Creating Practical Team Science Education for Clinical Research Professionals (CRP): Tailoring Training to Specific Translational Science Team Roles

University of CINCINATI

^aAngela Mendell, ^bElizabeth J. Kopras, ^aStephanie Schuckman, ^aLaura Hildreth, ^cJason T. Blackard, ^aJennifer Molano, ^aJohn R. Kues

Background and Purpose

Clinical and translational science teams are often comprised of members from diverse disciplines that fill distinct yet complementary roles. Team science education and training is typically directed toward investigators and trainees on these teams. However, all team members would benefit from robust team science training. Expanding team science training to the entire team, including staff, could create a more cohesive team as well as a more inclusive environment. Our team has created team science and communication training specifically tailored to clinical research professionals (CRP), who are an integral part of clinical research teams.

Until recently, the importance of well-trained CRPs to clinical research has been marginalized (Freels, 2023). However, very high turnover rates and recruitment and retention challenges have highlighted the value of better training, career development opportunities and greater levels of job satisfaction among individuals in these roles (Knapke, 2022 & Knapke, 2022).

Communication and teamwork are critical areas of training that are essential for the roles that CRPs play in the clinical trials enterprise, but it is often given less attention than the many technical skills they must master. Team science training created with CRPs in mind can help CRPs better understand team members, work better in teams, and even improve interactions with participants. This, in turn, may promote a feeling of inclusion and could encourage retention and help to mitigate turnover.

Workshop Creation & Requests

The Team Science team at the University of Cincinnati offers several workshops and a graduate level course through out the year. The team is comprised of people with backgrounds in team science, education, and clinical research, specifically clinical research coordination. The team typically tries to tailor presentations to the specific audience as much as possible. Faculty investigators, trainees, and fellows tend to attend these offerings.

Being aware of the need for team science education in the CRP space we designed workshop content with an eye toward CRPs. Communication is often the first team science topic covered with any audience because of its essential nature and inherent difficulty. Clinical research professionals need excellent communication skills as they work with many others in varying fields, levels of power and buy-in to conduct clinical research. The content was tailored to CRPs by giving clinical research related examples to highlight concepts.

The team created vignettes of typical interactions a CRP may have during the day. These vignettes were meant to highlight differences in communication styles which are based on the Whole Brain Model (Herrmann, 1996). The vignettes were used in a discussion around differences in communication styles and have subsequently been used to discuss the difficult nature of communication and the potential for inherent conflict.

The initial workshop was very well received. We were requested to conduct additional workshops on this content for other groups. Once these workshops were presented, we were asked back by two groups to present additional team science content. This content included team science basics, leadership, communication, difficult conversations, and conflict management. After these presentations, both groups were interested in expanding on this content, so we were asked to conduct follow up workshops.

Vignette Example

"We need a sample from the patient in Room B for the ABC study, but I have to run these samples across the street. Can you help me out and consent her? It's a simple blood draw in two red tops."

"Oh, Hey! How was your weekend? You were going out of town, right?"

"Yeah, It was great. Can you take care of the consent and blood draw or not?"

"Sure, I can do it. I haven't been trained on it yet but maybe Cheryl can help if I have questions."

"I added you to the protocol."

"Yes, but I haven't seen the Case Report Forms, and nobody has trained me, yet. But Cheryl's back from her trip. Maybe she can show me pictures!"

"All you have to do is go over the consent form and get a blood sample. It's not rocket medicine."

"O....K. How much blood do you need?"

"Two tubes."

"What do I do with the sample? Does it have to set and clot? Can it go in the fridge while I finish the patient in Room C?"

"Why do you always make everything so hard? Just consent and get the blood! I'll be back soon."

"Why are you getting so mad at me? I'm sorry, I'm just trying to help you out."

"Great insight to helping with communication amongst teams."



"People [have] different ways of communication and I [don't] need to take it personal but engage and learn from their styles."

"This helped me identify how to better interact with other members of my department."

"I am going to recommend this workshop to the rest of my team."

Workshop Request Email

Subject: Today's Team Science presentation

Hello all.

Your Team Science presentation and collaboration for it was beyond superb!

I 100 trillion, billion am asking, want, am almost begging you all to give the exact same presentation for one of my Lunch & Learn educational sessions...

...I would absolutely LOVE to plug you all and this presentation in that slot.

Please let me know.

C'mon, make my day, and respond with a resounding YES to March!

I look forward to your response!

Clinical Research Compliance Administration, Education and Training

Results

Since our first CRP specific Team Science workshop in January 2021, we have conducted 7 additional workshops at 3 institutions for 4 distinct groups using our CRP specific vignettes. We have limited preliminary evaluation data from post workshop evaluation surveys. The first workshop had 81 attendees and 15 evaluations were received. Evaluations included 11 questions with responses on a Likert scale from 1 to 5 (Poor, Fair, Average, Good, Excellent) and 4 qualitative questions.

The qualitative questions included questions around why you would or would not recommend the workshop, workshop improvement suggestions, what might you use in your work, and what wasn't covered that you hoped would be. All respondents indicated they would recommend this workshop to others, and no one indicated they'd hoped something else was covered. 2 participants had improvement suggestions which were centered around expanding resources and time in the workshop. The rest of the qualitative responses consisted of content being helpful in understanding others, working better with team members, and improving communication.

The workshop was positively rated overall with all questions receiving average scores ranging from 4.25 - 4.75. Questions and average ratings are listed in the adjacent table.

Evaluation Survey Responses

Questions	Avg Score
Value of the workshop in meeting your needs	4.58
Expertise of the presenter(s)	4.67
Presentation techniques of the presenter(s)	4.67
Your learning experience overall	4.75
Usefulness of handouts or other 'take-aways'	4.25
Clarity of objectives	4.75
Active involvement of participants in learning experience	4.67
Timeliness of the material presented	4.67
Use of practical examples	4.5
Use of activities	4.67
The use of technology in a virtual environment	4.5

"It was very interactive and engaging. Plus it helps for people to think about how different people think and interact with each other"

"I learned more about the different kinds of communication styles and ... how to work with others who may have a different style than myself."

Discussion

There is an increasing awareness that CRPs are an integral part of translational science teams. However, team science training is mostly directed at faculty or trainees. Our workshops created for CRPs have been well received as evidenced by the preliminary evaluation data we received from our initial workshop. The increasing number of requests for our CRP specific workshops hints at the interest in and need for team science training for Clinical Research Professionals. Moving forward, we plan to collect additional evaluation data to see if those data support our initial findings.

Author Affiliation

^aUniversity of Cincinnati College of Medicine, Center of Improvement Science; ^bUniversity of Cincinnati College of Medicine, Division of Pulmonary, Critical Care, and Sleep Medicine; ^cUniversity of Cincinnati College of Medicine, Division of Digestive Diseases.

This work was supported by the NIH CTSA program. (grant UL1 TR001425)

References

