

Acute Care Research Competencies for Clinical Research Professionals: A Practitioner Inquiry Approach and Assessment

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The authors have no financial relationships to disclose or conflicts of interest to resolve.

INTRODUCTION

Acute care research (ACR) is a unique area of clinical research within a vulnerable population that demands specialized skills, knowledge, and talents from empathetic research professionals. In an effort to create learning standards and performance evaluation metrics for clinical research professionals (CRPs), the **Cincinnati Acute Care Research Council (ACRC) defined 28 specialty core competencies in acute care research**. Our overall goal is to model competency-based career standards and educational curricula to support a collaborative community of acute care researchers within the Cincinnati Academic Health Center.

METHODS

Applying the **ADDIE Model**, qualitative data obtained from job shadowing, clinical observations, and interviews was analyzed to understand the educational needs and desires of the acute care research workforce. We grounded them in the CRP domains and competencies already developed by the Joint Task Force (JTF) of Clinical Trial Competency.⁶ **Bloom's Taxonomy** aided in constructing ACR competencies that will help to define performance expectations utilizing the cognitive process.

RESULTS *complete list: cctst.uc.edu/acrc*

Results suggest 28 special interest competencies for acute care CRPs under the 8 JTF competency domains. One example comes from the **Core Competency Domain on Communication & Teamwork**:

1. Understands each acute audience as its own vulnerable population and is considerate of and **empathetic*** to the diverse perspectives and feelings of Participants.
2. Utilizes regular checkpoints in concise presentations to ensure common understanding and reliability; assesses appropriate audience comprehension and engagement, making no assumptions with Participants nor ACR Team.
3. Anticipates needs from each enrollment presentation and adapts in response to the Participants' questions and feedback; proactively offers to gather disease related questions to partner with MD/PI.
4. Builds teamwork and trust with open and collaborative exchange of information among ACR Team and key stakeholders (*e.g. IRB, RNs*).

***empathetic** – Top recommendation for CRPs by family research participants per Cincinnati Children's Hospital Medical Center - Research Patient Advisory Council (CCHMC-RPAC, output of CCTST Community Engagement Core)

ADDIE LEARNING DEVELOPMENT MODEL – PRACTITIONER LED

Feb - April 2017

*SME = (MDs, PhDs, RRTs, Research RNs, CCRPs, etc.)

~ Job-shadowing (ACR-CRPs) = **60 hours TOTAL**
~ **Subject Matter Expert (SME)* interviews** with ACR stakeholders = **40 interviews TOTAL**
~ Observations (ER Simulations, Acute Care Research Interest Groups, Seminars, CITI) = **ONGOING**

May - June 2017

~ Consult Research Patient Advisory Council (RPAC) for input - **COMMUNITY ENGAGEMENT**
~ Gain input from ACR-CRPs Advisory Committee to flesh out competencies - **MEMBER CHECKING**
~ **FIRST DRAFT** of assessment/analysis: characteristics, wish list identified and defined - **PEER REVIEW**

July - Nov 2017

~ **ITERATIVE CYCLE** of **MEMBER CHECKING** and **PEER REVIEW** utilizing Bloom's Taxonomy
~ **APPROVED: 28 Special Interest Competencies - FINAL PEER REVIEW**

Dec 2017 - **NOW**

~ Task Force focuses on barriers and facilitators of implementation - **WORKING GROUP MEMBERS & PEERS**

TAKE HOME MESSAGES

- These special interest ACR competencies should serve as **guidelines for training** a workforce prepared for the challenges of conducting research within each critical care audience, **as a vulnerable population**.
- These competencies will guide creation of a **multi-pronged program** of translational workforce development and **may model standardization** of competency-based curricula and career performance expectations.
- **Community engaged input is crucial** in capturing the emotional perspective of a vulnerable population or special interest group that may emphasize important personal characteristics, such as **empathy**.
- Using a practitioner led approach with one learning expert **presents personal bias and interviewer effects**. A **more iterative ADDIE Learning Development Model** that includes the "boots on the ground" staff allows for a stronger "grass roots" design and development than only PIs or Peer Review.

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⁶Sonstein SA, Seltzer J, Li R, Silva H, Jones CT, & Daemen E. Moving from compliance to competency: A harmonized core competency framework for the clinical research professional. *Clinical Researcher*, 2014 June; 17-23.

Program funding provided by the Cincinnati CCTST, Institutional Clinical & Translational Science Award, NIH/NCATS 1UL1TR001425