Project Title: Exploring Facilitators of Clinical Faculty Research Activities at the Indiana University School of Medicine: A Qualitative Study  
Name and Institution: Linda DiMeglio, Indiana University School of Medicine (IUSM)  
Collaborators: Jay Hess (Dean), Anantha Shekhar (Executive Associate Dean)

Background, Challenge or Opportunity: IUSM has over 2,000 faculty serving in a variety of clinical, research, and administrative roles. Many of these are physicians who are engaged primarily in clinical service activities; many have clinical appointments through the Indiana University Health Physicians (IUHP) practice plan. Relatively few successfully pursue research activities. Yet, greater engagement and involvement of these clinical faculty in research is now urgently needed for several reasons. These include, but are not limited to, needs for: 1) additional microclimates for medical student research experiences, 2) faculty participation and support in initiatives which require recruiting trial participants from clinic settings, 3) additional faculty to contribute substantively to expanding ongoing research programs. Increasing these faculty’s clinical and translational research contributions will also accelerate innovations and improvement in health care.

Purpose/Objectives: Very few data are available at an institutional or a national level on what factors (personal, environmental) drive and facilitate clinical faculty engagement in research. We are using qualitative methods to explore the interface of the clinical service and research missions, with the goal of identifying facilitators of clinical research productivity for clinical faculty.

Methods/Approach: This project began with interviews with key stakeholders in the Departments of Medicine, Surgery, and Pediatrics at IUSM and within IUHP. We then developed a semi-structured interview based on a theoretical framework. The interview explores psychosocial factors, education, personality, professional responsibilities, and other themes likely to be important in choosing to perform research. We are focusing on identifying facilitators of research activities. We are interviewing faculty who meet the following inclusion criteria:

- >50% clinical appointments
- At IUSM for > 2 years
- Substantively involved in research activities. This may involve
  - publication of research-related papers
  - receiving external salary/other support for research activities
  - recognition as “high recruiters” for research protocols.

Following IRB approval, we will begin approaching faculty. Following informed consent, we will conduct recorded interviews; interviews will then be transcribed and coded for themes. We will continue interviews until saturation and anticipate interviewing ~24 faculty (8 from each of the above Departments).

Outcomes and Evaluation Strategy: We anticipate that this process will reveal factors that can facilitate clinical research productivity in an academic medicine environment and are amenable to modification. Results will be disseminated locally by presenting them to stakeholder groups within IUSM and nationally by publishing findings. We will then work within IUSM/IUHP to develop policies/programs to promote successful strategies, tailored to arenas where there is the greatest need and/or greatest likelihood of success. These programs will then be evaluable using metrics such as reported physician satisfaction, medical student engagement in research, physician/student research publications and presentations, and numbers of participants enrolled from clinic settings into research trials.
Exploring Factors that Facilitate Clinical Faculty Research Activities at the Indiana University School of Medicine: A Qualitative Study

Linda A. DiMeglio MD MPH, Professor of Pediatrics, Director of Career Development, Indiana Clinical and Translational Sciences Institute

Collaborators: Jay Hess MD, PhD ● Anantha Shekhar MD, PhD

BACKGROUND

- The Indiana University School of Medicine (IUSM) mission is to advance "health in the state of Indiana and beyond by promoting innovation and excellence in education, research and patient care."
- IUSM has over 2,000 faculty serving in a variety of clinical, research, and administrative roles.
- Many are physicians engaged primarily in clinical service activities with clinical appointments through the Indiana University Health Physicians (IUHP) practice plan. Relatively few successfully pursue research activities.
- Greater engagement and involvement of these clinical faculty in research is now urgently desirable for several reasons, including, but not limited to, needs for:
  1. additional microincentives for medical student research experiences,
  2. faculty participation and support in initiatives which require recruiting trial participants from clinic settings,
  3. additional faculty to contribute substantively to expanding ongoing research programs.
- Increasing these faculty’s clinical and translational research contributions will also accelerate innovations and improvement in health care.

METHODS: Phase I

- I conducted 1:1 interviews with administrators within IUHP and key IUSM stakeholders (e.g., Division Directors, Vice-Chairs of Research) in the Departments of Medicine, Surgery, and Pediatrics.
- Interviews focused on perceived institutional factors that facilitated and barriers to faculty research activities.
- Interviewees were also queried about personal attributes of particular individual clinical faculty that they identified as "successful" in research activities.

RESULTS: Phase 1

- Interviews revealed fundamental Department clinical and research environment differences
  - E.g. in Pediatrics, the clinical faculty salary support is derived from a base salary with % effort credit given for research activities; whereas in Surgery compensation is based on RVUs with no salary credit for unfunded activities that do not directly generate clinical revenue.
- Interviews also yielded names of clinical faculty recognized within Departments as substantive researchers.
- Using information obtained and the theoretical framework of the Rubio model of physician-scientist career success1, I developed a semi-structured interview (topics below).
- The interview explores psychosocial factors, education, personality, professional responsibilities, and other themes stakeholders identified as important in choosing to perform research.

INTERVIEW TOPICS: Phase II

1. What influenced your initial decision to become a physician?
2. What motivated you to work in an academic research setting?
3. What factors have been instrumental to your career successes so far?
   a. Query: Role models/mentors
4. How would you describe the distribution of your work roles?
   a. How do you balance these various roles?
5. How did you initially get involved in clinical research activities?
6. What motivates you now to do clinical research?
   a. Query: Improve ability as clinician to impact patient care?
7. What supports have facilitated your continued involvement in research?
   a. What have you needed from colleagues?
   b. What have you needed from the institution?
8. What would you say to encourage other clinicians to engage in research?
9. What impediments have you encountered?
   a. Query: Division director/chair role
   b. Query: Culture of work unit
   c. Query: Top challenges
10. How do you see your career progressing now?
    a. What are your career goals now?
    b. In what ways has IUSM provided you support towards your goals?
11. What has given you the most job satisfaction in the last year?
    a. Query: Top 3 things you like
12. What would you change about your job if you could?
    a. Query: Institutional changes
13. Anything else we haven’t covered?

METHODS: Phase II

- IRB approval for second project phase obtained 4/4/2017
- Plan to interview faculty who meet the following inclusion criteria:
  - >50% clinical appointments
  - At IUSM for > 2 years
  - Substantively involved in research activities. This will be evidenced by:
    - publication of peer-reviewed research-related papers
    - receiving salary/funding/other financial support for research activities
    - recognition as “high recruiters” for research protocols
    - promotion on a tenure rather than clinical track
- After informed consent, interviews will be recorded, transcribed and coded for themes using NVivo software.
- I will continue interviews until thematic saturation.
- I anticipate interviewing a minimum of ~24 faculty (8 from each Department of Medicine, Pediatrics, and Surgery).

OUTCOMES

- We anticipate that this process will reveal mediating factors that enable clinical research productivity in an academic medicine environment and are amenable to modification.
- Results will be disseminated locally by presenting them to stakeholder groups within IUSM and nationally by publishing findings.

PLANNED EVALUATION/ NEXT STEPS

- We plan to develop policies/programs to promote successful strategies, tailored to arenas where there is the greatest need and/or greatest likelihood of success.
- These programs will then be evaluable using metrics such as reported physician satisfaction, rates of medical student engagement in research, physician/student research publications and presentations, and numbers of participants enrolled from clinic settings into research trials.

SIGNIFICANCE

- Very few data are available at an institutional or national level on what factors (personal, environmental) drive and facilitate clinical faculty engagement in research.
- Such data will facilitate procedures and policies to encourage additional research activities both at IUSM and at other academic medical centers

PURPOSE/OBJECTIVE

- We are using qualitative methods to explore the interface of the clinical service and research missions, with the goal of identifying facilitators of clinical research productivity for faculty with primarily clinical roles.

REFERENCE


ACKNOWLEDGMENTS

Presented with thanks to the individuals who participated in the stakeholder interviews and also to Dr. Georgeanna Robinson, Ginnel University for her ongoing mentorship in qualitative methodology