Building a Strong Clinician-Investigator Community of Practice

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The Challenge

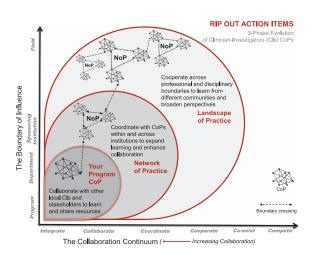
Supporting the career pathways of clinician-investigators (CIs) during residency and fellowship training presents a complex, multifaceted issue—a "wicked problem" that encompasses numerous stakeholders, with diverse priorities, values, competing interests, and agendas. Consensus on solutions may be elusive due to many intractable issues, such as human capital for mentorship, funding for protected research time during residency, and lack of research infrastructure. These factors collectively hinder CIs' development during graduate medical education (GME). Since the COVID-19 pandemic, financial constraints have further exacerbated these limitations. How can we best support residents and fellows pursuing CI careers in this challenging environment?

What Is Known

CIs play an essential role in translating scientific discoveries into medical practice; thus, sustaining this workforce is vital. Despite specialty-specific accreditation and board certification requirements, support for GME CIs predominantly occurs at individual residency or fellowship program levels. Given the complex and interconnected nature of CI training pathways, one solution lies in uniting and igniting these siloed communities for collective impacts, through the establishment of a CI community of practice (CoP). A CoP incorporates 3 key features—"mutual engagement, joint enterprise, and shared repertoire" —which shift the focus from valuing individual achievements to collective experiences of clinicians and scholars. This can enhance and sustain successes across many programs.

To form and sustain a CoP, 3 modes of belonging are essential: engagement, imagination, and alignment. Engagement promotes collaboration, imagination stimulates self-reflection and new possibilities, and alignment ensures open communication and consistency in community values and goals. As a CoP evolves in a rapidly changing and complex environment, it would benefit from interacting with other CoPs beyond its local sphere of influence to survive and thrive. ^{1,3}

This Rip Out provides practical recommendations for building a local CoP, expanding to a network of practice (NoP), and legitimizing the landscape of practice (LoP) for CIs. An LoP is an interconnected, complex



social learning system where various CoPs coexist.⁴ GME research leaders, program directors, and designated institutional officials can strengthen and sustain their CoPs by extending collaborative networks across programs and institutions. Conceptually, the 3-Phase Evolution of Clinician Investigators CoPs focuses on the "collaboration continuum" (x-axis) to extend beyond boundaries (y-axis). This boundary crossing can amplify learning, collaboration, and innovation within and across communities.

How You Can Start TODAY

- 1. Form a cohort. Identify colleagues within your GME program and allied programs. Include stakeholders such as faculty involved in research, trainees, a central contact person, and key program leaders. Set regular meeting times to foster relationships and communication and promote collaboration and cohesion. Develop an agenda that includes a needs assessment and use this information to develop an aligned mission and vision statement. Prioritize goals that use shareable assets (eg, curriculum, adviser training) or challenges (eg, lack of faculty advisors, insufficient research opportunities) to align task prioritization and accomplish goals.
- 2. Promote knowledge sharing. During standing meetings, discover and pool resources that will benefit CI CoP members through creating efficiencies and connections. Curate a list of resources and tools (eg, lectures/conferences, statistical support, research

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- regulatory resources, shared software licenses, administrative support). Organize a centralized Research 101 curriculum from existing sessions. Explore shared mentorship opportunities in popular research domains. Identify research and funding opportunities with sponsors.
- 3. Design for evolution. Consider starting a quarterly 45- to 60-minute research-in-progress session for your CoP—10 minutes for each resident/fellow CI presentation and 6 to 8 minutes for each Q&A and debriefing facilitated by an experienced faculty. Alternatively, incorporate one resident/fellow CI per month into an established curriculum session (eg, journal club, research seminars series, or other program meeting). Ask the human subjects and grants administration offices to give talks, based on tailored CI CoP needs, during standing meetings.
- 4. Foster community and belonging through technology. Establish a virtual CoP platform, leveraging tools like Microsoft Teams, Google Workspace, or Slack to facilitate robust, multichannel communication and regular knowledge exchange and idea sharing. Leverage IT support to address logistical barriers across programs or institutions.
- 5. Gain support and alignment for joint enterprise. Form a CoP backbone, a small group of faculty allies, and present ideas and early achievements to gain support from GME leaders, request feedback for alignment with program and institutional missions and values, and approach potential donors for support. Consider hosting an annual "GME research event" to make CI work visible. Involve alumni, foundation, recruitment, and public relations staff to share and get stories out.

What You Can Do LONG TERM

- Cultivate shared purpose and ownership. Develop a
 comprehensive strategy for CoPs that establishes a
 shared vision and mission for the CI CoP, to promote
 value creation for academia, CI CoP members, and
 member-affiliated teams. Encourage members to take
 ownership of the community and to feel invested in
 its success by using best practices such as SWOT
 (Strengths, Weaknesses, Opportunities, and Threats)
 analysis.
- 2. Champion CI training value. Advocate for policies, funding, and programs that support CI training within the broader health care ecosystem. This includes supporting funding, resources, and support for CI training programs across the continuum; assisting with extramural funding applications; and emphasizing the benefits of CI training during GME to stakeholders and decision-makers.

- 3. Strengthen through expansions. Extend the scope of CI CoP interactions by connecting with collaborators within and outside of your institution regionally (NoP) while concurrently working to refine the efforts of your local CoP. Attend regional meetings and seek interest groups and communities that aim to support CI trainee development. Identify opportunities for active engagement (eg, hosting a table discussion or panel) to discuss salient issues aligned with the mission of local CI CoP efforts.
- 4. Form expansive learning across CoP boundaries. Strengthen the CI CoP by promoting cross-disciplinary collaboration through connections with other CoPs (eg, affiliated, neighboring, or regional institutions). This expanded group can become an NoP that shares common goals and objectives to support CI training. Expand learning activities like informal lunches, research seminars, and networking socials to support the professional development of CI CoP members and build the community's "heart and soul."
- 5. Engage in national work groups for collective learning. Integrate standing activities sponsored across specialties, professions, and research disciplines, to provide members with opportunities to collaborate and refine their identities in the broader landscape of CI CoPs (LoP). Join national workgroups on CIs in GME to learn from others in the field. Continued expansion can include aligned international groups.

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