Enhance CS training through other programs' successes Scribe document

Please note and remind yourself frequently: The intent of this document is for it to lead to a public-facing record of your workgroup's activity. By the day of the Summit it will be accessible to anyone at the Summit, and after the Summit it will be turned into a fully public-facing document. This means that although you should take notes however makes sense for you, it will be important to refine the notes to be comprehensible to others.

Guiding Committee: None before Summit
Moderator: Annette Stanton
Scribe: Ann Haynos

Describe intended product of the workgroup:

Who is willing to lead on this topic (future efforts at the Summit and beyond):

Main Notes Area

Main themes:

1. There is more research and intervention on how to effectively train and supervise evidence based clinical work and less of evidence based science training
2. There are varying definitions of success. PCSAS has one definition (i.e., most trainees go into positions that predominantly involve research), but it may not fully capture all potentially successful outcomes from clinical science programs
3. Clinical science can do everything or solve every problem. We need to partner with other disciplines to move the needle on effective outcomes.

Specific Discussion:

1. What are the existing successes in clinical science training?
    a. One program had success with decoupling credit hours from competencies. For instance, a competency for history and systems could be 1 credit, the competency for developmental could be a lecture series. The idea is that not every competence needs to be a full class.
    b. Cognitive science has knowledge about modalities that support the acquisition of knowledge and skill competencies. Knowledge competencies are learned by encountering the information followed by successive relearning using distributed practice. Skill competencies are learned by direct instruction with feedback followed by deliberate practice with feedback. In contrast, exploratory self-guided learning is not effective without a lot of background knowledge. Can consider how this could be incorporated into clinical science training

    c. One question wasL Are there existing models of clinical training? Could they be compared to each other in an existing way?
    d. There seems to be more research on how to successfully train evidence-based practice, less on evidence-based research training. This seems more subject to the specific mentorship relationship. The research on mentorship seems to investigate specific qualities of good mentors, not interventions or structures to provide successful mentorship. There was a discussion about could there be more generalized processes put into place to support this type of training, or does it by necessity have to be more individualized based on the mentor and trainee?
    e. There are people in other fields doing research on how to teach and train in the sciences. Clinical science could draw off of that knowledge.
2. How do we define “success” in outcomes from clinical science? We need to understand what outcome we are evaluating in order to define successful competencies and interventions to achieve those competencies
    a. PCSAS has an existing definition of success, which involves most of the graduates of a clinical science program going into careers that substantially involve the application of science
    b. There was a discussion about whether that definition was too narrow or what we actually want to be the outcomes from our programs. For instance, implementing program development and evaluation, as well as science dissemination roles, is left out of that definition, though it involves scientific principles
    c. Additionally, the PCSAS definition does not reflection DEI competencies - it is possible to be successful by the PCSAS definition without engaging in any DEI work
    d. Some argued that what we really might want as a definition of success is whether our students are “moving the needle” on our clinical problems and making the world a better place. This area of success is currently under-prioritized in clinical science training, which places an emphasis on rigor and methodology, rather than on the ground impact. It is also under prioritized in our incentive structure.
    e. Others argued that it is important to be humble about our goals and not to set our sights to be too big – it can be ok if we just take on this one part of moving the needle by training people to do science – other areas of clinical psychology and other disciplines may be better suited to influence some of the broader impact goals. Our outcomes could be to train people to understand, apply, and evaluate science through a variety of roles.
    f. Successful outcomes could be different for different people and programs
3. What are some ways we could measure broader success in clinical science training and determine the active components of supporting it?
    a. Can ask trainees “What during your graduate training shaped how much you could move the needle in your area of clinical science?”
    b. Can look at the subpopulations people are working with and what is happening with them

    c. We can set SMART goals with proximal components of success and investigate influences on these goals
    d. We have a bunch of relevant data sitting around in different programs that are used for program evaluation — these could be used to investigate some of these issues
4. We need to partner with other disciplines in order to achieve larger, more ambitious metrics of success (e.g., moving the needle on clinical/societal problems)
    a. Partnering with more clinical focused programs who are producing a lot of clinicians to move the clinical practice may have a bigger impact on moving the needle on clinical care
    b. Maybe we need to train more on interdisciplinary and team based work

Parking Lot

The parking lot is for anything that was noted during the group that does not fit well on the topic. You may wish to refer this information to other groups after your group meets.