams, Datacubed
- ✔ John Storey, MRN
- ✔ Charisa Scott, Amgen
- ✔ Camila Matheny, Medable
- ✔ Helen Greta, IQVIA

4C Team Members:

- ✔ Venkat Setti, AstraZeneca
- ✔ Sneha Sundet, Agios Pharmaceuticals
- ✔ John Graves, Equideum Health
- ✔ John Stuart,
- ✔ Eldawud Reem, Kearney
- ✔ Inez Jones, Oracle
- ✔ Kishori Khokarale, ZS
- ✔ 1A Glossary

Team Dependencies:

- ✔ 2B Patient Journey Maps
- ✔ 4B Regulatory Gaps
- ✔ 4C Data Connectivity

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DCT Technology & User Ecosystem Grid- 2C Team

Overall Status:

Deliverable Timeline:

Completed on 31 January 2023 & Completed an updated grid in May, mapping it to the Patient Journey template

	DCT Technology & User/Personal Ecosystem Grid by Trial Milestone							
	Trial Planning		Trial Startup		Patient Recruitment & Consent		Trial Conduct	Trial Close Out & Reporting
	Digital Planning	Digital Implementation	Trial Startup	Pre-trial / Prescreening	Patient Recruitment	Consent/Screening/Enrollment	Study Conduct	Study Close Out
Definition	Digital planning is focused on the foundation of obtaining the desired patient outcomes, driven by geographies, interoperability, automation, and data access.	Digital implementation is the launch of the validated and integrated digital technologies for the trial.	Start-up occurs after protocol development and includes various tasks that enable trial execution. This phase includes digital system configuration for trial design and "go-live" for a study, development of key study materials (eg consent), and several activities to enable site readiness for patient enrollment such as regulatory submissions, investigator file compilation, and receipt of devices/kits/supplies.	Pre-trial or prescreening is the general identification of a patient population for any clinical trial.	Recruitment is the identification of patients for a specific IRB-approved clinical trial protocol using the inclusion/exclusion criteria.	Participant consent to study enrollment.	Conduct occurs from first patient in through last patient out.	Close out occurs at the time the database is locked followed by data analysis and potentially submissions Close out also involves decommissioing activities including provision of data to sites and sponsor for retention and return and/or disposal of digital components used in the trial.
Integrated Trial Roles	DCT Strategist in crossfunctional partnership with clinical teams, internal IT/Vendor(s)/CROs, site representatives (if site is developing or advocating tech), regulatory designee, and patient advocates	Site, IRB & EC, Sponsor/CRO, Country Regulatory Designee	Site, Patient, Sponsor/CRO, IRB & EC, Country Regulatory Designee	Site, Patient, Country Regulatory Designee	Site, IRB & EC, Patient, Sponsor/CRO	Site, Patient	Site, Sponsor/CRO, Site Monitoring, Patient	Site, Sponsor/CRO, Country Regulatory Designee
User/Persona Ecosystem	QA, Database Architect (IT), Data Management, Business Analyst, Statistician, Program Manager, Regulatory, Clinical Operations, Digital Health & Medicine Team, Supply Planning, Vendor Representative, Trial Payment Representative	Study or site startup team (CRA, PM, Feasibility Mgr, Patient Recruitment, Regulatory), IRB/EC, Study Management Team (CRO, Sponsor, SMO)	Site staff (CRC, PI, Sub-I, Pharmacist, Phlebotomist), Study Management Team	Site Staff, Patient Recruitment, RWD/RWE, Study Management Team	Site Staff, Patient Recruitment, IRB/EC, Study Management Team	Site Staff, Technology Teams, Study Management Team, Patient Recruitment	Site Staff, Patient Recruitment, RWD/RWE, Study Management Team, Technology Teams	Site Staff, Regulatory, Study Management Team, Technology Teams, IRB/EC
DCT + Current Clinical Trial Technology (Bold indicates focused technology)	Site: **eConsent, Prescreening, eSource, EHR, eISF, eCOA, IRT, Clinical Trial Payments, Telemedicine, CTMS, LMS** Sponsor: **CTMS, eTMF, EDC, Data Analytics** Patient: **ePRO, sensors/mobile devices** External: **Shipper, Pharmacy, Home Health Agency, Payment Portal (patients, physicians and sites)**	Site: **eConsent,** Prescreening, **eSource, eISF, eCOA, IRT,** Clinical Trial Payments, **Telemedicine, CTMS, LMS** Sponsor: **CTMS, eTMF, EDC, Data Analytics** Patient: **ePRO, sensors/mobile devices** External: **Shipper, Pharmacy, Home Health Agency, Trial Payments**	Site: **eConsent, Prescreening, eSource,** eISF, eCOA, IRT, Clinical Trial Payments, Telemedicine, CTMS, LMS Sponsor: **CTMS, eTMF, EDC, Data Analytics** Patient: **ePRO, sensors/mobile devices** External: Shipper, Pharmacy, Home Health Agency, Trial Payments	Pre-screener for trial Direct to patient (diagnostics) Investigator data bank (RWD patient populations and RWD secondary arms)	Recruitment database	Site: eConsent, Prescreening, **eSource, eISF, eCOA, IRT, Clinical Trial Payments, Telemedicine, CTMS, LMS** Sponsor: **CTMS, eTMF, EDC, Data Analytics** Patient: **ePRO, sensors/mobile devices** External: **Shipper, Pharmacy, Home Health Agency, Trial Payments**	Site: **eConsent, Prescreening, eSource, eISF, eCOA, IRT, Clinical Trial Payments, Telemedicine, CTMS, LMS** Sponsor: **CTMS, eTMF, EDC, Data Analytics** Patient: **ePRO, sensors/mobile devices** External: Shipper, **Pharmacy, Home Health Agency, Trial Payments**	Site: **eConsent**, Prescreening, **eSource, eISF, eCOA, IRT, Clinical Trial Payments, Telemedicine, CTMS, LMS** Sponsor: **CTMS, eTMF, EDC, Data Analytics** Patient: **ePRO, sensors/mobile devices** External: **Shipper, Pharmacy, Home Health Agency, Trial Payments**

Challenge:

Deliver a comprehensive list of technology used in a decentralized trial. Identify the users/personas that intersect in a decentralized trial.

Draft Solution:

Identify key technology used by trial milestone, provide a definition, integrated trial roles with identified ecosystem users/personas.

Final Solution:

We challenged the final toolset of our deliverable. We agreed that using the milestone draft solution is a great template to build upon the Patient Journey template and create a new a 'layer' of DCT technology and User/Persona Ecosystem.

Work ahead:

Draft of content in Patient Journey template waiting for a more 'professional' look.

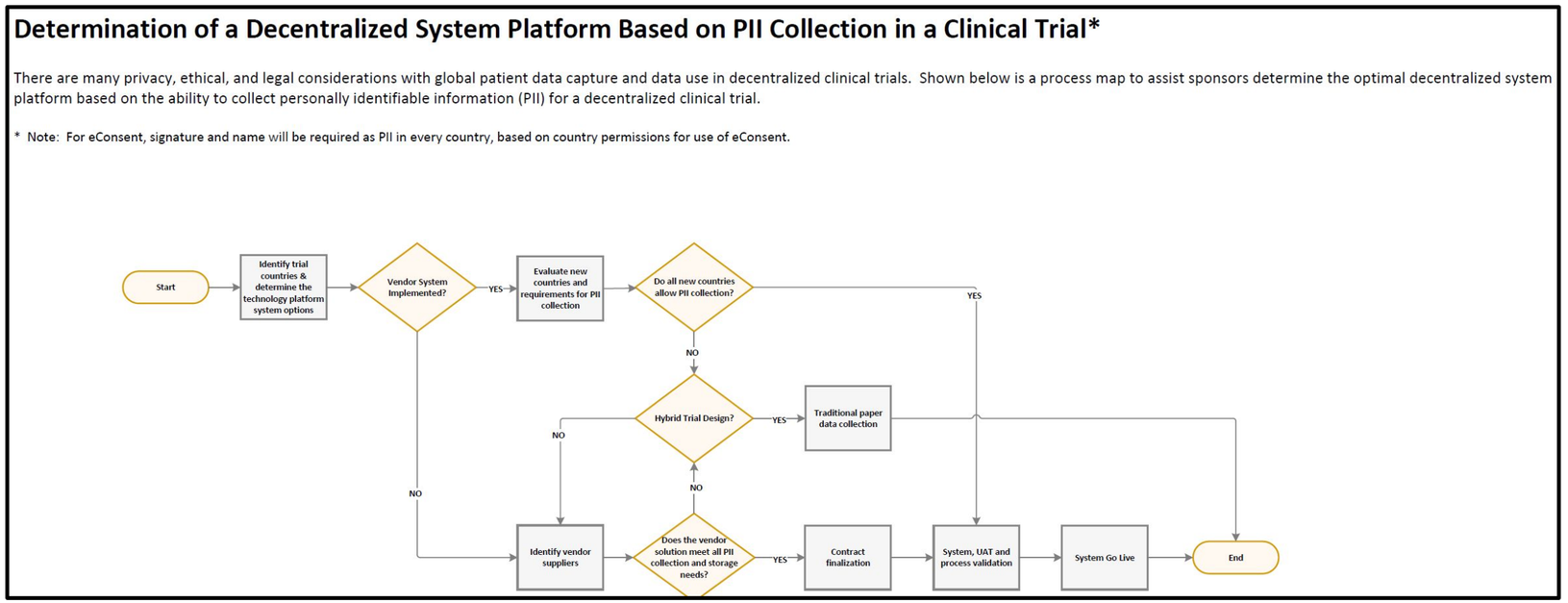
DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

Privacy, Ethical, Legal Considerations - 2C + 4C Teams

Overall Status:

Deliverable Timeline:

Completed on 31 January 2023 & Completed a streamlined version in May



Challenge:

Deliver a solution that encompassed the global considerations for privacy, ethical, and legal data collection.

Solution:

Adopt the System Agnostic Technical Solutions concept donated to the DTRA by AstraZeneca on how PII data collection could be fully avoided in any region, and back track this process to develop a process map on how to identify across sponsor, vendor, and site where and what system platform is needed to be compliant.

We also challenged the final toolset of our process map deliverable. We agreed that this could use additional vetting to draw out more of the decision making.

Work ahead:

Determining where this resides among the other initiatives as a tool to facilitate decisions on global trials where PII is collected.

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 2C Technology & Data Strategy

Deliverable:

'DCT Clinical Data Strategy' framework that outlines modern data requirements, data flow, data channels, data curation and insight generation to improve end-to-end data accessibility, reliability, integrity, and traceability across study phases

Key Initiatives/Focus Areas – 4 of 4 Completed with 2

Focus Area	DTRA Definition Provided	Notes
DCT Technology	Outline of established (and novel) technologies used to support decentralized trial execution	2C initiative
User Ecosystem	Outline of relevant users/personas that can comprise the execution of decentralized trials	2C initiative
Privacy, Ethical & Legal Considerations	Outline of key considerations (globally) related to data capture and data use in decentralized trials	2C initiative + input/feedback from interested 4C
Data Capture & Accessibility	Outline of diffe and associated accessibility for effective execution of clinical trial activities in a remote setting	2C initiative + input/feedback from interested 4C

No different for DCT from Conventional Trial Designs

2C Team Members:

- ✔ PM: Open
- ✔ Co-lead: Toni Hofhine, CardieX
- ✔ Co-Lead: Kim Williams, Datacubed
- ✔ John Storey, MRN
- ✔ Charisa Scott, Amgen
- ✔ Camila Matheny, Medable
- ✔ Helen Greta, IQVIA

4C Team Members:

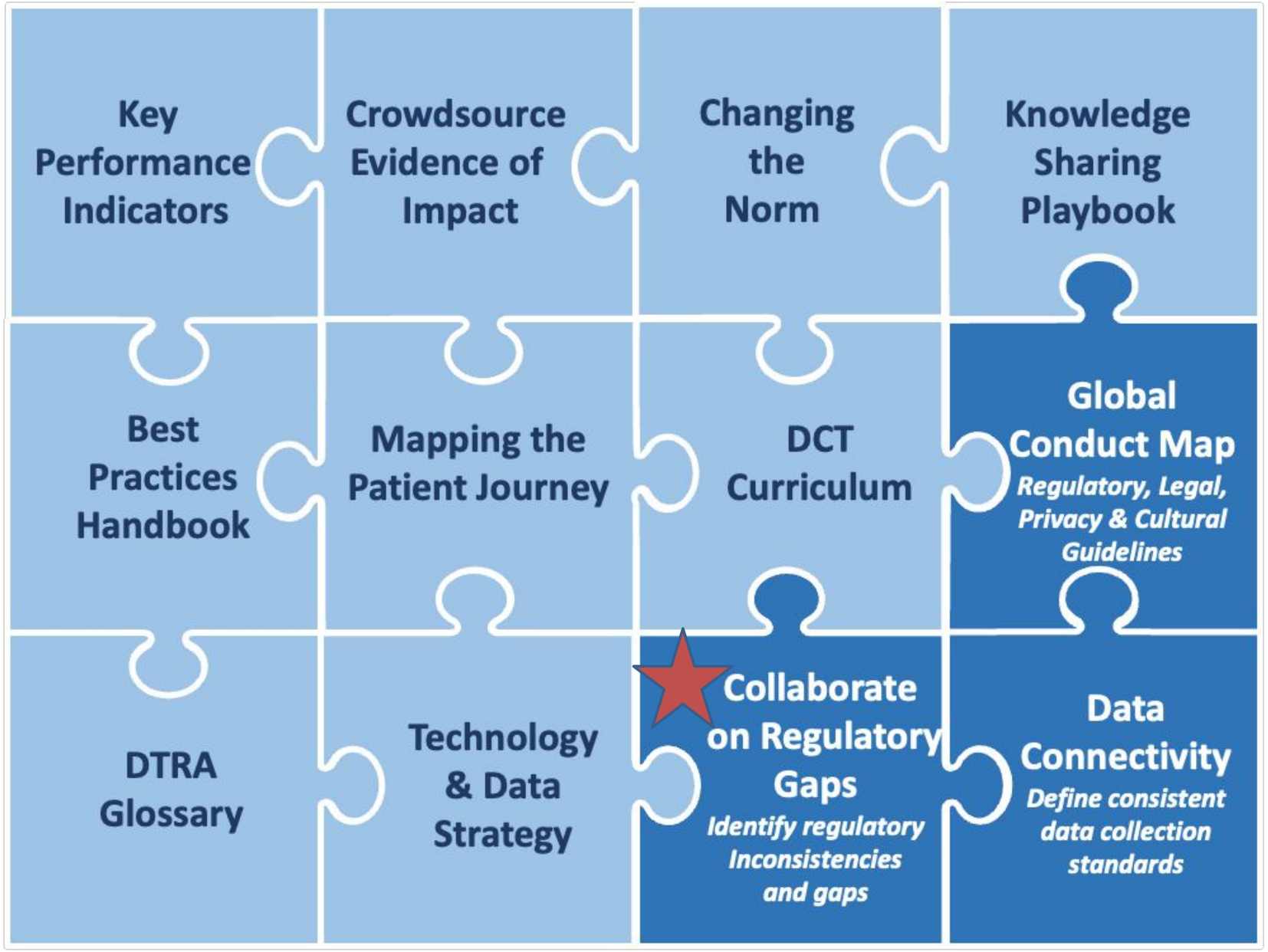
- ✔ Venkat Setti, AstraZeneca
- ✔ Sneha Sundet, Agios Pharmaceuticals
- ✔ John Graves, Equideum Health
- ✔ John Stuart,
- ✔ Eldawud Reem, Kearney
- ✔ Inez Jones, Oracle
- ✔ Kishori Khokarale, ZS
- ✔ 1A Glossary

Team Dependencies:

- ✔ 2B Patient Journey Maps
- ✔ 4B Regulatory Gaps
- ✔ 4C Data Connectivity

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

REMOVING BARRIERS TO ADOPTION



DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4B

Closeout Process

May 2023

Co-Lead: Jonathan Andrus, CRIO

Co-Lead: Steve Walker, CSL Behring

PM: Dylan Recht, Janssen

DTRA Initiatives

- **Section 1:** Overview on Initiative
- **Section 2:** Overall approach taken to reach deliverable (i.e., surveys, key inputs, etc.)
- **Section 3:** Summary of Deliverable
- **Section 4:** Call to action and/or DTRA next steps

DTRA Initiative 4B Collaborate on Regulatory Gaps

Overview

Problem:

- Regulations have inconsistencies and gaps that deter or cause industry concern around the adoption of DCTs

Deliverable:

Gap analysis of where current regulations are not addressing DCT

with outreach/engagement with Regulatory Authorities as appropriate

1. Survey conducted
2. Framework Gap created
3. Informed future directive

Actions Taken:

- Survey of sponsor companies on interactions with Health Authorities related to DCT implementation
- Review of gaps in specific areas related to DCTs
- Contribution of regulatory guidance and other materials to workstream 3B “tube stop” playbook
- Merged in to DTRA regulatory Council

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA Initiative 4B Collaborate on Regulatory Gaps

Recognition of team members

Team Member Name	Initiative Role	Company
Jonathan Andrus	Co Leader	CRIO
Steve Walker	Co Leader	CSL Behring
Dylan Bechtle	PM	Janssen
Deborah Ann Cenci	Past Project Manager	Capgemini
Cheryle Evans	Core Team Member	Advanced Clinical
Pete Embley	Core Team Member	Bionical Emas
Susan Berger	Core Team Member	Bristol Myers Squibb
Natalie McGregor	Core Team Member	Clinigen
Candice Durrence	Core Team Member	Halloran Consulting Group
Elizabeth Woods	Core Team Member	Parexel
Lada Leyens	Core Team Member	Roche (Genentech)
Mindy Allport-Settle	Core Team Member	Thread
Kim Spletstoser	Core Team Member	UBC
Chantal Le-Floch	Past Co Leader	Sanofi

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

DTRA – 4B
DTRA Health Authority Interaction Questionnaire

What have been sponsor experiences with navigating regulatory agencies in and around DCT?

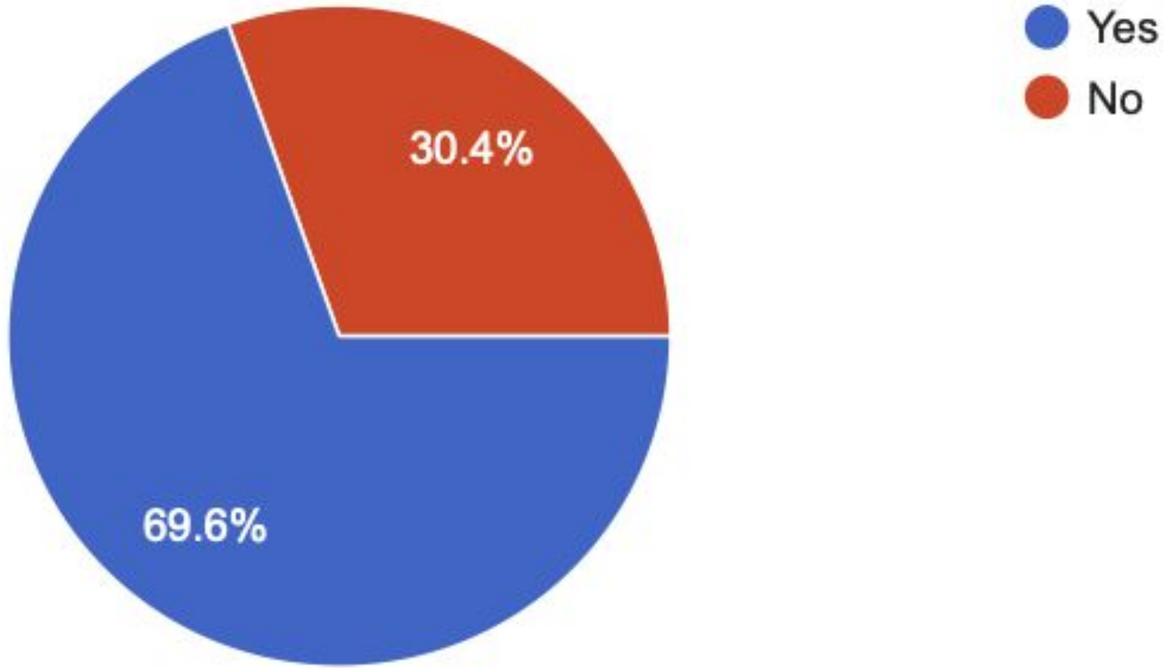
- **DTRA Survey**
  - February – March 2022
  - 25 respondents (globally)
  - 11 Questions

1. Survey Results

- **Approximately 20 respondents from a diverse range of member companies**
- **Health Authority Feedback was received from the following authorities** vis-à-vis the sponsor respondents (either via leveraging existing guidance or meetings):
  - FDA
  - PMDA (Japan)
  - BfARM (Germany)
  - MHRA (UK)
  - AEMPS (Spain)
  - DKMA (Denmark)
  - MPA (Sweden)
  - SwissMedic
  - Health Sciences Authority, Clinical Trials Branch (Singapore)
  - TFDA/CDE (Taiwan)
  - FAMHP (Belgium)
  - AIFA (Italy)
  - ANSM (France)
  - MEB (Netherlands)

Health Authority Questionnaire Highlights

Have you run a study with elements of a decentralized or hybrid trial?



Decentralization in a clinical trial setting means study designs that bring research to patients, with certain clinical activities localized for the study participant rather than having all activities occurring within a single study site. Hybrid clinical trials describe a suitably flexible scenario that partially eliminates the requirements for participants to visit a physical trial site to perform a protocol-required event that may have traditionally taken place on-site

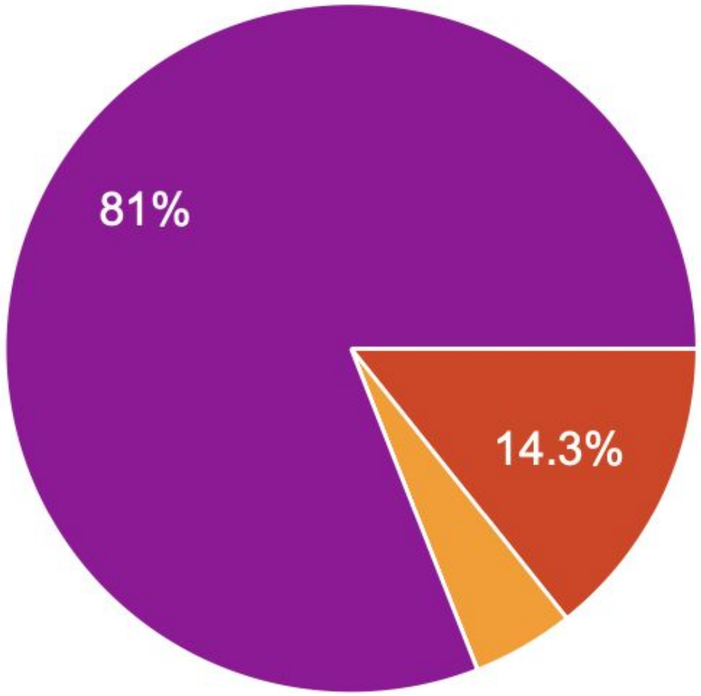
Health Authority Questionnaire Highlights

If yes to the prior, what elements of a DCT did you incorporate into your trial design?

- eConsent
- At Home Drug Shipment
- eCOA (patient reported) and patient engagement
- Televisits
- Mobile Research Nurse Visits

Health Authority Questionnaire Highlights

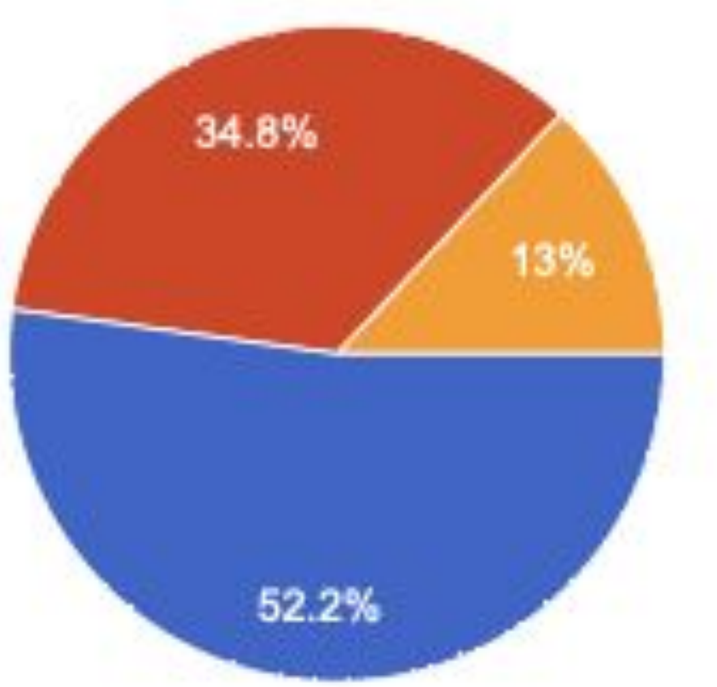
The profile of the questionnaire respondents

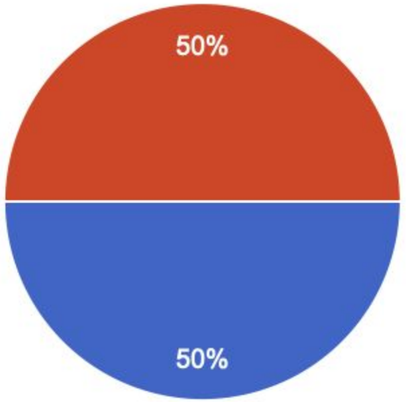


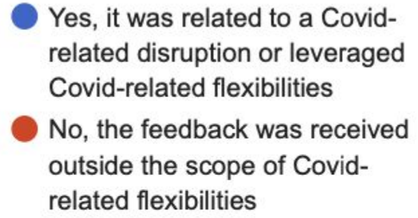
- Contract Research Organization (CRO)
- Other Type of Vendor
- Small Pharma/Biotech Company (<100 employees)
- Medium Pharma/Biotech Company (100-1000 employees)
- Large Pharma/Biotech Company (>1000 employees)

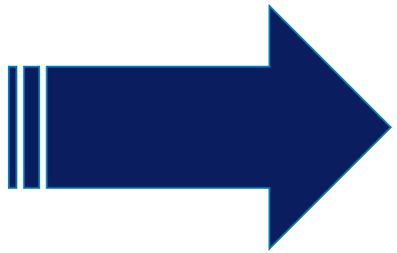
Health Authority Questionnaire Highlights

Have you sought regulatory feedback from a health authority concerning elements of trial decentralization?









Health Authority Questionnaire Highlights

If you did receive HA feedback, which were the HA's involved?

- PMDA
- FDA
- BfARM/PEI
- DMA

- Swissmedic
- TFDA/CDE (Taiwan)
- FAMHP (Belgium)
- INVIMA (Colombia)

Health Authority Questionnaire Highlights

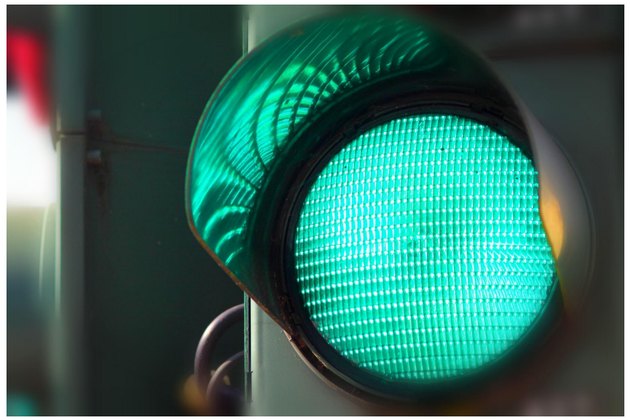
What feedback did you receive from a HA and what impact did it have on your trial design?

- **No roadblocks** or concerns expressed by Health Authorities
- Seek **local ethic committee approval**
- **Verify** and **ensure** clear delineation between site and home nursing provider – how will they work together?
- National Health Authorities within specific countries have stricter interpretation of GCP that requires site-level **ownership of and access** to patient data, which requires the PI access to any data collected outside of the site as part of a hybrid/decentralized trial

Health Authority Questionnaire Highlights

Were there any barriers in contacting health authorities?

NONE



Example commentary:

Meetings were held with US FDA, Germany's PEI, Sweden and Japan to discuss telemedicine, home nurse visits, drug shipments to patients – no concerns were expressed, and clinical trials proceeded as planned

Survey Results – The Upshot

Health Authority Feedback

- **Of the 13 respondents who answered this question, 6 respondents indicated HA feedback was helpful in de-risking trial design** whereas the remaining noted this question was not applicable.

  - While this is a small N to extrapolate from, on its surface it does not appear that sponsors faced barriers in soliciting feedback from HAs (this was confirmed by responses to 11 in which all 9 respondents indicated that there were no barriers that prevented them from contacting a HA)
  - Rather, several respondents indicated that they did not seek HA feedback because the guidance was clear regarding their trial design, or such approaches were taken under Covid-related flexibilities (which were also clearly enumerated in guidance)
  - Of respondents, ~40% indicated that feedback was in response to a Covid-related flexibility

- **Sponsors incorporated the following elements of DCT design:**
  - Remote Monitoring (N = 6)
  - eCOA/ePRO (N = 7)
  - Mobile Nursing (N = 2)
  - Remote Consent/eConsent (N = 7)
  - Remote Enrollment (N = 3)
  - Direct to Patient Drug Shipment (both in-country and internationally) (N = 3)

Survey Results – The Upshot

Health Authority Feedback

- Regarding HA feedback, most participants indicated that any feedback they received was related to Covid-related flexibilities which came through the issuance of emergency guidance rather than 1-on-1 meetings

- Initial survey results indicate that sponsors have largely relied on existing guidance to proceed with DCT design and conduct

- While HAs were engaged in a select manner most sponsors at this point have yet to have substantive interactions with HAs.

- According to respondents, lack of engagement does not seem to be the result of any existing barriers.

2. Framework Gaps

Deliverable

DTRA Workstream 4B Regulatory Gaps Overview

4 main gaps were identified.

1. **Clarification on Form 1572 and Delegation of Authority** (*Other trade groups have addressed this topic and it is on the FDA's radar*)

2. **Participant and site reimbursement**

3. **PI Oversight on remote data**

4. **What is source data**

- **Summary of main gaps found** here.

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

2. Framework Gaps

Deliverable

DTRA Workstream 4B Regulatory Gaps Overview

1. Clarification on Form 1572 and Delegation of Authority (*Other trade groups have addressed this topic and it is on the FDA's radar*)

Problem statement: Who needs to be documented for completing remote clinical trial activities

- If it is a virtual activity what is the site address
- How to differentiate between trial activities considered standard of care and study procedures
- Clarification of PI oversight if remote site staff (e.g., home health nurse, trial procedures at local pharmcy) are not part of the PI's organization

2. Participant and site reimbursement

Problem statement: Where do DCT wearables become prohibited reimbursement?

- Payment to sites for conducting remote activities – what are acceptable logistics and oversight fees?
- Does giving patients wearables, DHTs, to participate in a trial align with regulations governing IRB and participant reimbursement if the patient retains the technology after the trial?

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

2. Framework Gaps

DTRA Workstream 4B Regulatory Gaps Overview

3. PI Oversight on remote data

- Problem statement: Lack of clarity of PI or sponsor oversight responsibility (sign-off) on remote data (eCOA, wearables, etc.)
  - What is PI responsibility for data that the PI or Sub-I are not directly responsible for collecting?
  - What is PI responsibility for oversight of investigational medicine if delivered directly to the trial participant
  - Who has oversight if the PI is not responsible for monitoring the data? Is this the sponsor?
  - What is the sponsor's responsibility in managing data collected remotely?
  - When does 'clock' start when a DHT captures an AE? Does it begin when the DHT first detects a safety signal or when the event is logged into the PV system.
  - What is considered 'acknowledgement' of a safety event by PI? What monitoring systems need to be in place to address this issue in a remote setting with continuous data.
  - How do we validate our filtering of remote data if we do not have a data set to compare to at the start of a trial?

DTRA Workstream 4B Regulatory Gaps Overview

4. What is source data

- Problem statement: DCTs offer the sponsor the potential to collect terabytes of data

  - What level of data is source data (the raw data? the features? something in between?) which has a big impact on storage, accessibility, readability.

DTRA Initiative 4B Collaborate on Regulatory Gaps

Next Steps

- **Publish Tube Stop playbook on DCT implementation with regulatory and other reference links**. Regulatory framework and gap analysis underpinning tube stop may be found here.

- **Work with DTRA Regulatory Council to respond to government guidance and requests for information**.
  - White House Council
  - NIH RFI
  - FDA DCT Draft Guidance

- **Assist with DTRA Co-Labs - 1572**

- **Work with DTRA Regulatory Council** to prepare for interactions with Health Authorities

DTRA DECENTRALIZED TRIALS & RESEARCH ALLIANCE

Co Labs - Update and Up Next

Jane Myles

Co Labs

Opportunities for new member-driven initiatives

Smaller teams

Narrow-ish scope

- Not yet chartered initiatives
- May work on recommendations to solve problems ID’d by initiatives

Target - 3-4 month timeframe to recommendations

Operate more like a sprint team

Co Lab Progress

1572 Needs

- Kicked off on April 4!

SCOPE:

Recommendations on when/how to best include DCT-specific roles and needs

- eg local labs, local imaging, local HCPs, using 1572 and or other forms.
- Questions to raise to FDA with proposed solutions

Alternative Site Models

- Kickoff scheduled for April 27

SCOPE:

Recommendations on using alternative site models, such as pop up sites, in-pharmacy sites, mobile sites, research metasites

- site selection
- qualification
- training
- oversight

Co Labs - Up Next

Defining Site Needs: Research Project

SCOPE:

Design and sponsor a survey to gather information around what sites need to help drive adoption and use of DCT Methods

- DO NOT repeat prior surveys. Aim for more specificity on friction / barriers
- Target respondents are site staff. May need a partner org (e.g. SCRS or ACRP)

NEXT STEPS: Define Co Leads & open opportunity to join to membership

- **NOTE:** This Co Lab will likely lead to future Initiative work or Co Labs to define solutions

Circles Update

Jane Myles

DTRA Circles

The Challenge

Enable deeper member engagement

- DTRA receives many inbound messages from colleagues at a member company asking to get involved

Help more colleagues connect with their peers from across the industry

- Shared learnings
- New opportunities

Proposed Solution

Micro-communities of functional leaders from across member organizations

- Examples may include:
  - Diversity leaders
  - Monitoring leads for DCT
  - Data Management leads for DCT
  - Supply Chain leads for DCT
  - Other

Provide space for connecting and sharing

- Quarterly meet-ups
- Online connections

Circles: Status Update

Diversity Circle

- Next Virtual Meeting: June 13 3:00 - 4:00 PM ET

Data Management
Next Virtual Meeting: June 20, 12:00 - 1:00 PM ET

Patient Recruitment
Next Virtual Meeting: June 23, 11:00 - 12:00 PM ET

Real World Data & DCTs
Next Virtual Meeting: June 19, 1:00 - 2:00 PM ET

DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE

Circles: How to join?

To join any of our Circles, complete this form to submit your interest in being added to the Circle.

Feel free to share with anyone within your organization who may be interested, as well!

DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE

COMING NEXT!

- Join a *Circle*!
- Come to the *Clubhouse*
- Next meeting, TBD …

Thank You!

DTRA
DECENTRALIZED TRIALS & RESEARCH ALLIANCE