

# CTSA Program Webinar

**September 27, 2023**

# Agenda

TIME	TOPIC	PRESENTERS
2:00 PM ET	Welcome	Beck Lazelle, PhD CCOS
2:01– 2:15 PM	NCATS/CTSA Updates	Mike Kurilla, MD, PhD Director, Division of Clinical Innovation NCATS
2:15 – 2:20 PM	Call for Publications JCTS	Cynthia Vinson, PhD, MPA <i>Senior Advisor for Implementation Science, NCI</i>
2:20 – 2:35 PM	Clinical Research Workload and Complexity WG Report out	Allison Norful PhD, RN, ANP-BC, FAAN <i>Assistant Professor, Columbia University</i> Bernadette Capili PhD, NP-c <i>Director, Heilbrunn Family Center for Research Nursing at The Rockefeller University</i>
2:35 – 2:55 PM	SPARCRequest	Royce Sampson MSN, RN, CRA <i>Director, Office of Clinical Research at Medical University of South Carolina</i> Jillian Harvey PhD, MPH <i>Evaluation Director, Medical University of South Carolina</i>
2:55-3:00 PM	CCOS Updates	Kerry James, MPH PMP CCOS
3:00 PM ET	Adjourn	



## NCATS/CTSA Program Updates

Michael Kurilla, MD, PhD

*Director, Division of Clinical Innovation*  
NCATS

*September 28, 2023*

# NIH Director Nomination

- President Biden Announced Nomination of **Dr. Monica Bertagnolli** in May
- Senate HELP Committee to hold a confirmation hearing on the nomination
- Next steps following confirmation hearing:
  - Senate HELP Committee Vote
  - Full Senate Confirmation Floor Vote



# NCATS Advisory Council – September 28

- **Agenda:**

- 1:00 Director's Report
- 2:00 Renee Wegrzyn: ARPA-H The Mission
- 2:30 Break
- 2:45 Clearance of Concepts: Presentation and Discussion
- 3:10 Program Update: Division of Clinical Innovation
- 3:45 Program Update: Office of Drug Development Partnership Program
- 4:45 Clearance of Concepts: Presentation and Discussion
- 5:40 Adjourn

- **NIH Videocast Link:** <https://videocast.nih.gov/watch=52212>

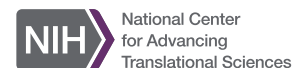


# List of CTSA Partners Updated with FY23 UM1s September 2023

- For the purposes of [PAR-21-293](#), NIH funding to the **Partner/Partnering Institution is used for determination of maximum direct cost budget requests.** [NOT-TR-22-032](#)
- Partner/Partnering Institution(s) must be effectively integrated into the proposed activities of the CTSA UM1 hub and are necessary for attaining its strategic goals and research priorities.
- An organization named as Partner/Partnering Institution in a CTSA UM1 application (and subsequent UM1 award), or a CTSA UL1 award funded previously under [PAR-18-940](#), [PAR-18-464](#) or [PAR-15-304](#) may be listed as a Partner with only one UM1 or UL1 unless the UM1 and UL1 are from the same organization.
- The list of Institutions that are partners of CTSA Program hubs in **FY22** are the following:
- [CTSA Partner List - FY22 \(updated 9.1.2022\)](#) (PDF - 135KB) **TO BE REPLACED** with FY23 list upon NCATS website update. FY23 partner list emailed to all CTSA PIs and Administrators on 9.25.2023

**Any updates/changes must be requested by the institution's AOR to the NCATS Grants Specialist**

<https://ncats.nih.gov/ctsa/funding/CPUBRT>



# Seeking New CTSA Program Steering Committee Members!

- NCATS is seeking **5 UL1/UM1 PIs** to serve on the committee for the next 2-3 years (2024-2027).
- If you would like to self-nominate or suggest a fellow PI, please submit the PI name, institution, and brief explanation by **Wednesday, October 18<sup>th</sup>** [here](#)

The eligibility criteria for SC appointments:

- A PI must be officially named in the Notice of Grant Award of an active CTSA.
- The PI's hub award must have at least 3 years remaining during the project period.
- The PI has not served on the SC since December 2017





# Notice of Special Interest: NOT-TR-23-026



## Advancing Recruitment through the Trial Innovation Network (AR-TIN)

- **Purpose:** To design, develop, demonstrate, implement, and evaluate digital and non-digital innovative tools and resources to improve participant recruitment in clinical trials
- **NOSI/NOFO:** [NOT-TR-23-026](#) / [PAR-22-167](#) UG3/UH3
- **Budget:** may not exceed \$650K direct costs per year for up to 5 years
- **Receipt Dates:** October 17, 2023; February 15, 2024; June 18, 2024; October 17, 2024
- **Tools and resources of interest include, but are not limited to:**
  - methods to improve disease progression modeling to advance the use of participant-based information that will inform safety and efficacy,
  - tools and resources that advance the digitalization of clinical trials activities,
  - innovative ways to incorporate clinical and demographic characteristics of intended populations in the absence of self-identification,
  - improving rural inclusion in centralized and decentralized clinical trials,
  - user-friendly dynamic model on the inclusion/exclusion criteria and its impact on participant recruitment in clinical trials
  - proposals that explore the utilization of artificial intelligence (AI) and other digital-based technologies to increase and improve participant recruitment in clinical trials.
- Awardees will be members of the [Trial Innovation Network](#)
- **NCATS POC:** Ken Wiley, Jr., Ph.D., Email: [ar-tin@nih.gov](mailto:ar-tin@nih.gov)





# 2024 Supporting Instructions for CTSA RPPRs

## CTSA Specific Instructions for UL1, KL2, and TL1:

- Minor changes compared to the prior year (see page 5 in PDF)
- Download the PDF and open on your computer (NOT in your browser) to access the attached appendices
- Access here: <https://ctsa.ncats.nih.gov/governance-guidelines/guidelines/rppr-instructions/>

## CTSA Specific Instructions for UM1: (in progress)

- Guidance on reporting for Element E research projects
- Section G reporting of EAB/EAC, Pilots, Collaborators will be retained

## Other new CTSA mechanisms K12/T32s/R25/RC2: (in progress)

- K12 / T32s: Use NIH RPPR instructions **WITH** Appendix 3: Training Individual Progress Report (formatted table)



# NIH Data Management and Sharing Policy Reminder

NIH staff are here to answer your questions!



NIH Institute or Center (IC) Program Staff



NIH Data Sharing Policy Staff



Genomic Data Sharing (GDS) Support

## NIH Data Sharing Policy Staff

- Contact our central mailbox for questions about NIH Sharing Policies including the new Data Management and Sharing Policy [sharing@nih.gov](mailto:sharing@nih.gov)

## **NEW** NIH Application Instruction Updates – DMS Costs ([NOT-OD-23-161](#))

- DMS costs may be requested in many cost categories; no longer required to have a single DMS cost line item



National Center  
for Advancing  
Translational Sciences

# 2023 National Diversity in STEM Conference

- **Dates:** October 26-28, 2023 in Portland, Oregon
- **Conference:** Society for Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS) [National Diversity in STEM Conference](#).
- **CTSA Program Staff Attendees:** If you or someone in your program—such as scholars, trainees, and/or R25 participants—would be interested in meeting with CTSA Program staff, please contact:
  - Jamie Doyle ([jamie.doyle@nih.gov](mailto:jamie.doyle@nih.gov))
  - Andrew Loudon ([andrew.louden@nih.gov](mailto:andrew.louden@nih.gov))



# CTSA Community of Practice (CoP) to Advance Mentorship Inaugural Event

- Provide individuals in the CTSA and wider community with access to information and research about evidence-based mentorship education, mentorship policies and practices, and assessment strategies.
- **WEBINAR:** Barriers and Supports to Advancing a Culture of Mentorship
  - Tuesday, October 17th, 2023; 10:00 - 11:15 AM PT / 12:00 - 1:15 PM CT / 1:00 - 2:15 PM E
  - <https://uwmadison.zoom.us/j/99079257721?pwd=dWdTN0xIY3RxVGkyM2xXUHJ2TFhFUT09&from=addon>
  - Meeting ID: 990 7925 7721; Passcode: 721064
- **AGENDA:** (75 min)
  - Overview of the CTSA-led Community of Practice to Advance a Culture of Mentorship Presentation: Barriers and
  - Supports to Advancing a Culture of Mentorship
  - Small Group Discussions and Report Outs
  - Sharing CoP Resources and Ways to Engage
  - Q&A
- **CONTACT:** Dr. Melissa McDaniels, CoP Lead, [mmcdaniels@wisc.edu](mailto:mmcdaniels@wisc.edu)



# Request for Information: NOT-OD-23-180

- **Request for Information (RFI):**
  - Inviting Comments and Suggestions on Opportunities and Challenges for the Collection, Use, and Sharing of Real-World Data (RWD) including Electronic Health Records, for NIH Supported Biomedical and Behavioral Research [NOT-OD-23-180](#)
- **Issued by:** NIH Office of Data Science Strategy (ODSS)
- **Purpose:**
  - To solicit public comments on the use of Real-World Data (RWD), including Electronic Health Records, for Biomedical and Behavioral Research.
- **Suggested Topics:**
  - Scientific value and quality considerations for collection, use, and sharing of RWD in biomedical and behavioral research.
  - Using RWD as part of the scientific paradigm, including open science, scientific rigor and reproducibility, and team science.
  - Administrative and logistical considerations for collecting, using, and sharing RWD for biomedical research.
  - Ethical considerations for using RWD for biomedical and behavioral research.
- **Response due:** December 14, 2023: submission website: [datascience.nih.gov/rfi-rwd](https://datascience.nih.gov/rfi-rwd)
- **Inquiries:** NIH Office of Data Science Strategy [RWD-rfi@od.nih.gov](mailto:RWD-rfi@od.nih.gov)



## NCATS 2024 Strategic Plan

Current NCATS Strategic Plan (Fall 2016): <https://ncats.nih.gov/strategicplan>

*If you have feedback for the NCATS 2024 strategic plan, please send comments to:*

**[NCATS2024StrategicPlan@nih.gov](mailto:NCATS2024StrategicPlan@nih.gov)**

**NEW!** Request for Information (RFI): Inviting Input on NCATS' Strategic Plan for 2024-2029 ([NOT-TR-23-027](https://ncats.nih.gov/strategicplan))  
Responses accepted through November 1, 2023

# Notice of Award (NoA) Delays

- Non-competing grant applications are considered awarded on time if the NoA is issued prior to or on the budget period start date.
- NIH cannot issue a NoA until all compliance issues are resolved and/or NIH provides the option to the NIH Institute/Center/Offices to issue restricted awards.
  - If a recipient fails to comply with the terms and conditions of award, NIH may take enforcement action including disallowing costs, withholding of further awards, or wholly or partly suspending the grant, pending corrective action.
  - Compliance concerns resulting in special award actions are required to be reported to the NIH Office of Policy for Extramural Research Administration (OPERA).
  - Compliance resolution requires substantial staff time from all parties involved.





# Research Performance Progress Report (RPPR) Reviews

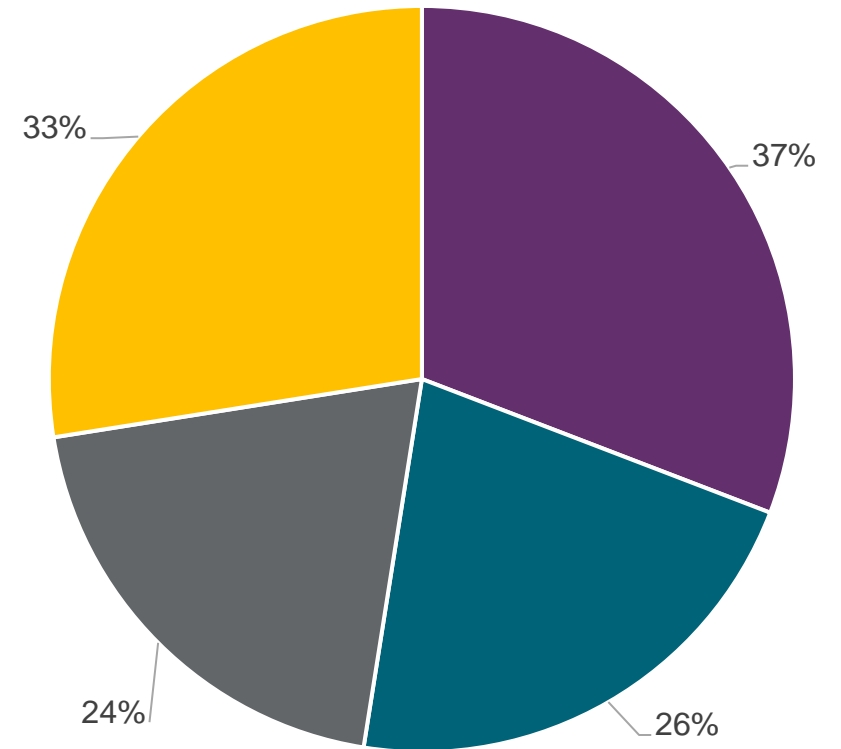
- All FY23 non-competing UL1 RPPR application submissions were analyzed.
- 28% of the RPPRs reviewed did not include any non-compliance concerns.
- Most RPPRs without non-compliance concerns resulted in NoAs issued prior to the budget period start date. (Note – two were issued within 4 days of the budget period start date to accommodate for new prior approval request submissions.)



# Non-Compliance Delays

- There is a direct correlation between non-compliant RPPR submissions and late NoAs.
- 72% of UL1 RPPR applications were submitted with a non-compliance concern requiring resolution prior to award.
- 48% included more than one non-compliance concern.
- NoA delays stemmed from 1 – 112 days late.
- Three major areas of non-compliance – public access, clinical trial reporting, and other support.

RPPR Submissions



■ Public Access ■ Clinical Trial Reporting ■ Other Support ■ Other



# Moving Forward...Working Together

- UL1/KL2/TL1 are linked applications meaning the review must be conducted simultaneously which also means that non-compliance or concerns on one component application impacts the others causing additional delays.
- The new suite of Notice of Funding Opportunities (NOFOs) will be subject to independent reviews and award actions.

## NCATS Support:

- Additional guidance will be provided over the next few months for the three primary areas of compliance concern.
- Orientation discussions will be held with all new UM1 recipients to better understand and assist with individual Hub challenges.
- More proactive communication will be provided directly with individual Hubs on compliance concerns, resolutions, and enforcement.



# Upcoming Dates to Remember

## Next CTSA Program Webinar

**October 25, 2023; 2-3 PM ET. [Register here.](#)**



# NCATS

**COLLABORATE. INNOVATE. ACCELERATE.**

 [ncats.nih.gov](https://ncats.nih.gov)

 [@ncats\\_nih\\_gov](https://twitter.com/ncats_nih_gov)

 [@ncats.nih.gov](https://facebook.com/ncats.nih.gov)

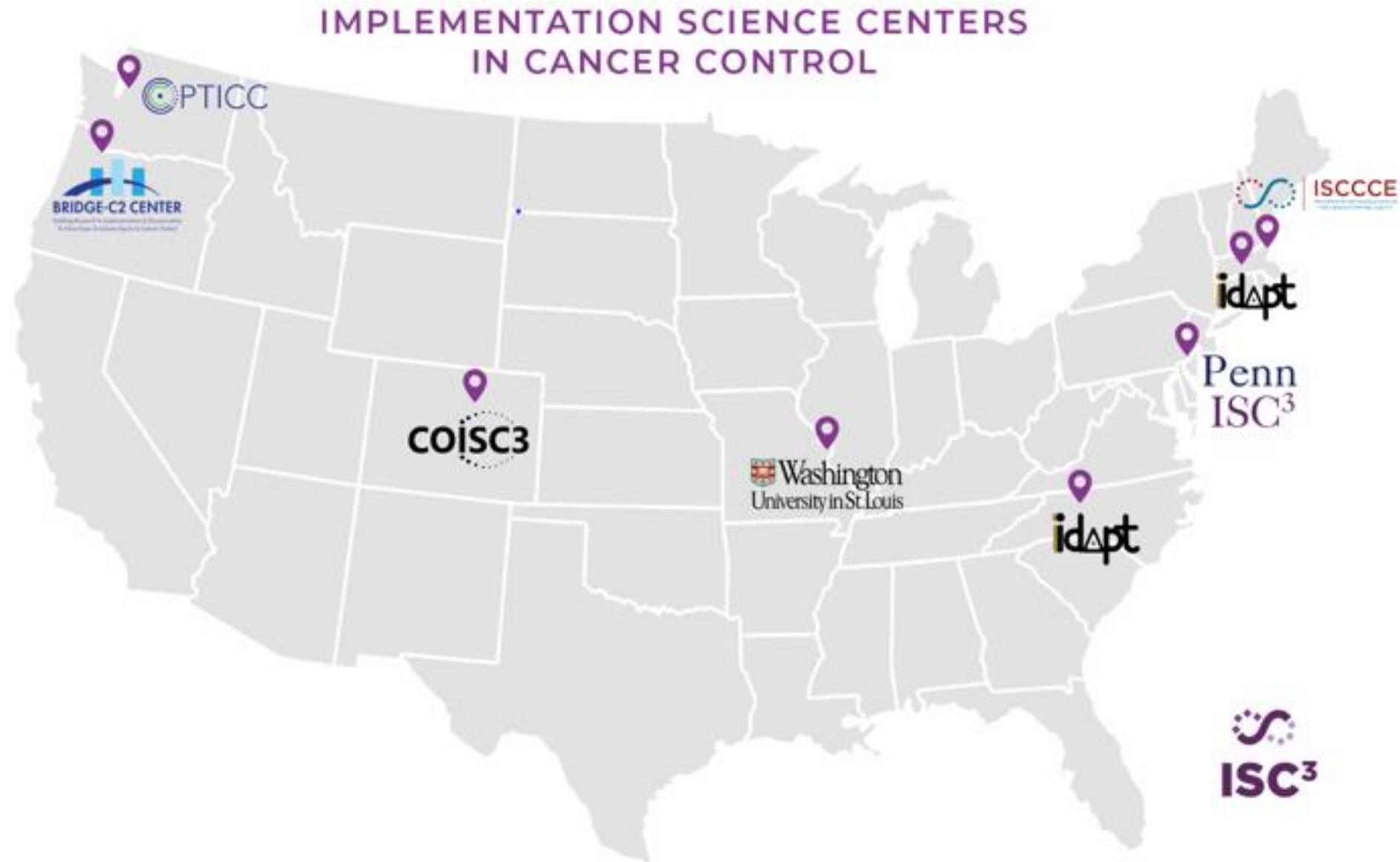
 [NIH-NCATS](https://linkedin.com/company/NIH-NCATS)



**NIH** National Center  
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Translational Sciences

# Journal of Clinical and Translational Sciences Themed Issue on Impact Measures in Implementation Science

# Origin of the Themed Issue



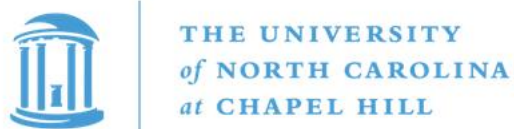




PI/MPI	Institution(s)	Themes	Implementation Labs (iLabs)
Karen Emmons Elsie Taveras	Harvard	Health equity Cancer screening	Federally Qualified Health Centers
Jennifer DeVoe Nathalie Huguet	Oregon Health & Science University	Underserved populations Cancer prevention	Primary care Safety net clinics
Russell E. Glasgow	University of Colorado	Pragmatic research Cancer prevention	Rural primary care practices
Rinad Beidas Justin Bekelman Robert Schnoll	University of Pennsylvania	Behavioral economics Equitable implementation Cancer care delivery	Hospitals Community-based practices
Bryan J. Weiner Margaret Hannon	University of Washington	Methods, measures Cancer treatment and care	Primary care clinics, health systems, cancer centers, local/state health departments
Kristie Long Foley Thomas Houston Sarah Cutrona	Wake Forest University of Massachusetts	Technology-assisted implementation Intervention adaptations Cancer control	Primary care practices Cancer centers Community-oncology practices
Ross C. Brownson Graham A. Colditz	Washington University in St. Louis	Sustainability Systems science Cancer control	FQHCs, primary care, health departments, community organizations

# Journal of Clinical and Translational Science Themed Issue

- Focus: Advancing Understanding and Use of Impact Measures in Implementation Science
- Areas of interest:
  - Descriptive studies on the application of impact measures (e.g., TSBM) in clinical, community, economic or policy to document impacts of implementation science;
  - Case studies of how impact measures have been used to measure outcomes in implementation science projects across a wide range of health conditions (e.g., cancer, diabetes, heart disease, mental health, infectious diseases) and contexts (e.g., policy, community evaluation, healthcare delivery, etc.);
  - Papers that focus on extensions or modifications to existing impact measures (e.g., TSBM) to account for additional categories of impact that are not as clearly delineated in the base model;
  - Identifying measures of implementation science impact beyond academic metrics; and
  - Developing approaches that will further build a focus on health equity into assessment of implementation science impact.
- Submissions due: February 15, 2024



# CTSA Working Group: Clinical Research Study Complexity Assessment



## Goals of the Presentation

- Provide an overview of the *Study Complexity Workgroup* project
- Discuss data obtained from
  - Phase 1 – Content, Face, and Cognitive Validity
  - Phase 2 – Inter-rater Reliability Testing
- Summarize the next steps and dissemination plans

# Background of the Project

- Barriers and challenges to developing and implementing clinical research.
  - Complex regulatory requirements
  - Restrictive eligibility criteria
  - Specific study timelines
  - Limiting funding
  - Appropriate staffing



# Goals of the Project



- Identify the dimensions and attributes of clinical research complexity.
- Develop a scoring rubric to scale clinical research study complexity.
- Establish the initial psychometric properties of an instrument that aims to measure clinical research study complexity.

# Available Tools for Study Complexity

- Methods of evaluate clinical research study complexity are scant.
- Available tools are specific to oncology research
  - Ontario Protocol Assessment Level
  - Wichita Community Clinical-Trial Oncology Protocol Acuity
  - NCI Trial Complexity Elements and Scoring Model





# Processes Used in Clinical Research Studies

- Logistics/feasibility of protocol
- Protocol approvals
- Work with multiple departments (i.e., radiology, pharmacy, laboratory)
- Participant recruitment, screening, study visits, follow-ups
- Communication with sponsors, team members, study participants



# Dimensions of Scaling Study Complexity

Structure			Process		Outcomes
Environment	Personnel	Resources	Procedures	Team-based processes	Study Outcomes
<ul style="list-style-type: none"> <li>• Ample physical space in primary institution to conduct study procedures</li> <li>• Institutional and Stakeholder Support</li> <li>• Access to external environments required to conduct study procedures (if applicable)</li> </ul>	<ul style="list-style-type: none"> <li>• Research team size/composition</li> <li>• Research team experience level</li> <li>• Proposed investigator effort/allocation of time to complete study</li> <li>• Access to support staff to carry out study procedures</li> </ul>	<ul style="list-style-type: none"> <li>• Required equipment &amp; supplies to carry out procedures</li> <li>• Sufficient funding</li> </ul>	<ul style="list-style-type: none"> <li>• Study procedures (*core elements)</li> <li>• Feasibility of recruitment and enrollment, the sample size</li> <li>• Number of study arms <ul style="list-style-type: none"> <li>- registration or randomization steps</li> <li>- complexity of the intervention</li> <li>- length of study (number of study visits)</li> <li>- data collection complexity</li> <li>- follow-up requirements</li> <li>- personnel impact (number of staff to coordinate study)</li> </ul> </li> <li>• Feasibility of timeline for study completion</li> </ul>	<ul style="list-style-type: none"> <li>• Delineated roles and responsibilities for each study team member</li> <li>• Measures of accountability for task completion</li> <li>• Conflict resolution</li> </ul>	<ul style="list-style-type: none"> <li>• Novel evidence produced that warrants investigation and future research</li> <li>• Plan for feedback and evaluation of methodologic success needed for subsequent study planning</li> </ul>

\* Adapted from NCI Trial Complexity Elements; Model adapted from Donabedian's Quality Model

**Original NCI Trial Complexity  
Elements and Scoring Model**

Element Number	Study Element
1	Study Arms
2	Informed Consent Process
3	Registration or Randomization Steps
4	Complexity of Investigational Treatment (Tx)
5	Length of Investigational Tx
6	Feasibility & Personnel Impact
7	Data Collection Complexity
8	Follow-up Requirements
9	Ancillary Studies (includes correlative studies, imaging)
10	Participant Feasibility & Enrollment


**Heilbrunn Research  
Complexity Index**

Element Number	Study Element
0	Pre-Study Prep
1	Study Design
2	Recruitment
3	Informed Consent
4	Randomization
5	Intervention/Dosing
6	Research Team
7	Data Collection
8	Follow-up Requirement
9	Data Analysis
10	Dissemination

# Content, Face & Cognitive Validity

## Phase 1

- Content, Face, and Cognitive validity testing
- N = 6 Targeted

## Eligibility Criteria

- Engaged in clinical research for five years or more
- Experience in preparing, directing, or coordinating clinical studies sponsored by industry, foundation, and/or government
- Certified in Good Clinical Practice
- Completed training in research, ethics, and compliance





## Content

- Participants rate each element/response tier 4 point Likert-type scale ranging from 'highly relevant (4) to 'highly irrelevant' (1).
- Content validity index (CVI) computed.
- CVI greater than .8 will be eligible for inclusion and further psychometric testing

## Face

- 1:1 interviews
- Participants asked to read each item aloud and interpret the intended element and response options
- Iterative revisions with each subsequent interview until agreement reached

## Cognitive

## Clinical Research Workload and Study Complexity Assessment

Page 2 of 12

### Section A: Pre-Study Preparation

On a scale from 1-4, how **relevant** is the *Selection of Measures* item? (1= extremely irrelevant, consider removal; 2= somewhat irrelevant, major revision recommended; 3=slightly irrelevant, minor revisions recommended; 4= extremely relevant, no revisions recommended).

	1	2	3	4	
1. Selection of Measures (e.g. validated measures to the target population, translated, number of measures needed)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Tier 1 (1 point): -1 measure -Validated in population	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<a href="#">reset</a>
Tier 2 (2 points): -2 to 3 measures -Not validated in population	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<a href="#">reset</a>
Tier 3 (3 points): -4 or more measures -Unknown validity of measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<a href="#">reset</a>

On a scale from 1-4, how **clear** is your understanding of what *Selection of Measures* is measuring? (1= extremely unclear, consider removal; 2= somewhat unclear, major revision recommended; 3=slightly unclear, minor revisions recommended; 4= extremely clear, no revisions recommended).

# Phase 1 Results

- Content Validity (n=7)
  - CVI .42-1.0
  - 34 elements/tiers fell below 0.8 threshold
  - New Instrument development justification
- Face & Cognitive Interviews (n=8)
  - Iterative revisions of elements and tiers
  - Goal: Inclusive of all study design and elements of research





## 25 Elements

- Selection of Study Instruments
- Physical equipment
- Budget Preparation
- Consultant Agreements
- Facilities or vendor agreement
- Multiple PI agreements
- Hiring and Job Descriptions
- Study Arms
- Access to Target Population
- Vulnerable Populations
- Participant Eligibility
- Incentives
- Informed Consent
- Randomization
- Type of Intervention
- Intervention Administration
- Research team
- Data Collection (Procedures)
- Data Collection (Frequency)
- IRB Prep
- Compliance Reporting
- Expected AE/Safety
- Follow up
- Statistical Analysis
- Dissemination

<b>HEILBRUNN RESEARCH COMPLEXITY INSTRUMENT:</b> The purpose of this instrument is to scale the complexity of a research protocol. For each of the following elements, circle which level best fits the protocol.			
Study Element	1 point	2 points	3 points
<b>Selection of Study Instruments (e.g., surveys, tools)</b>	1 instrument <i>and</i> Instruments validated in population	2 to 3 instruments <i>or</i> Instruments valid but not validated in targeted population <i>or</i> At least 1 case report form; simple; 1-page form	4 or more instruments <i>or</i> Unknown validity <i>or</i> 2 or more case report forms that require multiple categorization; multiple pages
<b>Physical Equipment</b>	Not applicable <i>or</i> Usual or standard care equipment (e.g. thermometer, ECG)	New to study team <i>or</i> Some learning required	Complex equipment in learning <i>or</i> Calibration needed
<b>Budget Preparation/ Approvals</b>	2 or fewer authorizers	3-4 authorizers	5 or greater authorizers
<b>Consultant Agreements</b>	Consultant Agreements (0)	Consultant Agreements that include different roles for each person (1-3)	Consultant Agreements that include different roles for each person (4 or more)

## Phase 2

- Pilot testing to establish initial reliability
- Instrument built into REDCap
- Participants score 2 independent clinical research protocols
- N = 30 (Target)

### Eligibility Criteria

- engaged in clinical research for five years or more
- experience in preparing, directing, or coordinating clinical studies sponsored by industry, foundation, and/or government
- certified in Good Clinical Practice
- completed training in research, ethics, and compliance

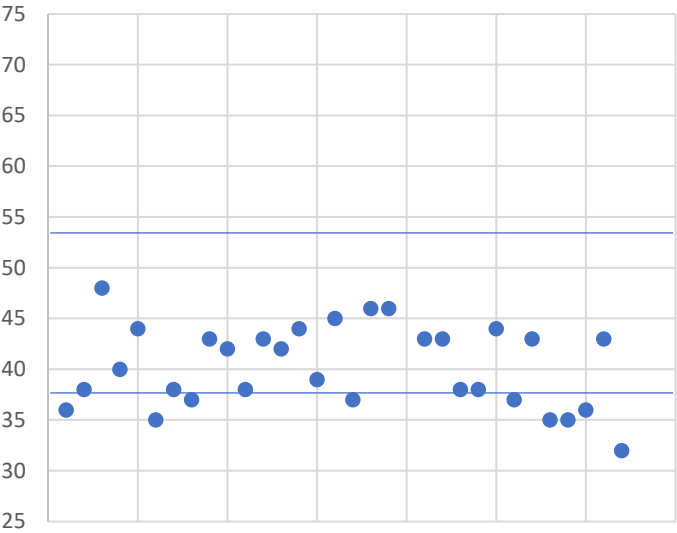
**Data analysis:** Descriptives (item mean/SD), % agreement; Fleiss Kappa statistic for inter-rater reliability

## Phase 2: Pilot Testing

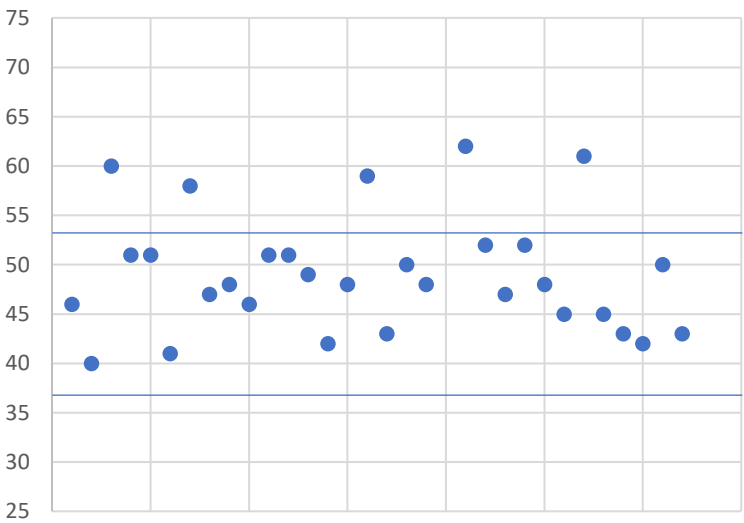
# Phase 2 results

- N=31 participants
- Potential Range 25-75 points
- Protocol 1 composite score range 32-48
- Protocol 2 composite score range 40-60

Protocol 1



Protocol 2



Agreement on Individual Categories<sup>a</sup>

Rating Category	Conditional Probability	Kappa	Asymptotic Standard Error	z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
1.00	.502	.216	.010	20.873	.000	.196	.237
2.00	.503	.122	.010	11.792	.000	.102	.143
3.00	.427	.282	.010	27.184	.000	.262	.302

a. Sample data contains 31 raters.

<u>Element</u>	Protocol 1			Protocol 2		
	1	2	3	1	2	3
<b>Selection of Study Instruments</b>	0.00%	22.58%	77.42%	0.00%	22.58%	64.52%
<b>Physical equipment</b>	51.61%	48.39%	0.00%	45.16%	41.94%	0.00%
<b>Budget Preparation</b>	83.87%	12.90%	0.00%	70.97%	12.90%	0.00%
<b>Consultant Agreements</b>	67.74%	29.03%	3.23%	58.06%	29.03%	0.00%
<b>Facilities or vendor agreement</b>	25.81%	70.97%	3.23%	19.35%	64.52%	3.23%
<b>Multiple PI agreements</b>	74.19%	12.90%	12.90%	67.74%	12.90%	6.45%
<b>Hiring and Job Descriptions</b>	64.52%	32.26%	3.23%	58.06%	25.81%	3.23%
<b>Study Arms</b>	77.42%	6.45%	16.13%	67.74%	6.45%	12.90%
<b>Access to Target Population</b>	41.94%	38.71%	19.35%	35.48%	32.26%	19.35%
<b>Vulnerable Populations</b>	29.03%	64.52%	6.45%	25.81%	54.84%	6.45%
<b>Participant Eligibility</b>	0.00%	74.19%	22.58%	0.00%	61.29%	22.58%
<b>Incentives</b>	6.45%	16.13%	77.42%	6.45%	12.90%	67.74%
<b>Informed Consent</b>	19.35%	77.42%	3.23%	16.13%	67.74%	3.23%
<b>Randomization</b>	100.00%	0.00%	0.00%	90.32%	0.00%	0.00%
<b>Type of Intervention</b>	93.55%	6.45%	0.00%	80.65%	6.45%	0.00%
<b>Intervention Administration</b>	90.32%	9.68%	0.00%	77.42%	9.68%	0.00%
<b>Research team</b>	58.06%	32.26%	9.68%	51.61%	25.81%	9.68%
<b>Data Collection (Procedures)</b>	19.35%	58.06%	22.58%	16.13%	51.61%	19.35%
<b>Data Collection (Frequency)</b>	25.81%	64.52%	9.68%	22.58%	54.84%	9.68%
<b>IRB Prep</b>	0.00%	83.87%	16.13%	0.00%	70.97%	16.13%
<b>Compliance Reporting</b>	38.71%	58.06%	0.00%	38.71%	45.16%	0.00%
<b>Expected AE/Safety</b>	90.32%	9.68%	0.00%	77.42%	9.68%	0.00%
<b>Follow up</b>	87.10%	12.90%	0.00%	74.19%	12.90%	0.00%
<b>Statistical Analysis</b>	54.84%	35.48%	9.68%	51.61%	25.81%	9.68%
<b>Dissemination</b>	70.97%	16.13%	9.68%	61.29%	12.90%	9.68%



# Summary

- Develop and establish initial psychometric properties of a novel instrument to scale study complexity
- Pilot testing demonstrates high cognitive validity and fair inter-rater reliability
- 4 elements potentially warrant further investigation including revision and/or removal
- Future research should include construct validity testing with a greater sample size
- Potential Future Use
  - Grant/Budget Planning
  - Resource allocation
  - % effort delineation
- Dissemination Plans
  - Manuscript
  - Professional Association Presentations
    - International Association for Clinical Research Nurses
    - Memorial Sloan Kettering Research Round Table
    - Society of Clinical Research Associates
    - Sigma Theta Tau International
    - Academy Health



## Next Steps

### Dissemination Plans

- Manuscript
- Professional Association Presentations
  - International Association for Clinical Research Nurses
  - Memorial Sloan Kettering Research Round Table
  - Society of Clinical Research Associates
  - Sigma Theta Tau International
  - Academy Health
- Construct Validity Testing

### Contact Information:

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Margaret Barton-Burke PhD, RN, FAAN (Memorial Sloan Kettering Cancer Center)

Bernadette 'Candy' Capili PhD, NP-C (Rockefeller University) - CHAIR

Christine Kovner PhD, RN, FAAN (New York University)

Allison Norful, PhD, RN, ANP-BC, FAAN (Columbia University)- STUDY LEAD

Olga Jarrín Montaner, PhD, RN, FAAN (Rutgers University)

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Bridget Adams, MS (Oregon Health & Science University)

Ashley Arrington (University of North Carolina-Chapel Hill)

Jackie Attia (University of Rochester – CCOS)

Maria Chiodo, MPH (University of Rochester)

Gallya Gannot, PhD (NIH, NCATS)

Susanne Heiningen (University of Rochester)

Scott McIntosh, PhD (University of Rochester – CCOS)

Kitt Swartz, MPH (Oregon Health & Science University)

Abby Spike (University of Rochester – CCOS)

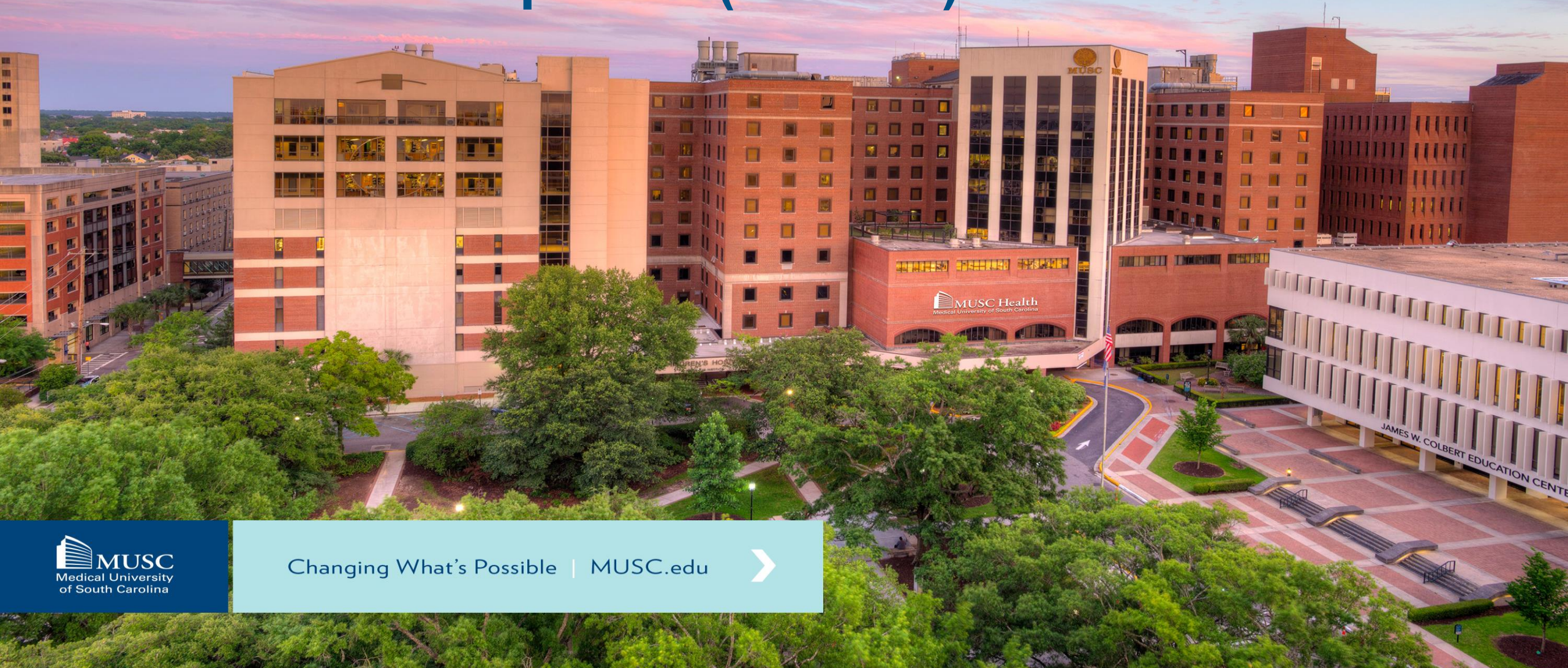




Thank you



# A Collaborative Approach to CTSA Program Evaluation Data: SPARCRequest© (SPARC)





**Jillian Harvey, PhD, MPH, SCTR Program Evaluation Director**

**Royce Sampson, MSN, RN, CRA, Primary Administrator, SPARC Product Owner**

**Leila Forney, DNP, CCRP, CHRC, SPARC Project Director**

**South Carolina Clinical & Translational Research Institute Medical University of South Carolina**



This project was supported by the National Center For Advancing Translational Sciences of the National Institutes of Health under Award Number UL1TR001450

# Presentation Goals & Outcomes

**Goals:** Present an innovative solution to address CTSA evaluation challenges, support the field of translational science, and promote impactful partnerships and collaborations.

**Expected Outcomes:** Dissemination of a best practice to address evaluation challenges, support CTSA programs, and build CTSA consortium collaborations to advance clinical and translational science.



# Agenda

- SPARC and RINS Update
- CTSA Program Evaluation Challenges
- The Future of Evaluation
- Evaluation Utilization
- CTSA Collaborations and Dissemination





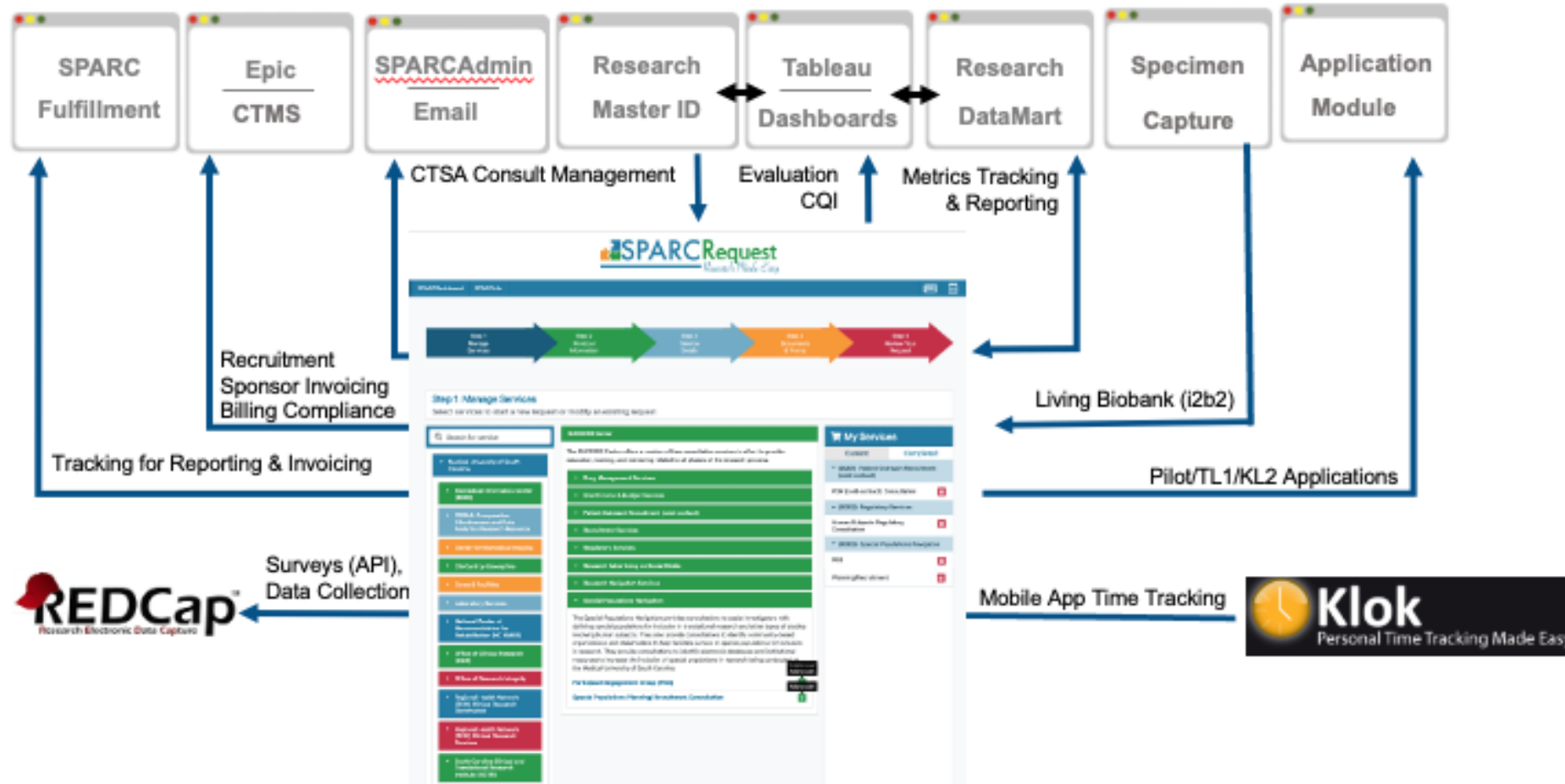
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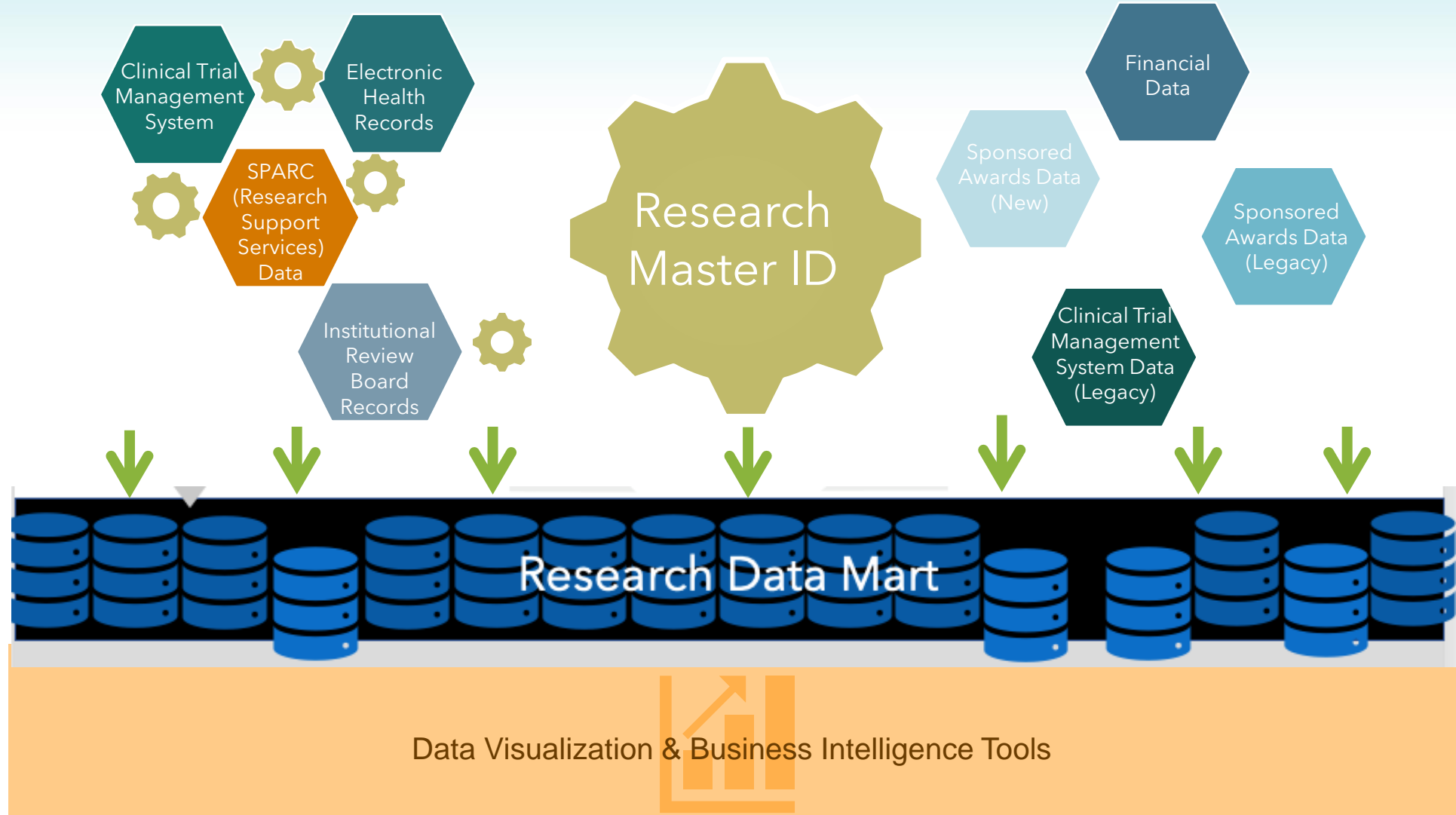


Updates:

What is SPARCRequest© and  
the Research Integrated  
Network of Systems (RINS)

# SPARCRequest<sup>®</sup> CTSA eStorefront: “A Research Transaction Manager”







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## Program Evaluation Challenges



# Service Utilization and Evaluation Challenges

1. Unclear of all available services
2. Confusion navigating “external” services
3. Lack of awareness of when CTSA services were used
4. Difficulty knowing and tracking each service that has been recommended for a study

Source: Elworth JT, Vaught M, Harvey J, Paranal R, Zell A, El Bcheraoui C, Elworth JT, Vaught M, Harvey J, Paranal R, Zell A, El Bcheraoui C. Exploratory study of the underutilization of CTSA module services. J Clin Transl Sci. 2022; 6(1):e114. PMID: [36285017](#); PMCID: [PMC9549576](#).



Evaluation &  
Service Managers  
have limited  
bandwidth

There is a  
growing demand  
for data

Item	Feasibility	Importance
1. Number and type of <b>patents or trademarks</b> filed and/or received (e.g. IP data, implementation science etc.)	<input type="text"/>	<input type="text"/>
2. Number and type of <b>trainings offered by Hub</b> (e.g. courses, certificates, workshops, seminars, tracks, etc.)	<input type="text"/>	<input type="text"/>
3. <b>Institutional collaboration and commitment to clinical and translational science research</b> (e.g. number of projects and protocols, in-kind support, \$ and personnel)	<input type="text"/>	<input type="text"/>
4. Number of <b>pilot grants advancing to clinical trial proposals and/or awards</b>	<input type="text"/>	<input type="text"/>
5. Median <b>time to complete CTSA Hub-supported consultation and/or services</b> (duration in days)	<input type="text"/>	<input type="text"/>
6. Number and type of measurable <b>plans, policies or changes related to diversity, equity, and inclusion</b>	<input type="text"/>	<input type="text"/>
7. Number and types of <b>CTSA Hub interactions with state, local and public health entities</b>	<input type="text"/>	<input type="text"/>
8. Qualitative data regarding how <b>gender and racial diversity in clinical translational research</b> can be achieved and/or what is needed	<input type="text"/>	<input type="text"/>
9. Number and types of <b>new or ongoing collaborations with multiple CTSA Hubs and/or national consortium</b>	<input type="text"/>	<input type="text"/>
10. Number and percent of <b>pilot awardees</b> overall and by relevant demographics (e.g. women and underrepresented populations)	<input type="text"/>	<input type="text"/>
11. For newly-emerging health crises requiring a rapid response: Number of CTSA-affiliated <b>investigators publishing relevant results within X period of time</b> (in months or years)	<input type="text"/>	<input type="text"/>
12. Relative <b>familiarity with the term "translational science"</b> among key indicator groups (healthcare providers, leaders of relevant community organizations and academic faculty in relevant fields)	<input type="text"/>	<input type="text"/>
13. Number and type of <b>underrepresented populations in clinical trials</b>	<input type="text"/>	<input type="text"/>
14. Number and type of CTSA Hub supported <b>services with subsequent grants and/or publications cited</b>	<input type="text"/>	<input type="text"/>
15. Number of different <b>CTSA initiatives with a specific focus on greater than one of the following: quality, safety, efficiency and effectiveness of clinical research</b>	<input type="text"/>	<input type="text"/>
16. Number, type, duration, and quality of Hub-supported <b>community engagement services and tools</b>	<input type="text"/>	<input type="text"/>
17. Number of <b>datasets made discoverable</b> as a result of Hub-supported Informatics resources	<input type="text"/>	<input type="text"/>
18. The collection of high-level <b>success stories</b> (e.g. novel approaches or collaborations, mitigating translational science roadblocks...)	<input type="text"/>	<input type="text"/>
19. Number and type of <b>changes in promotion and tenure policy as the result of Hub activities</b>	<input type="text"/>	<input type="text"/>
20. Number of Hub supported <b>opportunities created for novel care approaches for clinical research participants</b> relative to other regional providers	<input type="text"/>	<input type="text"/>
21. <b>Cost per participant enrolled</b> in NIH-supported clinical trials	<input type="text"/>	<input type="text"/>
22. <b>Scientific interdisciplinarity</b> as measured by number and type of Doctoral/MBA/MPH degree types, scientific areas, and/or collaborations between and support of various departments, in Hub-supported work	<input type="text"/>	<input type="text"/>





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Evaluation Utilization

# Evaluation Utilization



# SPARCRequest<sup>®</sup>: Evaluation Data Collection

SCTR Customer Satisfaction Survey

Fields with an Asterisk ( \* ) are required

Customer Satisfaction

Thank you for utilizing services from the South Carolina Clinical and Translational Research Institute (SCTR), MUSC's CTSA. SCTR is committed to providing high quality research support services. Your feedback on a one-question survey is requested about the services and tools provided to you. The results of your responses will provide valuable information to evaluate our performance and guide the development of future resources. Be assured that your answers will be kept confidential. Thank you for your participation.

1) How likely is it that you would recommend this SCTR service to a colleague?\*

1

2

3

4

5

Not at all likely

Not very likely

Neutral

Somewhat likely

Extremely likely

2) If you would like to provide additional feedback, please use the space below.

Citation

Please remember to cite the CTSA grant in any related publication:  
"This publication [or project] was supported by the South Carolina Clinical & Translational Research (SCTR) Institute, with an academic home at the Medical University of South Carolina NIH - NCATS Grant Number UL1 TR001450."



# SCTR Impact: Helping Research Happen at MUSC



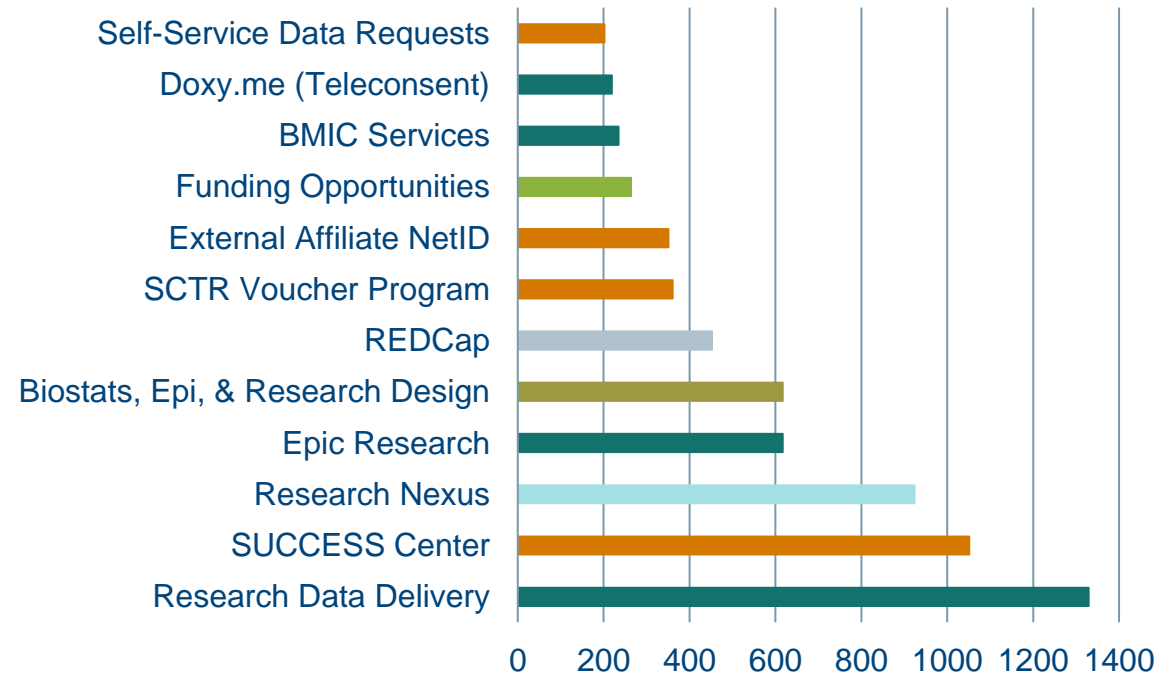
July 2018 - June 2023



<b>SCTR</b>	<b>4,823</b>	<b>9,872</b>	<b>3,235</b>
<b>BMIC</b>	<b>2,467</b>	<b>2,896</b>	<b>1,845</b>
	Requests	Services	Protocols

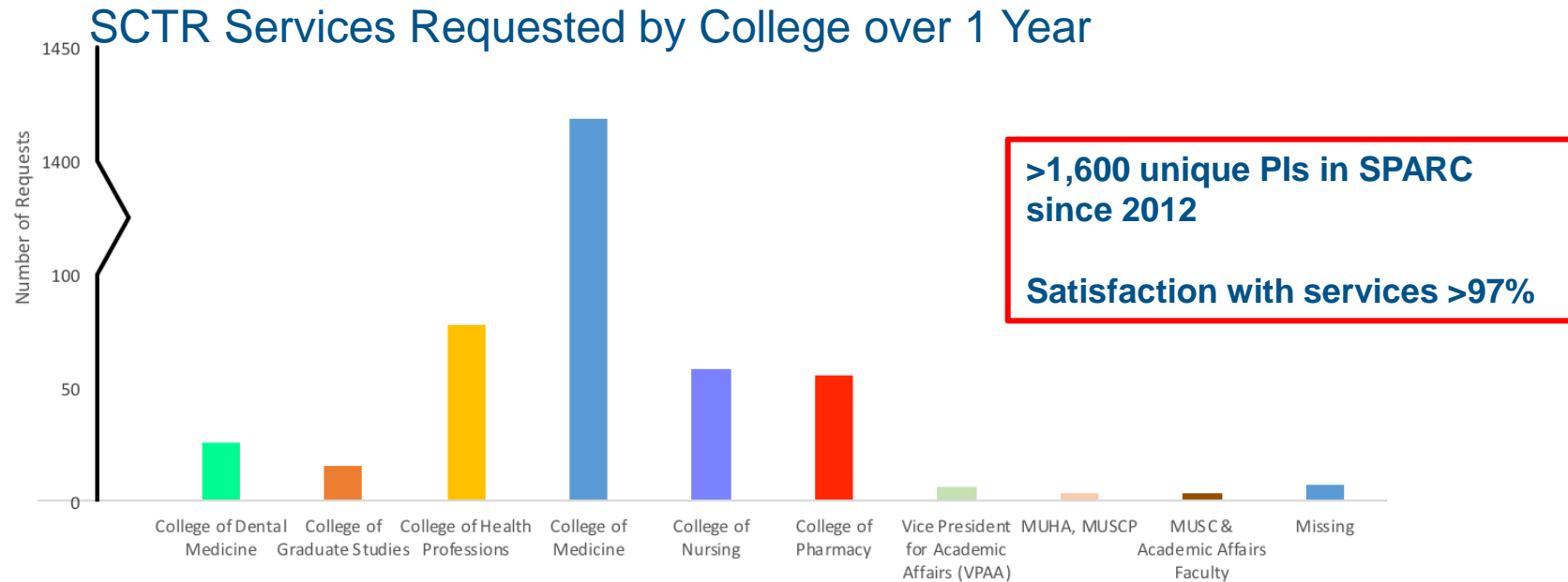
**97%**  
Satisfaction

SCTR & BMIC Program Requests, 2018-2023



# High Institutional Visibility and Utilization

18

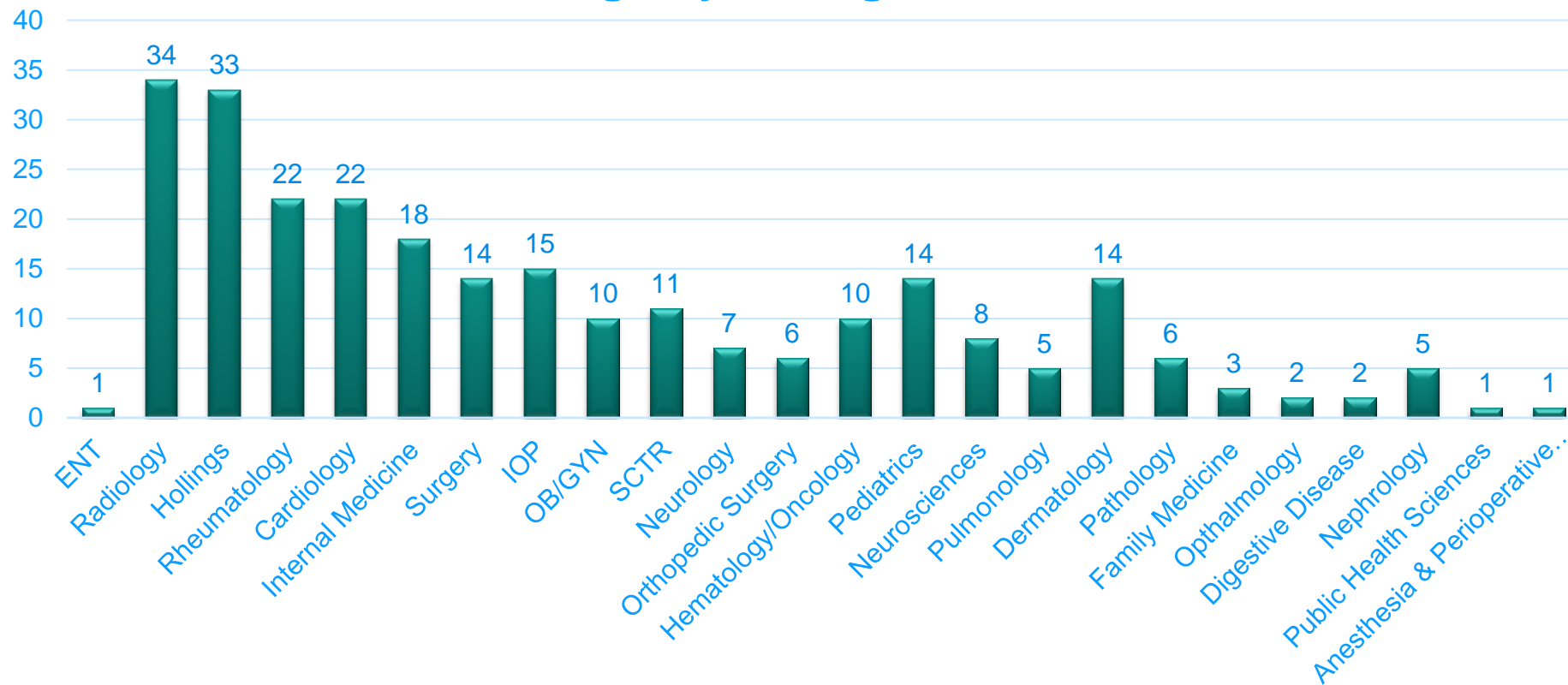


Services	Number	Services	Number
Biomedical Informatics Services	24	Recruitment & Special Populations	15
Biostatistics, Design, & Epidemiology	302	REDCap	142
Clinical Data Warehouse	40	Regulatory Services	236
Clinical Research Ethics Program	4	Research Coordination & Management	134
Clinical Trials Design Center & TIN	7	Research Data Requests	208
Community Engagement & Research	3	Research Navigation Services	9
Drug Management Services	5	Research Nexus	1331
Epic Research	2	Science Consultation	3
External Affiliate NetID	61	Self-Service Research Data & Feasibility	43
Grant Forms & Budget Services	45	Telehealth Research Services	2
Nexus Biorepository	3	Voucher Program	68



# Stakeholder Metric Tracking & Reporting

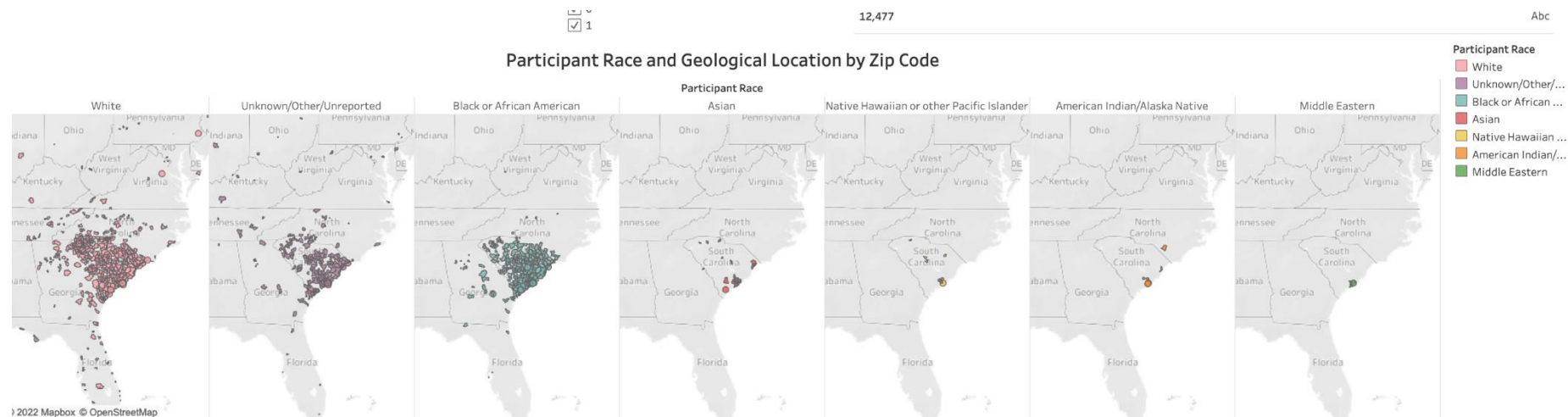
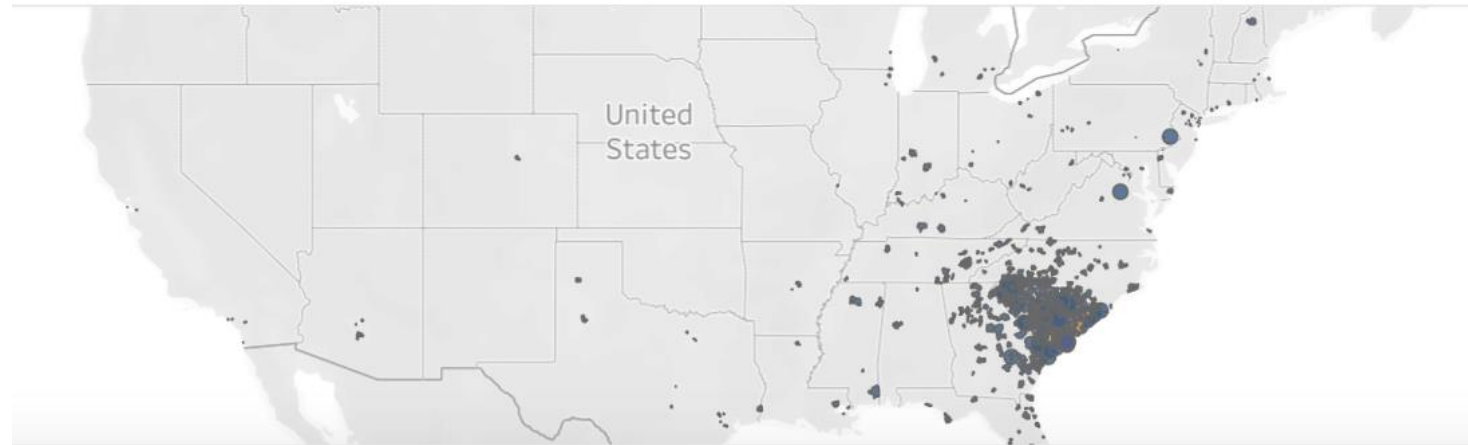
## Usage by College of Medicine



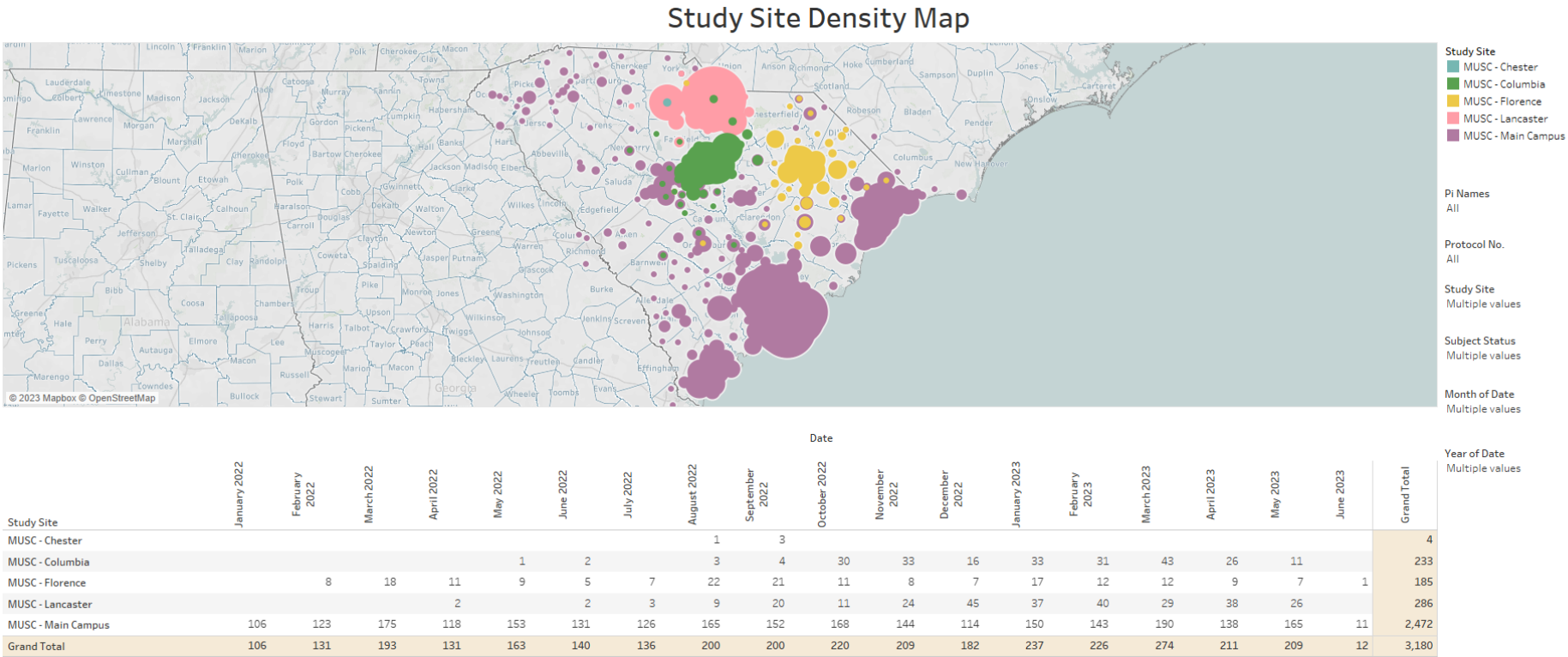


# SPARC: SCTR Research Nexus Clinical Research Unit: Research Participants (location, race, age, gender)

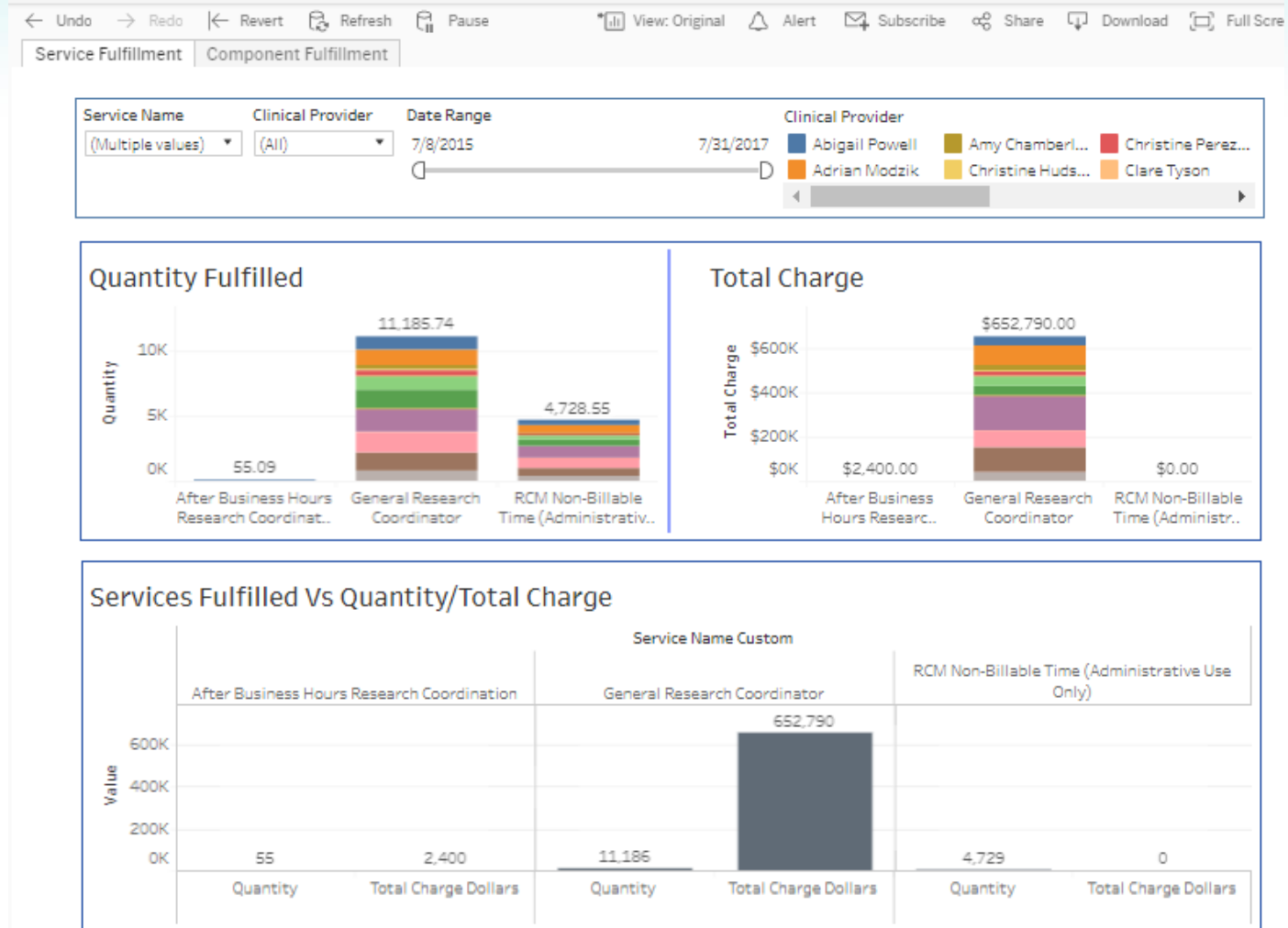
Number of Participants and Geological Location by Zip Code



# RINS: MUSC Main Campus and Regional Health Network (RHN) Research Participants



# SPARCRequest® Supports: Program & Service Center Management



# Continuous Quality Improvement– Challenges & SPARC Opportunities

## Service Utilization and Evaluation Challenges

1. Unclear of all available services
2. Confusion navigating “external” services
3. Lack of awareness when CTSA services are used
4. Difficulty knowing and tracking each service that has been recommended for a study

## SPARCRequest Opportunities

- SPARC Catalog of Services
- SPARCRequest can add services & track referrals
- Dashboards for Study Teams and Service Managers
- Document repository for study teams and service providers
- Access to study protocol documents





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Cross CTSA Functionality



**Join Our SPARC Open-Source Governance Community**

SPARC Open-Source Map Version Date: 3/6/2023

# Next steps & How to Get Involved

Contact us at:

[SPARCRequest@musc.edu](mailto:SPARCRequest@musc.edu)

Action Items:

Explore CTSA Consortium options for SPARCRequest©

- › Cloud Instance
- › Shared Marketplace
- › Shared Evaluation Opportunities







**SPARCRequest©:** <https://research.musc.edu/resources/sctr/research-resources/tools/sparcrequest>

**SPARCRequest© (SPARC) Confluence Wiki**  
<https://sparcrequest.atlassian.net/wiki/spaces/RD/overview>

**SPARCRequest**  
Videos: <https://sparcrequest.atlassian.net/wiki/spaces/AG/pages/37093447/Training+Videos>





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Questions and Discussion

## 2023 Fall CTSA Program Annual Meeting

*Leveraging Real World Data and AI to Advance Translation*

**Registration is (still) open!** Be sure to register before close date on Oct 16th



**Nov 6**

CTSA  
Administrators  
*Morning*

Steering  
Committee Meeting  
*Afternoon*

**Nov 7**

CTSA Program  
Meeting  
*Full day*

Poster and  
Networking  
Session  
*Evening*

**Nov 8**

CTSA Program  
Meeting  
*Morning only*

***Check CCOS website for detailed agenda,  
speaker bios, session descriptions***

# 2023 Fall CTSA Program Annual Meeting

## Poster Session on Nov 7 (6-8pm ET)

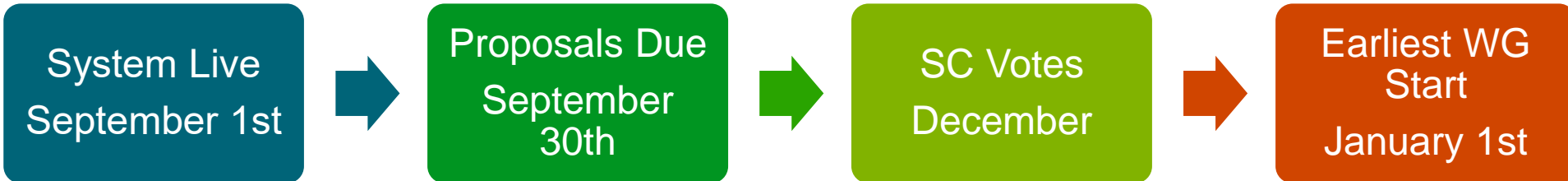
Poster Submission Form is now available on [CCOS website](#)

- Poster session is designed to spotlight **CTSA trainees and scholars**
- Each hub may submit a **single** poster from a TL1/T32 trainee or KL2/K12 scholar related to the overarching theme of the meeting
  - If your Hub does not have a current TL1/T32 trainee or KL2/K12 scholar working in an area related to the meeting theme, we would encourage you to identify an early career candidate that is in line with the spirit of this poster session and request approval via [FallPlanningCmt@ccos.ctsa.io](mailto:FallPlanningCmt@ccos.ctsa.io)
- Hub Administrators (or designee) may submit the abstract and digital poster representing their hub to the CCOS website
- ***The submission portal will close on October 23<sup>rd</sup>***
- A poster gallery will be viewable on the CCOS website on Oct 27<sup>th</sup>
- Awardees to be recognized during session on Nov 8<sup>th</sup>

# Working Group Proposal Submission Period

**Closes on September 30<sup>th</sup>, 2023**

All proposals should be submitted no later than **September 30<sup>th</sup>**.



# Working Group Proposals – Helpful Links

- General Information and application link:
  - <https://ccos-cc.ctsa.io/groups/working-groups/proposal-cycle-information>
- Proposal Application Questions:
  - [https://uploads.ccos-cc.ctsa.io/CCOS\\_WG\\_Proposal\\_Submission\\_Form\\_v1\\_2023\\_Sept1\\_1d500510ff.pdf](https://uploads.ccos-cc.ctsa.io/CCOS_WG_Proposal_Submission_Form_v1_2023_Sept1_1d500510ff.pdf)
- CTSA Program Groups Guidance FAQs
  - [https://uploads.ccos-cc.ctsa.io/CTSA\\_Program\\_Group\\_Guidance\\_FA\\_Qs\\_305ff833dd.pdf](https://uploads.ccos-cc.ctsa.io/CTSA_Program_Group_Guidance_FA_Qs_305ff833dd.pdf)

# CCOS Website Updates

## Released

- CTSA Program Group pages
- Hub Directory
- CTSA Program Calendar (w/filter)
- Help – Landing page
- News articles
- User registration
- Working Group Proposal form
- Poster Submission Form
- Meeting archive (April-June)

## Next up

- Meeting archive (Jan to Present)
- Poster Gallery
- Steering Committee Review Form for Working Group proposals
- Cycle X Working Group pages
- Webinar page plus archive
- Pod Submission Form
- CTSA Guidance documents
- Spring 2024 In Person Meeting
- Spring 2024 Collaborative Workshop



**Thank you!**

# Reminders

Next CTSA Webinar is Wednesday, October 25 at 2pm ET

Webinar Registration Link:

[https://zoom.us/webinar/register/WN\\_qy2vYoxnSdGzbhABVjQFzQ](https://zoom.us/webinar/register/WN_qy2vYoxnSdGzbhABVjQFzQ)