CLINICAL TRIALS TRANSFORMATION INITIATIVE

Assessing U.S. Clinical Trials Site Capacity and Readiness for Public Health Emergencies

CTTI Expert Meeting

July 30, 2025

Welcome to CTTI's Expert Meeting on Assessing U.S. Clinical Trials Site Capacity and Readiness for Public Health Emergencies

- This meeting is being recorded for note taking purposes only.
- Open discussion is encouraged and fostered by respect and collaboration.
- Please enter questions into the chat.
- Kindly no AI recording notetakers.

Here's to a great day of discussion and learning from one another!

CTTI

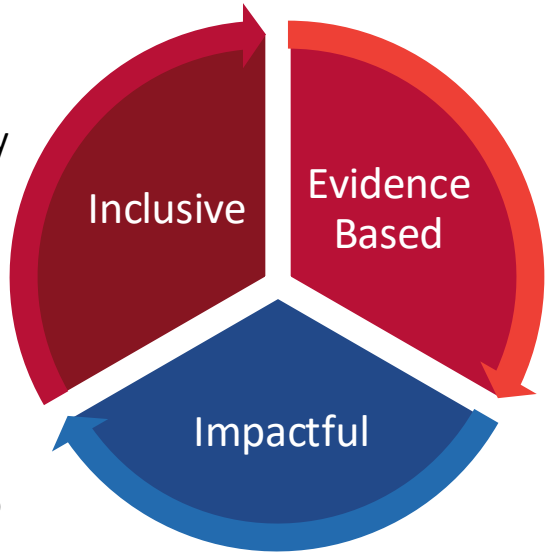
The Clinical Trials Transformation Initiative (CTTI)

MISSION

To develop and drive adoption of practices that will increase the quality and efficiency of clinical trials.

VISION

A high-quality clinical trial system that is patient-centered and efficient, enabling reliable and timely access to evidence-based therapeutic prevention and treatment options.



PUBLIC-PRIVATE PARTNERSHIP

- Co-founded in 2007 by FDA and Duke University
- Active collaboration with +500 individuals and groups
- All materials are freely available

SCOPE

Focus on clinical trials of FDA-regulated medical products, recognizing that clinical trials are international and acting as a collaborative global citizen.

CTTI

What We Do

- Provide **leadership** across the Clinical Trials Enterprise through vision-setting, collaborating, convening, measurement

Topic-focused convenings
FDA public meetings
State of Clinical Trials

- Produce evidence-supported, consensus **recommendations and tools** to improve quality and efficiency of clinical trials

30+ Recommendations
80+ Implementation Tools
50+ Case Studies

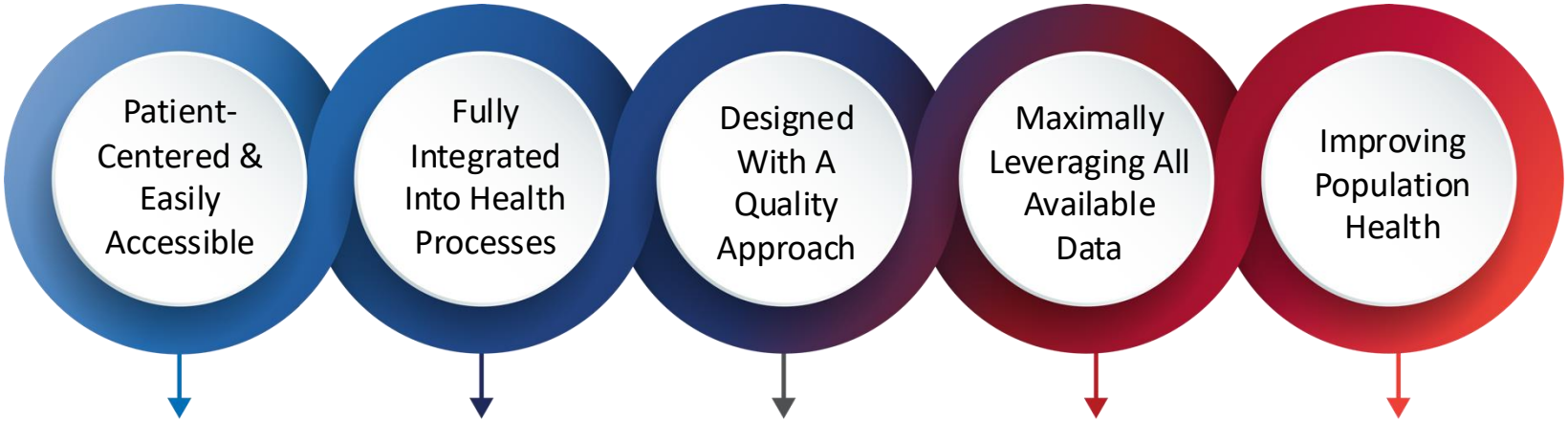
- Drive innovation through **strategic communication and engagement** efforts that support organizational and overall system transformation

30,000+ downloads / year
40,000+ media impressions / year
550+ presentations & workshops
130+ articles & publications

CTTI

Transforming Trials 2030

By 2030, clinical trials need to be:



A critical part of the Evidence Generating System

Learn more at https://ctti-clinicaltrials.org/about/transforming-trials-2030/

CTTI

CTTI Membership

Version: April 23, 2025

CTTI

CLINICAL TRIALS TRANSFORMATION INITIATIVE

Opening Remarks

Taré Floyd, Project Manager

Clinical Trials Transformation Initiative (CTTI)

Watchtower

CTTI

Project Watchtower Objectives

Develop a framework for assessing US clinical trial sites' capabilities, capacity and changes over time.

Create a tool to calculate the existing capacity and capabilities of U.S. clinical trial sites conducting research on the inpatient, intensive care treatment of respiratory emerging infectious disease.

Evaluate the feasibility of creating an ongoing US Site Inventory.

CTTI

Agenda-Day One

Time (EDT)	Content
11:00 a.m.	CTTI Introduction | Morgan Hanger, Clinical Trials Transformation Initiative (CTTI)
11:10 a.m.	Opening Remarks | Taré Floyd, Clinical Trials Transformation Initiative (CTTI)
11:20 a.m.	Operation Warp Speed | Kevin Bugin, Amgen
11:40 a.m.	Mobilizing the CTSA's Trial Innovation Network for Public Health Emergency Preparedness and Response| Salina Waddy, National Institutes of Health (NIH)
12:00 p.m.	Watchtower Framework Overview and Breakout Group Instructions| Amy Corneli, CTTI Social Science Team
12:15 p.m.	Break
12:35 p.m.	Break Out Group Roundtable Discussions | CTTI Social Science Team
2:00 p.m.	Adjourn

CTTI

Agenda-Day Two

Time (EDT)	Content
11:00 a.m.	Welcome | Taré Floyd, Clinical Trials Transformation Initiative (CTTI)
11:05 a.m.	Lessons Learned from ACTIV | Stacey Adam, Foundation for the National Institutes of Health (FNIH)
11:25 a.m.	Tufts CSDD Global Site Landscape Study | Joan Chambers, Tufts University
11:45 a.m.	Mobilizing VA Clinical Trial Networks for Rapid Response in Public Health Emergencies| Kousick Biswas and Missy Almand, Veterans Affairs
12:05 p.m.	Break
12:20 p.m.	Break Out Group Roundtable Discussions | CTTI Social Science Team
1:55 p.m.	Closing Remarks | Taré Floyd, Clinical Trials Transformation Initiative (CTTI)
2:00 p.m.	Adjourn

CTTI

CLINICAL TRIALS TRANSFORMATION INITIATIVE

Operation Warp Speed – Therapeutics Development

Kevin Bugin, AVP Global Regulatory Policy & Intelligence

Amgen, Inc

Disclaimer

This presentation reflects information shared in 2021 by Dr. Janet Woodcock (then Acting FDA Commissioner) and Dr. Kevin Bugin (Deputy Director of Operations, Office of New Drugs, FDA/CDER), as part of the U.S. Government's review of COVID-19 therapeutic evaluation efforts. Earlier versions are available via the Reagan-Udall Foundation for the FDA Workshop.

Operation Warp Speed Therapeutics

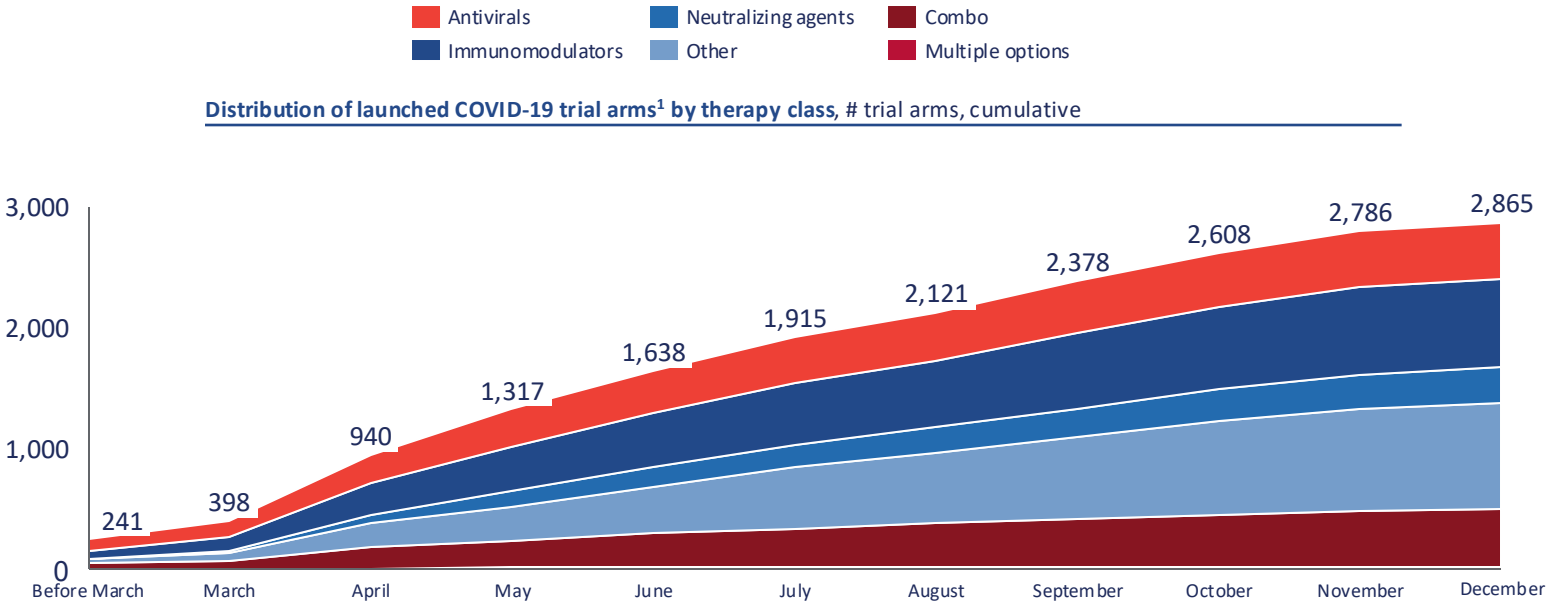
In May 2020, the Operation Warp Speed (OWS) therapeutics effort was established with the following mission:

- Accelerate **clinical development and manufacturing scale-up** of candidates most likely to have a broad public impact
- Enable **broad distribution and availability of Therapeutics (Tx)** until wide-spread access to a vaccine(s) could be achieved
- Provide **continued access for those infected** with COVID-19

The OWS therapeutic strategy focused on candidates that **attack the virus or prevent/manage complications** associated with COVID-19

In January 2021, OWS was transitioned to the Federal COVID-19 Response, subsequently H-CORE and ultimately absorbed back into HHS' Assistant Secretary of Preparedness and Response

A reminder… There were thousands of trials launched in 2020 for COVID Tx



1 Corresponds to number of global investigational trials recruiting or completed. Excludes trials that have been terminated (or equivalent). Separates out multi-arm trials into distinct counts, including arms testing the same intervention in different doses or durations. May not be fully comprehensive. Excludes Traditional Chinese Medicine and vaccine trials. Placebo arms are not included in arm counts.

Source: Clinicaltrials.gov accessed 11/27/2020 and WHO clinical trial registry accessed 11/27/2020

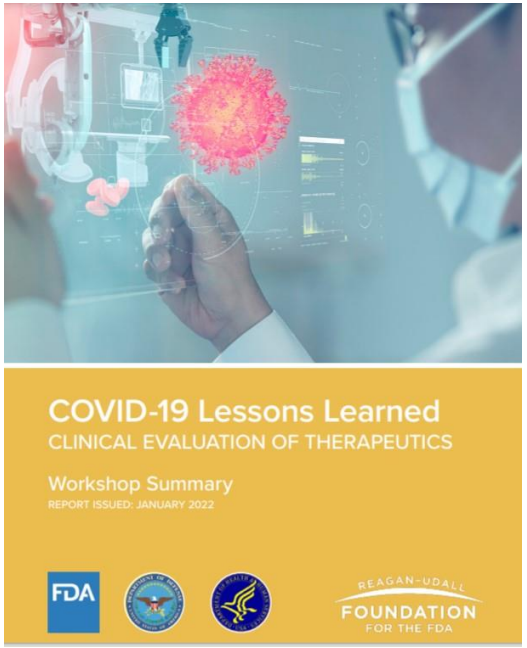
CTTI

Lessons Learned from OWS

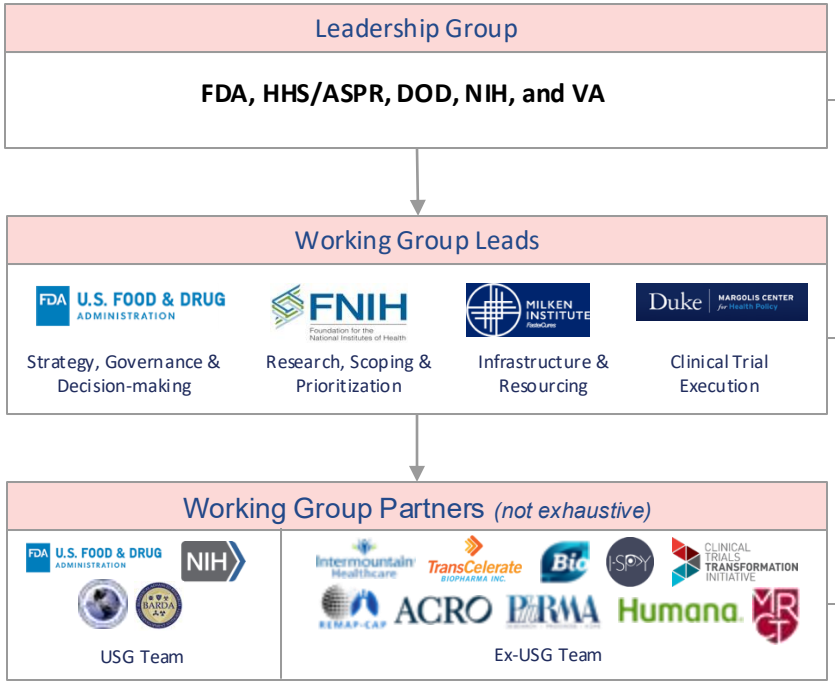
From this substrate, the coordinated Federal Response for COVID-19 therapeutics produced insights related to the clinical evaluation of therapeutics, which can be applied to the broader clinical trial landscape

While there continued to be a public health emergency, there was a need to focus on the clinical evaluation of therapeutics early in 2021 to explore immediate application of lessons and initiation of longer-term efforts

Analysis and collection of lessons learned took place from January to May of 2021 and discussed at a December 2021 Reagan Udall Foundation Workshop.



Working groups were formed around key topic areas with oversight from a USG leadership group



Key roles

Leadership Group: Oversee overall initiative and provide input on cross-agency & stakeholder buy-in

WG Leads: Coordinate and provide input to the development of lessons learned in the topic areas assigned to them based on expertise

WG Partners: Share lessons learned from their organization's experience and support development of recommendations

Lessons Learned were identified across 5 topic areas, with 4 being within scope of this initial effort and discussion today

In Scope for this Effort: clinical evaluation of Tx topics

Not in Scope





Strategy, Governance & Decision-making	Research, Scoping & Prioritization of Tx	Infrastructure & Resourcing	Clinical Trial Execution	Supply, Distribution & Administration
Governance & coordination, portfolio & strategy, sponsoring & funding trials, strategic comms., contracting	Screening & agent selection, scoping and prioritization of agents and trials, evidence generation strategy, data sharing	Networks and partnerships, CT infrastructure, patient enrollment & diverse participation	Site readiness, IRB & regulatory set-up, data management, culture change, technology supports	*Other Topics saved for future efforts* Industry engagement, Manufacturing / supply, Allocation and distribution Administration and utilization of products

CTTI

29 recommendations developed across the 4 topic areas

Strategy, Governance & Decision-making[1]

1 **Establish coordinating governing body, with:**

- 2 to 3 — Centralized functions (PMO[2], communications)
- 4 to 6 — Frameworks for critical processes
- 7 to 8 — Tools to enforce strategy

9 to 10 **Enhance international coordination**

11 to 15 **Centralize contracting capabilities**

Research, Scoping & Prioritization of Tx

16 **Share enabling information**

17 **Support CT[3] system in creating actionable evidence**

18 **Enable open sharing of research strategy and plans**

19 **Enable sharing research data and results**

Infrastructure & Resourcing

20 **Keep CT networks and infrastructure "warm" for future public health emergencies (PHE)**

21 **Build and support community-based networks**

22 **Enable decentralized / hybrid trials and remote monitoring tools post-PHE**

23 **Share best practices on managing patient enrollment**

24 **Increase trial participation from under-represented communities**

Clinical Trial Execution

25 **Mitigate regulatory impediments**

26 **Develop tools to enable site readiness & participation**

27 **Ensure framework for priority questions matches site capabilities**

28 **Develop report on driving culture change in trial participation**

29 **Improve technology support, capacity and motivations**

1. Many Strategy, Governance & Decision-making recommendations are interrelated and were combined here for brevity. 2. Program Management Office 3. Clinical Trial

CTTI

Strategy, Governance and Decision-making: Context and Recommendations

Context

- **Lack of coordinated strategy across USG agencies** led to delays and fragmented trials; centralized decision-making can facilitate rapid response
- **Absence of PMO support resulted in delays** in trial standup; **multiple USG communication sources was confusing** and hurt coordination
- **Standing up PPPs in a PHE was challenging, yet critical** for coordination; process for **shifting treatment guidelines and evidence needed for EUAs were unclear** early on
- **Funding and regulatory levers** (e.g., around trial approvals, requirements) to drive actionable evidence generation from CT ecosystem
- **International trials struggled to gain regulatory support** due to regulatory differences and preference for domestic trials
- **Lack of centralized contracting led to increased costs and delays due to inefficient processes**; Increasing contracting process flexibilities and including contracting language that increases contractor accountability

Recommendations

1. **Identify a governing body** pre-PHE with authority to set strategy, align portfolios, budget, and ensure coordination

2 to 3. **Establish centralized governance functions** (PMO function, communication authority)

4 to 6. **Establish frameworks for critical governance processes** (e.g. PPP to advise governing body, treatment guidelines, policy guidance on evidence of effectiveness for EUAs)

7 to 8. **Establish regulatory, funding tools** to focus CT conduct around key strategy / priorities

9 to 10. **Enhance international coordination** (e.g., establish/ engage with global regulatory forums/ partnerships)

11 to 15. **Centralize contracting capabilities**, including coordinated reviews, streamlined procedures and create standard contracting language and frameworks for optimal approaches

CTTI

Research, Scoping & Prioritization: Context and Recommendations

Context

- **Lack of centralized enabling information and natural history registry data** prevented effective investigations
- Lack of CT literacy across stakeholders led to **trials which were not designed to yield adequately powered data** and hence actionable results
- **Research priorities and strategy were not always aligned** between CT system stakeholders, leading to non-actionable and delayed outcomes
- **Accelerated dissemination of information and preliminary findings can prevent duplication** and support coordination

Recommendations

16. **Rapidly collect and disseminate enabling information** such as pathogen ID, sequencing, and natural history data (through natural history registries)
17. **Ensure the CT ecosystem creates actionable evidence** through developing strategy, guidelines, templates, incentives, and capacity building (e.g., prioritize randomized trials).
18. **Enable the open sharing** of research strategy and plans amongst stakeholders in the CT ecosystem to coordinate activities, including in funding announcements
19. **Establish efficient and effective systems** for sharing early research data and results with other researchers outside of publication channels while maintaining confidentiality and protections for trade secrets

CTTI

Infrastructure & Resourcing: Context and Recommendations

Context

- **Activating networks and partnerships was difficult during PHE; A standing network** with appropriate capacity would be responsive in PHEs and "kept warm" by deploying against current unmet needs
- **Established trial networks lacked diversity**; nationwide network inclusive of community sites would improve representation
- **Decentralized/hybrid trials have become critical** to trial continuity, improving diversity, and helping capture real-world data, but regulatory considerations can pose hurdles
- **Restrictions on co-enrollment and lack of coordination** led to competition for patients & hindered recruitment for high-priority trials
- **There was low minority participation** in trials; **deliberate efforts** to reach underserved communities are needed, including disseminating messages through community partners

Recommendations

20. **Identify and leverage existing CT networks infrastructure** (incl. NIH-funded networks, nonprofit & industry/CRO sites networks) and public-private partnerships (e.g. ACTIV) **to maintain a "warm base" for PHEs and that can be deployed against high priority needs**
21. **Build, engage, and support more community-based institutions/networks** to improve the diversity and representativeness of clinical trials and ability to deploy pragmatic trials
22. Remove post-pandemic barriers to expanded adoption of **decentralized/hybrid trials and remote monitoring tools**
23. **Research, develop and share best practices on managing patient enrollment** with a focus on prioritized trials/platforms while enabling co-enrollment
24. **Determine best practices for increasing participation in trials from under-represented communities** and create action plans for improvement

CTTI

Clinical Trial Execution: Context and Recommendations

Context

- **Continually evolving regulations, conflicting regulatory guidance, and duplicative IRBs** led to challenges and delays in review process; however, **FDA proved very innovative/ flexible** during PHE
- **Lack of standardized site readiness assessment tools, inadequate** preparation and / or re-opening processes and supporting tools (e.g. around contracting, regulatory compliance) led to slow start up in PHE
- **Lack of coordination between research questions and site capabilities** led to some sites not having the research, infrastructure and / or capabilities to generate evidence
- **CT ecosystem culture was not conducive to sharing of resources** and conduct of effective trials; providers also lacked education and tools on conducting trials while providing care
- **Data collection and data management requirements were burdensome for many sites due to absence of capabilities and digital tools;** lack of consideration for data flow and integrity when using digital tools resulted in suboptimal system interoperability and data security

Recommendations

25. **Reform regulatory oversight to avoid impediments in trial conduct and review/ maintain effective PHE regulatory flexibilities** (incl. development of best practices for IRBs/ cIRBs, indemnity, streamlining FDA collaboration across centers, fit-for-purpose human subject research protection training)
26. **Develop tools, best practices and resources for timely and effective trial participation,** including site readiness assessment tools
27. **Assure that regulatory and prioritization framework** for priority questions and data requests will generate optimal and timely clinical site participation
28. **Develop a retrospective assessment report for federal agencies, funders, academic and industry partners on driving culture change** in pandemic trial participation, informed by clinical and patient communities. Engage and leverage "early adopter" health systems and community providers to link effort to clinical trial culture change.
29. **Improve technology support, capacity and motivations: capabilities for automated clinical trial data collection** via: integration, automated lab data, tools for remote patient monitoring & data collection, electronic registries (for natural history and conversion to trials), and registry/trial payment incentives to encourage adoption

CTTI

@CTTI_Trials

Kevin Bugin, AVP Global Regulatory Policy & Intelligence

Amgen, Inc

THANK YOU

www.ctti-clinicaltrials.org

Mobilizing the CTSA Trial Innovation Network for Public Health Emergency Preparedness and Response

Salina P. Waddy, MD, FAHA
Associate Director, CTSA Program Clinical Affairs and
Director, Trial Innovation Network

TRIAL INNOVATION NETWORK

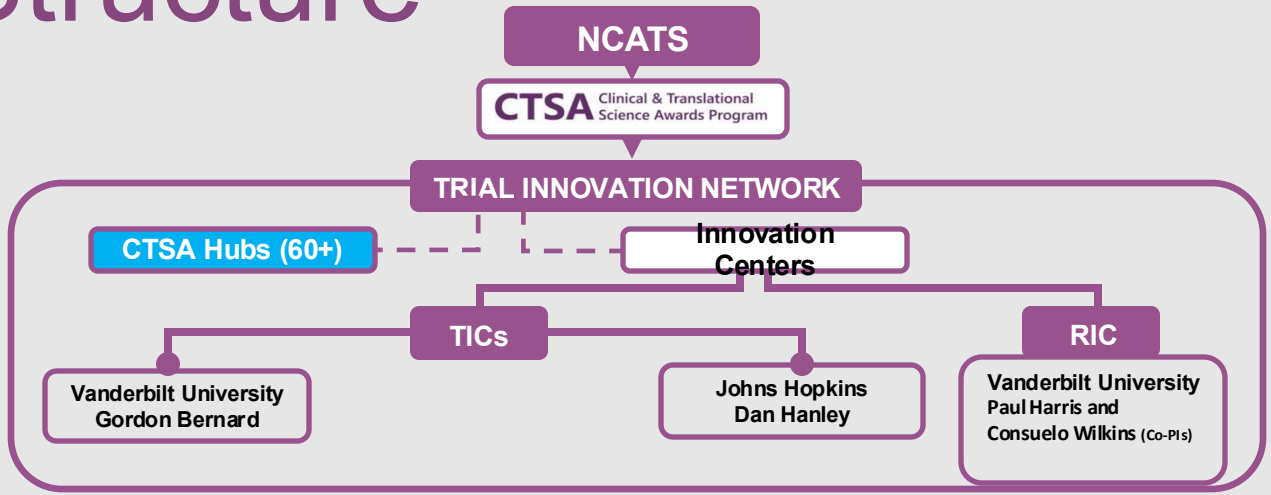
https://trialinnovationnetwork.org/

CTSA Clinical & Translational Science Awards Program

Goals of the TIN

- The Trial Innovation Network is a collaborative national network that focuses on ***operational innovation***, ***operational excellence*** and ***collaboration*** and will leverage the expertise and resources of the CTSA Program.
- The Trial Innovation Network features a single IRB system, master contracting agreements, quality by design approaches, and a focus on evidence-based strategies to recruitment and patient engagement.
- The goal of the Trial Innovation Network is to not only execute trials better, faster, and more cost-efficiently but, importantly, to be a national laboratory to study, understand and innovate the process of conducting clinical trials.

Trial Innovation Network Structure



CTSA Clinical & Translational Science Awards Program

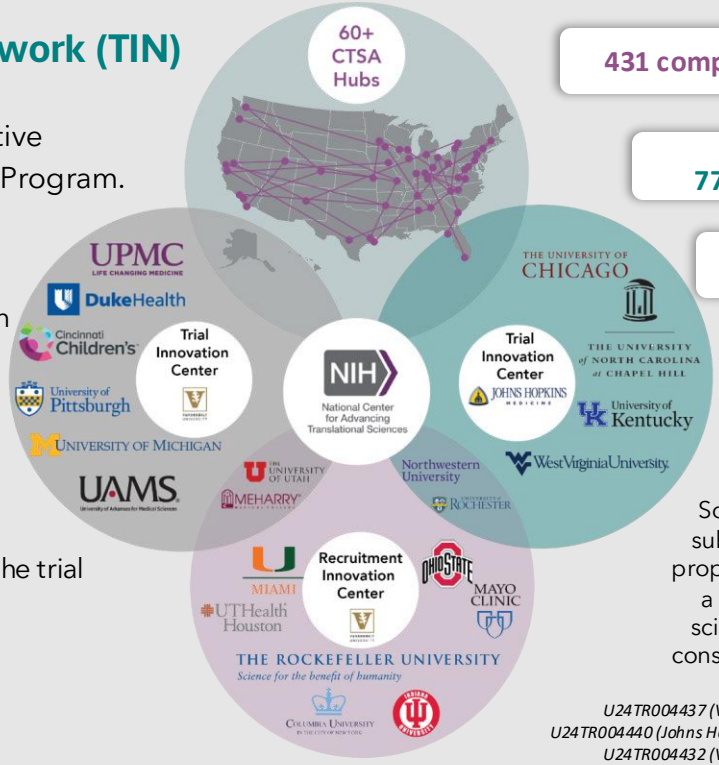
TRIAL INNOVATION NETWORK

CTSA Clinical & Translational Science Awards Program

2025 OVERVIEW

Trial Innovation Network (TIN)

- NCATS funded collaborative initiative within the CTSA Program.
- Seeking to innovatively address critical roadblocks in **multi-site clinical research**
- **Cost-free, structured scientific consultations** with clinical trial experts in various diseases across all stages of the trial process.



Since 2016:

431 completed consultations

Proposals covered
77 therapeutic areas

Proposals submitted to
21 NIH I/Cs

Scan to submit a proposal for a FREE scientific consultation

.

U24TR004437 (Vanderbilt University Medical Center)
U24TR004440 (Johns Hopkins University School of Medicine)
U24TR004432 (Vanderbilt University Medical Center)

TRIAL **INNOVATION** NETWORK

CTSA Clinical & Translational Science Awards Program

Specific attributes of the CTSA network for emergency response

Requires the rapid identification of study sites and PIs

Strengths of the 60+ CTSA Hubs:

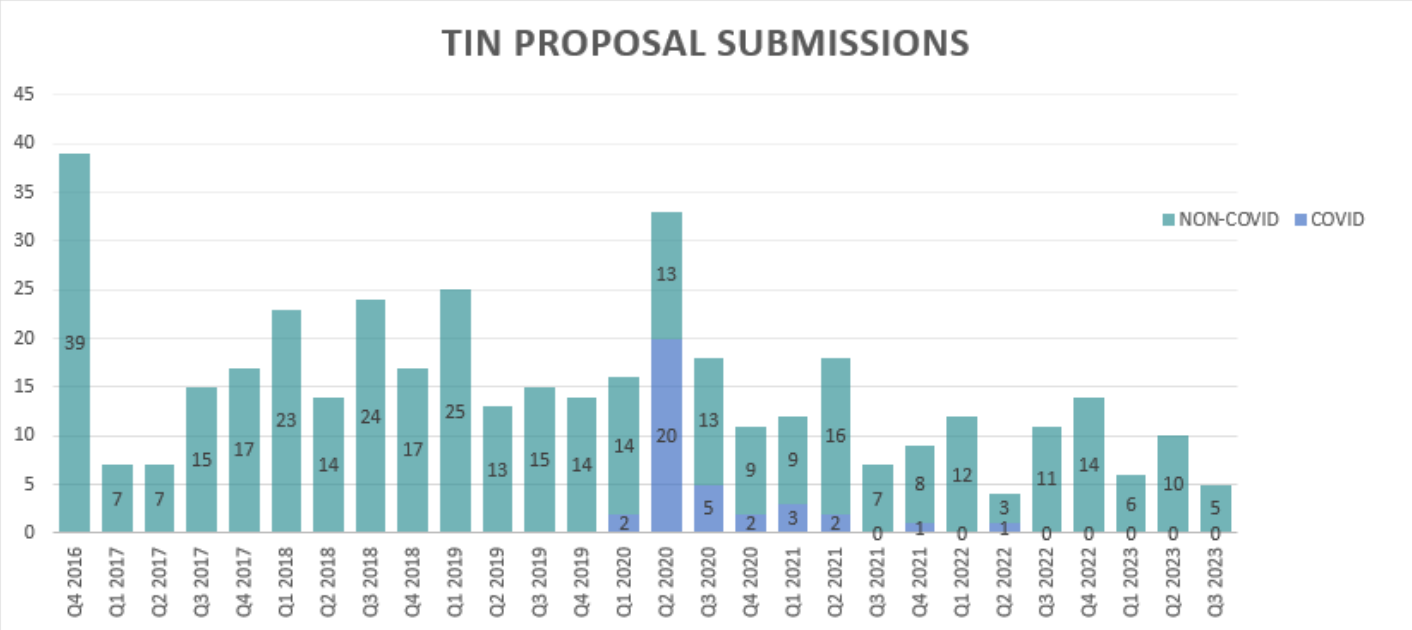
- Over 60 academic health centers with affiliates (93 million patients, 13% African-American, 6% Asian-Americans, 2% American Indian and 13% Hispanic)
- 17% of the CTSA patient pool reside in a rural area
- Large research professional teams with ~750 research nurses employed by CTSA Centers and over 1000 research coordinators
- Able to locally prioritize studies and identify research teams to participate in public health emergency trials

Specific attributes of the CTSA network for emergency response (cont'd)

Assets Provided by the TICs and RIC:

- Robust Expression-of-Interest process: TIN can simultaneously ask 60+ hub sites and their affiliates/partners if they want to be a study site after sharing the protocol and receive responses over a period of days
- Accelerated study start up and trial management (ex, SMART IRB, sIRB and, (REDCap) and contracting resources (Federal FDP-CTSA) and Industry sponsored studies (ACTA)
- Recruitment expertise with the RIC through use of remote approaches include decentralized methods, research registries, EMR patient portals like MyChart, and experience prioritizing multiple inpatient emergency protocols
- Partnering with N3C platform to analyze a large EMR database within a protected data enclave

TIN COVID trial submissions



TIN COVID Studies

TIN proposal date range	# of studies
March 2020	2
Apr-Jun 2020	20
Jul-Sep 2020	5
Oct-Dec 2020	2
2021	6
2022	1

Sample size	# of studies
< 100	4
100 - < 1000	13
1000 - < 5000	11
5000 +	8

Study type	# of studies (multiple possible)
Acute care	8
Outpatient	12
Platform/Tech/EHR	5
Registry	2
Predictive modeling	2
Schools	2
Treatment	18
Prevention	4
Observational	4
Surveillance	3
Prospective	5
Exploratory	1

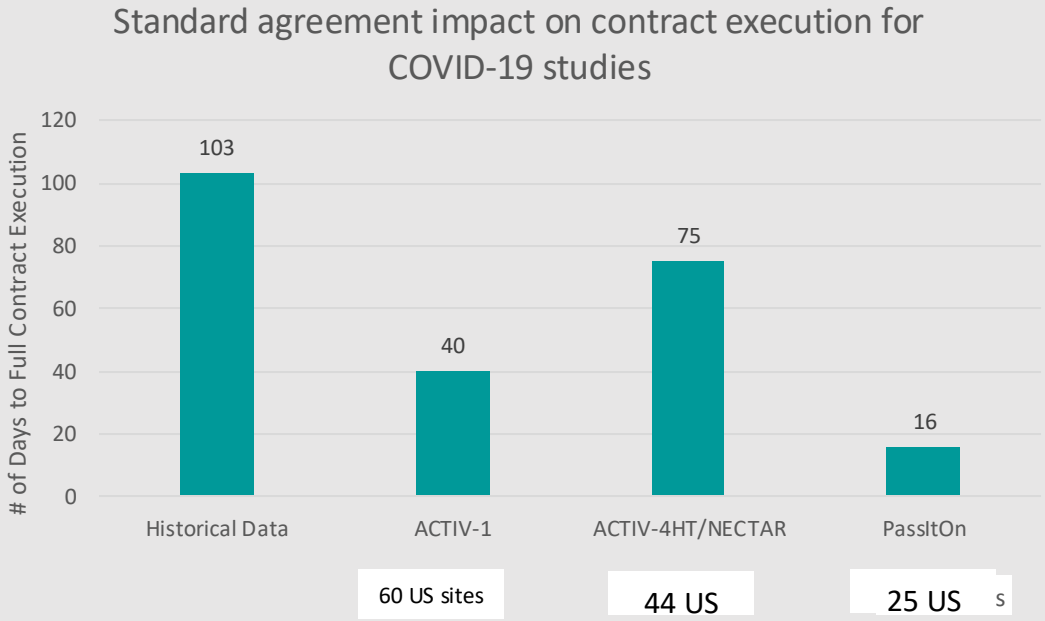
Decentralized elements of design for trials conducted during COVID

	Participant-informed study design	Ethics and Informed Consent	Screening/ Enrollment	Recruitment	Confirmation of eligibility	Intervention	Data collection/ Endpoints	Monitoring	Retention/ Reminders	Return of results/ Return of value
REACT-AF	✓	✓	✓	✓		✓	✓	✓	✓	
CSSC-004		✓	✓	✓				✓		✓
BEACH			✓				✓	✓		
PREVENTABLE	✓	✓	✓	✓	✓		✓	✓	✓	✓
TREAT Now		✓	✓	✓	✓	✓	✓		✓	
ACTIV-6		✓	✓	✓	✓	✓	✓	✓	✓	
OIAC19		✓	✓			✓	✓		✓	
Autism Sleep		✓	✓	✓	✓	✓	✓		✓	
CASH							✓			
CARE4kids		✓	✓	✓			✓		✓	
Niclosamide			✓	✓	✓	✓	✓	✓	✓	

Decentralized elements of design for trials conducted by Trial Innovation Center (TIC) or Recruitment Innovation (RIC) Center investigators or through TIC or RIC coordinating centers.

Hanley et al. Decentralized clinical trials in the trial innovation network: Value, strategies, and lessons learned. J Clin Transl Sci. 2023

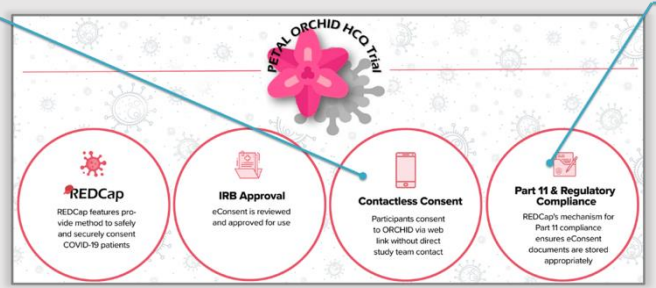
Standard Agreements to streamline COVID Study start up



eConsent and COVID-19

Contactless Consent

- Review and sign on own devices
- No direct contact with study staff required



Part-11 Compliant

- PDF copy displayed after signing
- Signed copy stored in **secure file repository**
- **Audit trails** track changes

Multi-Lingual Module:

- Allows Research Teams to more easily integrate different language versions of an instrument in eConsent

METRICS

	Pre-Pandemic (March 2020)	Post-pandemic (Sept 2023)
# of eConsent Projects REDCap Consortium-wide	3,100	>58,554
# of eConsent transactions REDCap Consortium-wide	50,625	>4,719,451

COVID resources in TIN Toolbox

Resource	Submitted by	Date Posted to TIN Toolbox	Number of views as of 9/18/23
The Community Engagement Alliance (CEAL) Against COVID-19 Disparities	National Institutes of Health (NIH)	10/6/2020	182
N3C Domain Teams and Leaders	University of Colorado	11/13/2020	105
Best Practices for Conducting Trials during the COVID-19 Pandemic	Clinical Trials Transformation Initiative	12/29/2020	239
RIC COVID-19 RECRUITMENT + RETENTION TOOLKIT	Recruitment Innovation Center	7/30/2021	381

Community Feedback to Develop the Covid Toolkit

Purpose: to share the community input we received, and the resources we have developed, that can help study teams conduct trials in a manner that is **safe, trustworthy, and respectful of all participants.**

8 # of COVID Studios

58 # of experts
- Healthcare workers
- Essential workers
- African American/Black
- Hispanics/Latinx
- Older adults 65+

17 # of states represented for geographic diversity

RIC COVID-19 RECRUITMENT + RETENTION TOOLKIT

Resources and community informed advice for clinical trial recruitment during the pandemic

Download now from TIN Toolbox

CTSA Clinical & Translational Science Awards Program

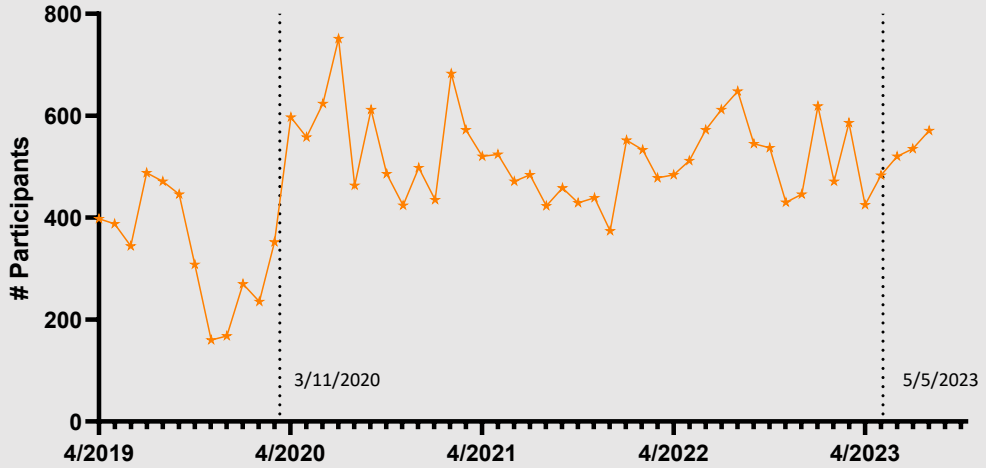
TIN Collaboration Webinars on COVID-19 Topics

Webinar Date	TIN Collaboration Webinar Title	Institution(s) Presenting	Topic	Attendee Number
3/31/20	REDCap, eConsent, and Part-11 Validation	VUMC	New technical methods enabling institutions to connect REDCap to their local EHR system for automated project-level data exchange, leveraging HL7/FHIR-based technology in multisite studies	400
7/15/20	Recruitment in the Time of **COVID-19**: Single and Multisite Study Strategies Using ResearchMatch	VUMC	Lessons to optimize recruitment messaging, REDCap survey options, and strategies when using ResearchMatch	125
8/3/20	No Participants, No Trial (Don't Plan for Everything, but Recruitment)	University of Washington	Practical guidance to develop effective recruitment plans, track and measure success. and create eye-catching recruitment materials	82
9/16/20	Social Media and Participant Recruitment: What we've learned so far	University of Florida	Stakeholder-informed process as a case study to demonstrate establishment of social media guidelines and evaluation of Facebook effectiveness to recruit research participants	156
1/20/21	Patient Engagement in the time of **COVID**- Virtual Community Engagement Studios	VUMC	Obtaining patient-center feedback from underrepresented groups to enhance research projects even during COVID. How to transition to Zoom technology for community engagement, address issues of tech-equity and literacy, and effectively facilitate group dialogue in a virtual forum	49
2/1/21	Using National **COVID** Cohort Collaborative (N3C) Data to Inform your Protocol Development	National COVID Cohort Collaborative, OHSU	Researchers planning COVID-19 trials with the Trial Innovation Network (TIN) can leverage the N3C to inform their research hypotheses. N3C aligns its infrastructure for the curation of value sets and phenotype variables relevant to COVID-19, such as ventilator support, ICU use, and definitions of COVID-19 cases	32
4/21/21	The Innovative Climate of Study Teams and Their Adoption of Innovative Study Designs within Clinical Trials	Drexel University	The challenges that **COVID** adds to the landscape of clinical trials also brings potential for new pathways of clinical trial design and innovation	27
7/21/21	Recruitment Innovation Center **COVID-19** Recruitment and Retention Toolkit	VUMC	The RIC **COVID-19** Recruitment and Retention Toolkit provides practical information on integrating community feedback into the operations of recruitment and retention planning for **COVID-19** research	40
10/4/21	Using REDCap to Improve Recruitment and Data Collection for Clinical Research	VUMC	Impactful uses of REDCap Clinical Data Interoperability Services for clinical research, including **COVID-19** trial recruitment and multi-site critical care studies	116

New Faster Together Course – Visitors Before and After COVID-19

Faster Together, Enhancing the Recruitment of Minorities in Clinical Trials

Platform dedicated to ***improving the representation of racial and ethnic minorities in medical research***.



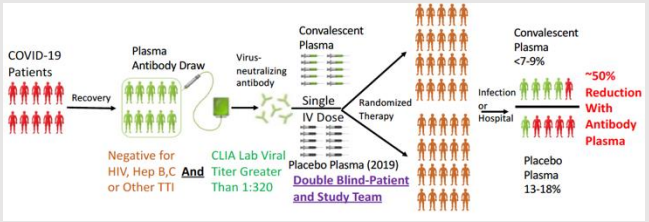
Note:
4/1/2019 – Faster Together Coursera course launches
3/11/2020 – World Health Organization (WHO) declares COVID-19 a pandemic
5/5/2023 – WHO declares end to COVID-19 emergency
Data is from 4/2019 until 8/2023.

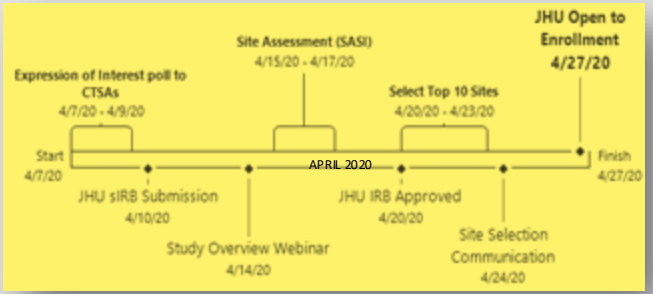
TIN Use Cases – COVID-19 Trials

COVID-19 PLASMA TRIALS

SPONSORED BY JOHNS HOPKINS UNIVERSITY

- Early COVID-19 outpatient treatment with high titer convalescent plasma
- TIN Expression of Interest survey of 65 CTSA sites
- TIN Led - Rapid Consortium organization, FDA IND, DoD (and other) funding, with sIRB approval
- Rapid 1-month study planning and 14-day site activation program
- Innovative, diverse recruitment: Local registries and national media marketing (The Bliss Group)
- 16 months FPFV to data analysis; 1 month to publication & change FDA indication for use (IFU)





TRIAL INNOVATION NETWORK

https://trialinnovationnetwork.org/

CTSA Clinical & Translational Science Awards Program

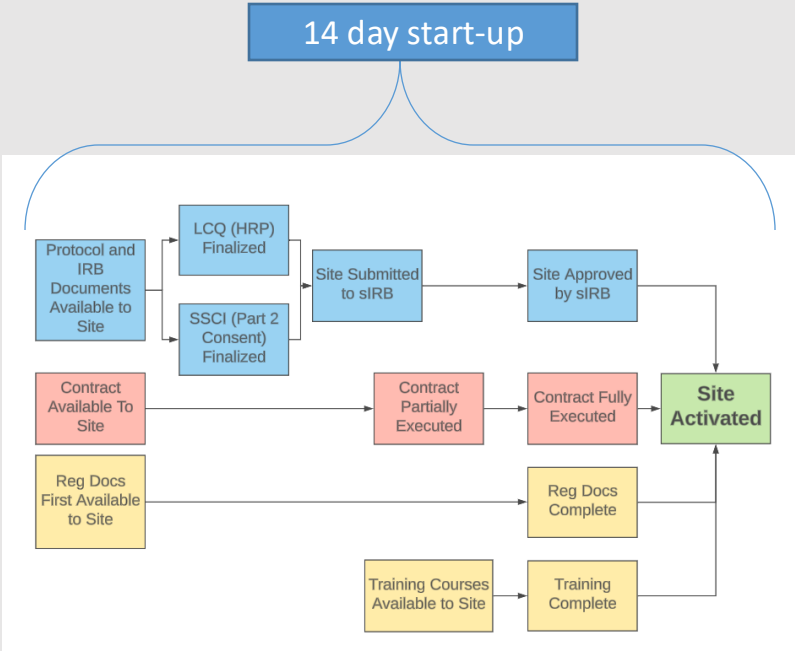
Innovations

TOOLS	BARRIERS ADDRESSED
SASI: Site Assessment Survey Instrument Comprehensive and detailed method of assessing and selecting sites for a multicenter clinical trial. Educate site teams about trial requirements and educate trial leadership on site capabilities.	Late discovery of immoveable barriers to site participation in study, baseless site selection leading to underperforming sites
Rapid 14-Day Site Start-Up Lean, standardized approach to site onboarding in a multicenter clinical trial for a global pandemic. Organized, discrete milestones with parallel processing, innovative tools, and expert personnel driving progress.	Slow-moving, expensive site start-ups, delayed activations and delivery of care to participants, wasted time, lost time to enroll

Activate Sites ASAP

Rapid Start-Up:

- 14-day site activation program
- Standardized task workflow
- Site Navigator Partner
- Automatic, electronic tracking of task completion



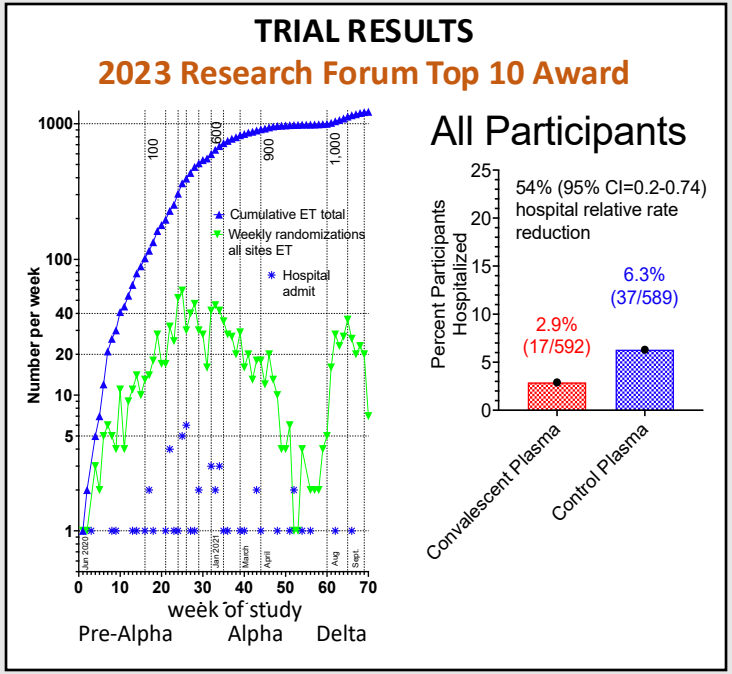
Efficient and Informative Site Selection

Site Assessment Survey Instrument (SASI)

- Readiness-based site assessment
- Organized collection of site-specific information
- Informs both ways: sites learn about study requirements, leadership learns about site capabilities

TIN-CTSA Emergency Response Results

- FDA issues emergency allowance Dec 27, 2021
  - for high titer plasma use in immuno-suppressed individuals (one week after public release of early CCP effective outpatient treatment results)
  - continued collections remain in use with response adaptability to each virus mutation
- Direct-to-Participant RETURN OF RESULTS webinar May 2022
- 61 accepted trial publications
- >12 new international CCP Guidelines
- Biologic License Application for early CCP FDA approved Dec 10, 2024
- Generalizable emergency process for future pandemics



TRIAL INNOVATION NETWORK

https://trialinnovationnetwork.org/

COVID-19 PLASMA TRIALS

SPONSORED BY JOHNS HOPKINS UNIVERSITY

TIN-CTSA Emergency Response Action Plan

If we have another pandemic, what resources are in place?

- COVID-19 accelerated development of remote consent and study visits which are transitioning to permanent processes.
- Evolution of financial structures to support rapid pivot to infectious diseases studies
- Institutional CTSA and academic knowledge on importance of RCT early for therapy efficacy.
- Infectious Diseases master protocols
- Regulatory readiness
- Activation-ready clinical trial networks in warm state with ongoing Respiratory pathogen research

Pandemic Metrics & Network Performance

Plan	Result
Design, Approval, Start	Protocol to IND approval 6 weeks
Used TIN expression of interest (EOI) for 65 CTSA sites	TIN consult to 17 sIRB approved sites - 8 weeks
Commercial outreach to stakeholders; combined radio, TV, internet, internet media and mailer recruitment approach	Recruitment inclusion Black (14%), Hispanic (14%), Native American (1%), and pregnant women (<1%)
Trial duration	FPFV to LPLV 15 months
Trial completion – Integration to Practice	19 months to publication & new indication and use in routine non-pandemic practice

TIN publications

Trial Innovation Network

TIN Summary paper- https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2810186

Invited commentary- https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2810198

Enhancing informativeness of clinical trials https://www.cambridge.org/core/journals/journal-of-clinical-and-translational-science/article/approaches-for-enhancing-the-informativeness-and-quality-of-clinical-trials-innovations-and-principles-for-implementing-multicenter-trials-from-the-trial-innovation-network/74D5273A19D6D9816212DDFB1F66C20D

Decentralized trials- https://pubmed.ncbi.nlm.nih.gov/37654775/

Protocol assessment- https://www.cambridge.org/core/journals/journal-of-clinical-and-translational-science/article/insights-from-the-trial-innovation-networks-initial-consultation-process/A0E8CEFCB6AEEF29074D7E23B3F145DE

Site selection in trials- https://www.sciencedirect.com/science/article/pii/S1551714424001666

TIN publications

Recruitment Innovation Center

RIC marker paper- https://www.cambridge.org/core/journals/journal-of-clinical-and-translational-science/article/recruitment-innovation-center-developing-novel-personcentered-strategies-for-clinical-trial-recruitment-and-retention/D1583E46F3F5E8FFB0C1CA526FAAF9A5

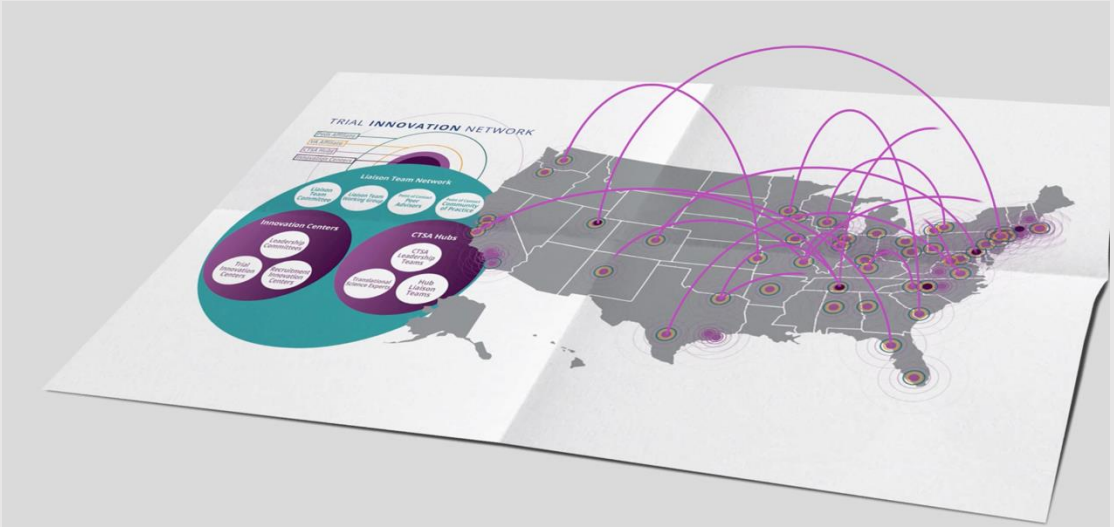
Top 4 things Researchers should know about Recruitment and Retention https://www.cambridge.org/core/journals/journal-of-clinical-and-translational-science/article/what-we-wish-every-investigator-knew-top-4-recruitment-and-retention-recommendations-from-the-recruitment-innovation-center/D7D12A2D307FE5549A864D7AA6695C0A

Trial Innovation Center

Accelerated Clinical Trial Agreements paper- https://www.cambridge.org/core/journals/journal-of-clinical-and-translational-science/article/quantitative-assessment-of-the-impact-of-standard-agreement-templates-on-multisite-clinical-trial-start-up-time/5D7F4408016C708396E40C1346025D35

SIRB lessons learned https://www.cambridge.org/core/journals/journal-of-clinical-and-translational-science/article/key-lessons-and-strategies-for-implementing-single-irb-review-in-the-trial-innovation-network/2179CB3611FE0D561E1C2C5A25FBA64B

TRIAL **INNOVATION** NETWORK



Who we are
(scan to view)

Learn more about the TIN
www.trialinnovationnetwork.org

TRIAL **INNOVATION** NETWORK

TRIAL **INNOVATION** NETWORK

CTSA Clinical & Translational Science Awards Program

https://trialinnovationnetwork.org/

CLINICAL TRIALS TRANSFORMATION INITIATIVE

Watchtower Framework Overview and Breakout Group Instructions

Amy Corneli, PhD, MPH
Professor, Department of Population Health Sciences, Duke University School of Medicine
Lead, Social Science Team, CTTI

Overview

- Introducing the existing framework
- Extending the framework
- Looking ahead
- Today’s work as a starting point

CTTI

Introducing the Framework

Existing framework created through an expert-driven, multi-disciplinary collaboration

Site readiness practices for clinical trials – considerations for CTSA hubs

Laura Viera[1], Laura James[2], Anantha Shekhar[3], Octavian C. Ioachimescu[4] and John B. Buse[1]

[1]University of North Carolina School of Medicine, Chapel Hill, NC, USA; [2]University of Arkansas for Medical Sciences, Little Rock, AR, USA; [3]University of Pittsburgh, Pittsburgh, PA, USA and [4]Medical College of Wisconsin, Milwaukee, WI, USA

A framework for assessing clinical trial site readiness

John B. Buse[1], Christopher P. Austin[2], S. Claiborne Johnston[3], Freda Lewis-Hall[4], Andrew N. March[5], Carolyn K. Shore[5], Pamela Tenaerts[6] and Joni L. Rutter[7]

[1]Department of Medicine, University of North Carolina School of Medicine, Chapel Hill, North Carolina, USA; [2]Flagship Pioneering, Cambridge, Massachusetts, USA; [3]Harbor Health, Austin, TX, USA; [4]Retired from Pfizer Inc., USA; [5]National Academies of Sciences, Engineering, and Medicine, Washington, District of Columbia, USA; [6]Medable, Inc, USA and [7]National Center for Advancing Translational Sciences, National Institutes of Health, Bethesda, Maryland, USA

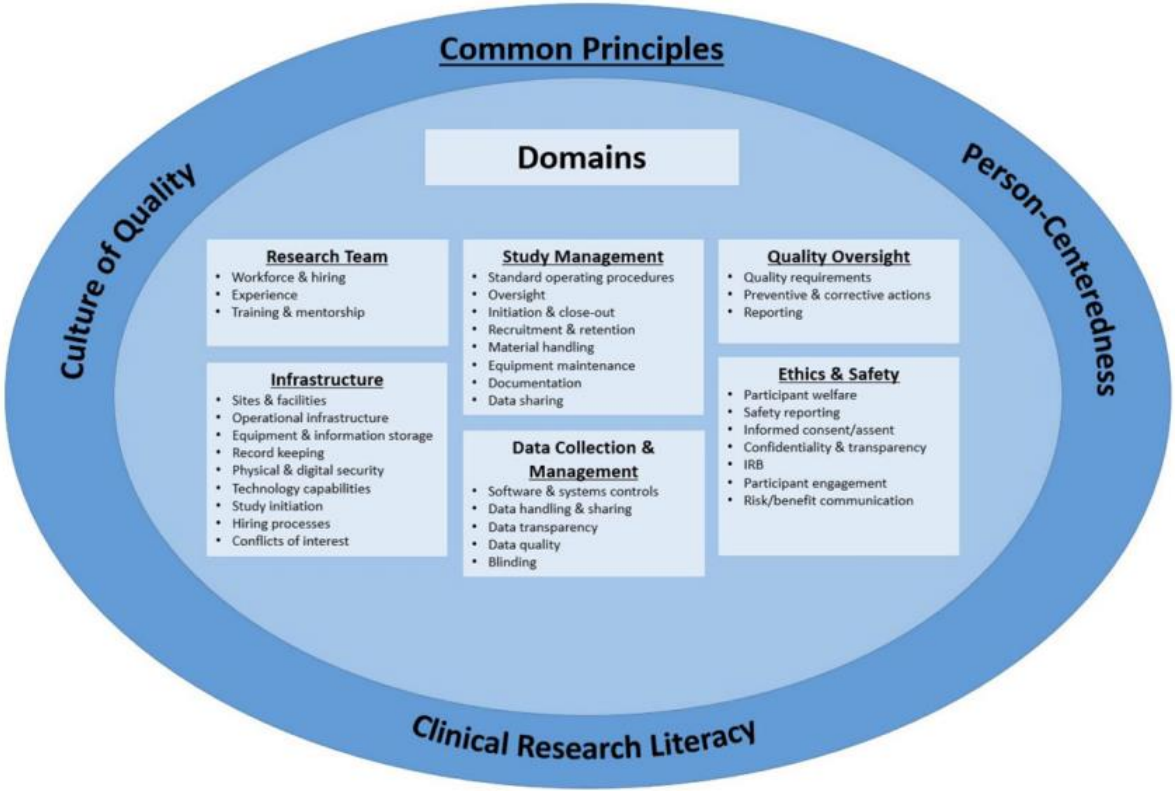
Purpose of the Existing Site Readiness Framework[1]

- **Reduce inefficiencies and delays in trial startup** by clearly defining what constitutes a "ready" site
- **Promote consistency across sites** by making it easier for sponsors and CROs to assess and select capable partners
- **Support both new and experienced sites** by identifying strengths and areas for improvement
- **Advance inclusion** by enabling a broader range of sites to participate in research
- **Encourage a culture of quality and participant-centeredness** by ensuring trials are scientifically sound, ethically grounded, and responsive to participant needs

[1]Viera L, James L, Shekhar A, Ioachimescu OC, and Buse JB. Site readiness practices for clinical trials – considerations for CTSA hubs. Journal of Clinical and Translational Science 7: e146, 1–4. doi: 10.1017/cts.2023.569; Buse JB, Austin CP, Johnston SC, Lewis-Hall F, March AN, Shore CK, Tenaerts P, and Rutter JL. A framework for assessing clinical trial site readiness. Journal of Clinical and Translational Science 7: e151, 1–8. doi: 10.1017/cts.2023.541

CTTI

Core Set of Site Readiness Principles



CTTI

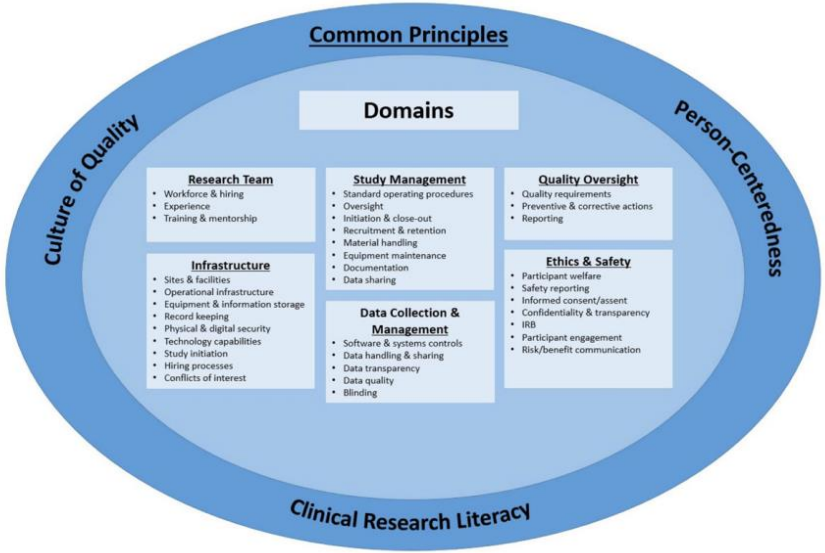
Six Essential Domains

- **Research team:** Qualifications, training, and experience of investigators and staff
- **Infrastructure:** Physical and technological resources needed to conduct trials
- **Study management**: Operational processes, including trial oversight and coordination
- **Data collection and management:** Systems for accurate, secure, and compliant data handling
- **Quality oversight:** Mechanisms to monitor performance and ensure regulatory compliance
- **Ethics and safety:** Commitment to participant protection and ethical conduct

CTTI

Extending the Framework

CTTI's Watchtower Project — Initial Step



U.S. clinical trial sites conducting research within the **respiratory emerging infectious disease space.**

Looking Ahead

Using the Watchtower Readiness Framework — Sponsors

Sponsors can:

- **Rapidly assess site capability**: Enables swift identification of sites equipped to initiate clinical trials in urgent public health scenarios
- **Use a standardized assessment**: Provides a consistent and structured approach to evaluating site capabilities for emerging infections across diverse settings

Leads to:

- **Accelerated trial startup during urgent public health emergencies**: Reduces delays by streamlining the process of determining which sites are ready to begin enrollment and data collection
- **Supports equitable site selection**: Facilitates inclusion of sites by clearly outlining readiness criteria
- **Ensures quality and safety**: Helps confirm that sites meet essential standards for data integrity, participant protection, and regulatory compliance

CTTI

Using the Watchtower Readiness Framework — Site Use

- **Strengthen the research team** (e.g., ensure staff have appropriate qualifications, training, and experience)
- **Evaluate and upgrade infrastructure** (e.g., confirm availability of necessary equipment, facilities, and technology)
- **Establish robust study management processes** (e.g., develop SOPs for trial conduct, documentation, and communication)
- **Implement reliable data collection and management systems** (e.g., ensure data security, integrity, and compliance with regulatory standards)
- **Create quality oversight mechanisms** (e.g., set up internal monitoring and audit procedures; ethical and safety protocols are in place)

CTTI

Today's Work as a Starting Point

Purpose of Today's Breakout Sessions:

Determine how to apply this framework to clinical trial readiness for emerging respiratory infections.

CTTI

Breakout Rooms Overview

- 5 breakout rooms, by domain
- Today — 12:35 to 2:00
- Tomorrow — 12:20 to 1:55
- You'll be asked to discuss how each domain of the framework can be operationalized specifically for clinical trials on emerging respiratory infectious diseases.

CTTI

Example

Domain	Site readiness practices
Research team	• The research team has sufficient and diverse personnel, to support the roles and functions needed to conduct a clinical trial and enroll trial participants who accurately reflect the patient population for the disease or condition being studied, with particular consideration for underrepresented and underserved groups. • The Principal Investigator is qualified through experience, training, and mentorship to lead and conduct clinical trials and is free from regulatory debarment and other disciplinary actions that would prevent them from practicing medicine and conducting clinical research. • Sub-investigators and other research team members are qualified through experience, training, and mentorship to conduct clinical trials, are well trained in cultural humility and strategies for engaging with underrepresented communities, and free from disciplinary actions that would prevent them from conducting clinical trials. • All research team members receive initial and refresher training to perform clinical trial activities per ICH GCP standards, and as appropriate, have received training that is tailored to an individual's role and specific to the study protocol.

Group discussion:

- What does it mean to you to have "**sufficient personnel**" to support a clinical trial on an emerging respiratory disease?
- What does it mean to you to have "**diverse personnel"** to support this type of trial?

CTTI

Breakout Rooms and Facilitators

Domain	Facilitator
Research Team & Quality Oversight	Blythe Fortino
Infrastructure	Jamilah Taylor
Study Management	Amy Corneli
Data Collection and Management	Carrie Dombeck
Ethics and safety	Kevin McKenna

CTTI

Any questions before we have a 20-minute break and head to the breakout rooms at 12:35?

Break

Reconvene at 12:35pm EDT to enter breakout groups

CLINICAL TRIALS **TRANSFORMATION** INITIATIVE

@CTTI_Trials

THANK YOU

www.ctti-clinicaltrials.org