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 The author has no Conflict of Interest (COI) with regard to the presentation.







# Clinical Research Professional Shortages

- In the last six years, pharmaceutical and biotech companies removed roughly 150,000 jobs from their workforce as they shifted more R&D activities to CROs. - Centerwatch, 2015
- At least 10,000 open CRA Positions in the US as of June, 2015 DIA, 2015
- Number of physicians doing research has declined 5.5% since 2003 and the number in their 60's and 70's exceeds the number in their 50's and below – NIH, 2012
- Many nurses would like to move into Clinical Research Coordinator positions, but salaries are lower and they really do not have CR training in nursing school
- As number of clinical trials increases and number of sites per trial increases there is a tremendous shortage of competent clinical research coordinators





# Status of the pipeline of new personnel?

- Still primarily on-the-job training focused on specific role requirements as opposed to defined core competencies
- Supplemented by recurring GCP training with little understanding of the underlying science of medicines development or regulatory perspectives – JTF, 2017
- The current "on the job" training system in place to train and mentor CRAs and CRC's is inadequate to meet a growing demand for new skills and talents – ACRP, 2016
- No requirement for academic preparation or professional certification
- Graduates of academic programs in clinical research have difficulty obtaining position due to arbitrary experiential requirement.







## **JTF** origin

- Organized under the sponsorship of MRCT/ACRES at Harvard University conference (2013)
- Supported by DIA, ACRP and MAGI
- Included representatives from industry, academia and nonprofit organizations
- Agreed to work toward aligning and harmonizing the many more focused statements relating to core competencies for clinical research professionals into a single, high-level set of standards which could be adopted globally
- serve as a framework for defining professional competence throughout the clinical research enterprise





#### **Joint Task Force for Clinical Trial Competency**











































Representatives met in person or via TC during the period October 2013-June 2015 JTF Coordinators: S. Sonstein and R. Li







# JTF Framework – Competency Domains for the Clinical Research Professional



Sonstein, S.A., Seltzer, J., Li, R., Jones, C.T., Silva, H., Daemen, E. (2014, June). Moving from compliance to competency: A harmonized core competency framework for the clinical research professional. *Clinical Researcher*. 28(3); 17-23

- Applied Clinical Trials. May 28, 2014
- Journal of Clinical Research Best Practices, 10(6); 1-12.
- CenterWatch Whitepapers, June, 2014.







# **Examples of Utilization of JTF Framework**

- ACRP organized annual meeting tracks and professional certification examination based on JTF Framework
- Duke University restructured research job classifications based on competencies. Went from over hundred to fewer than 20. Restructured promotion criteria
- Takeda Pharmaceuticals reorganized internal training programs based on competency framework
- CTSA adopted core competency framework as basis for clinical investigator training program
- CAAHEP sponsored accreditation of academic programs in clinical research.
  Standards based on JTF framework
- The UK National Institute for Health Research (NIHR) Clinical Research
   Network (CRN) has used the JTF Framework in a clinical research workforce
   development initiative called the Integrated Workforce Framework (IWF).





### **Current and Future JTF activities**

- JTF website <a href="http://clinicaltrialcompetency.org">http://clinicaltrialcompetency.org</a>
  - Broaden the stakeholders utilizing competencies to comprise all team members including statisticians, data managers, physicians, patient advocates
- JTF Framework 2.0
  - Reduced overlap across domains. Uses objective, measurable language.
    Gives examples of specific skills that need to be mastered for each competency statement.
- Add leveling (or tiers) of competencies
  - Obviously there are entry, mid and expert levels of competency
- Personal competency portfolios
  - Individuals can apply for employment or promotion based on documented competencies instead of "length of time of employment"
- Development of Metrics to show impact of integration of competency framework in to the clinical research enterprise





### **JTF Vision**

- To develop a universally applicable, globally relevant harmonized competency framework for clinical research professionals
- To align competency-based efforts (e.g., education, training, and workforce development) across the clinical research enterprise
- To identify knowledge, skills, and attitudes that are essential for the successful, ethical, and safe conduct of clinical trials
- To build a framework that can adapt to meet the needs of clinical researchers as the discipline evolves and advances
- To facilitate the success and development of current and aspiring clinical research professionals
- To align stakeholders across the clinical research enterprise—including academia, industry, government, non-profits and professional societies



