Professional identity formation (PIF) is the process by which students and residents come to think, act and feel like a physician. PIF is further specified as an ‘adaptive developmental process that happens simultaneously at two levels: (a) at the level of the individual, which involves the psychological development of the person, and (b) at the collective level, which involves socialisation of the person into appropriate roles and forms of participation in the community’s work’.

During the COVID-19 pandemic, medical students were temporarily extricated from the clinical environment. Many educators created new roles for students and incorporated them into new forms of participation in health care. However, observers wondered if preserving or advancing students’ professional identity and professionalism while away from patients and colleagues was possible. We had the same question given the strong influence of patients, peers and socialisation in the clinical setting, where students’ professional identities are influenced more by the informal and hidden curricula than by formal teaching experiences.

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A review of the innovations published in Medical Education’s Adaptations series demonstrated how educators across the world succeeded in not only fostering PIF while students were away from the clinical setting, but also in expanding notions of professionalism and what doctors do.

### 1 | DOCTOR OF PUBLIC HEALTH

Despite the elaboration of core competencies by regulatory bodies, there remains an asymmetric emphasis in medical education programmes on roles that advance direct patient care skills and medical knowledge. Training programmes continue to have limited or elective instruction in communication, collaboration, health system leadership and health advocacy. The COVID-19 pandemic temporarily curtailed experiential learning in clinical settings. This gave educators clear space to develop initiatives that encouraged students to participate in public health early in their career.

Klasen et al taught students in Switzerland about social distancing, disinfection, and hygiene concepts and assigned them to swab collection at a COVID testing centre, thereby introducing trainees to the role of a public health professional. Casas et al demonstrated how US internal medicine residents conducting COVID-risk triage by telephone learned about public health concepts, such as preventing infection clusters and contacting tracing. Educators in the USA organised student volunteers to staff hotlines, remotely monitor patients with COVID post-discharge and organise procurement of personal protective equipment (PPE).

Current reward systems prioritise grades, test scores and publications, whereas public health work and community service are conceptualised as optional activities. Some educators provided academic credit for COVID-19-related service, which is a first step in signalling to students that these skills and activities are a must-have, not nice-to-have, in medical education.
Academic credit for COVID-19-related service is a first step in signalling to students that these skills and activities are a must-have.

2 | FROM PROFESSIONAL TO INTERPROFESSIONAL IDENTITY

Current conceptualisations of PIF in medical education focus on the transition from lay person to physician. Other disciplines similarly focus on the transformation into a professional in nursing, pharmacy and physical therapy. However, these unidimensional characterisations can be insufficient when health care is an interprofessional endeavour. During the COVID-19 pandemic, educators designed integrated approaches to volunteer and education efforts that emphasised collaboration across professions during the crisis.

Educators designed integrated approaches to volunteer and education efforts that emphasised collaboration across professions during the crisis.

Edelman et al’s COVID-19 Student Service Corps (CSSC) emphasised recruitment of interprofessional faculty members and student volunteers, interprofessional oversight, and interprofessional collaboration as guiding principles across their portfolio of projects. Kratochvil et al utilised the University of Nebraska Incident Command System to consolidate and structure volunteer efforts, using interdisciplinary teams to support frontline providers with child care, collect and distribute PPE, and coordinate community mask sewing. Kent et al reformatted a medical and pharmacy student (approximately 500 learners in Australia) interprofessional workshop on asthma management to be conducted virtually with physician and pharmacist co-leaders in each small group. Rather than cancelling or postponing this learning opportunity, reformatting sent the ‘strong message that learning about, from and with other professions is critically important’. Coleman et al recruited 75 US medical students to create over 60 COVID-19 educational infographics for dissemination via Twitter and Instagram. Students received guidance and supervision from fellows and faculty to ensure accuracy of content and adherence to infographic best practices. Villela et al engaged medical students in the Brazil public health response to COVID-19. Teachers invited students to produce national epidemiology bulletins as part of the Epidemiology and Health Services Observatory project. Students in turn proposed the creation of a website with amplification via Facebook, Instagram and YouTube to reach a wider audience. WhatsApp was used for project coordination, and teachers provided feedback (described as a ‘crucial component’) and quality checks on the text and audiovisual content.

Social media has evolved from a tool for learning from colleagues and forming online communities of practice to a platform for communicating professional values, connecting to society and advancing population health. Villela et al, reflecting on students’ creation of epidemiology bulletins, noted that ‘this experience allowed new ways of teaching and learning through the use of education technologies that are currently made use of in daily life, but are sometimes little explored by teachers effectively’. The Adaptations articles demonstrate how teachers can lead this exploration for students.

4 | TRADE-OFFS

None of the aforementioned adaptations approximated the traditional cognitive apprenticeship triad of learner, teacher and patient which forms the foundation of PIF. Nor did they expose students to the hidden curriculum which powerfully shapes how doctors think and behave. Without access to mentors and role models in traditional clinical settings, some students are apt to feel that their
professional development has stagnated, rather than advancing through service-learning activities and non-traditional roles, as we have suggested.

5 | DIVERSIFYING PROFESSIONAL IDENTITY FORMATION

The Adaptations series showcased innovative examples of advancing professional identity in non-traditional ways: putting students in a public health role, promoting interprofessional work, and encouraging social media engagement with society. Institutions can expand the formal and informal curriculum that drives PIF by awarding academic credit for service-learning that addresses public health needs, creating interprofessional collaborations among trainees, and treating social media skills as a professional competency rather than a professional landmine.

Treat social media skills as a professional competency rather than a professional landmine.

PIF theories guide instructional methods that shape students’ attitudes and encourage them to act in accordance with values and practices of the profession. However, full standardisation is at odds with the goal of diversity in medical education that values individual students with unique life experiences, backgrounds and identities. Rather than insisting that students conform to a uniform notion of professionalism we should ensure, as Frost and Regehr advocate, ‘that all students are able to construct identities as physicians that will allow them to retain and take advantage of their individuality while respecting and honoring professional values and norms’. One resident physician conveyed this struggle noting, ‘I have not mastered the art of reconciling my identity as a Black woman with my identity as a physician. I frequently feel I have to silence the Black woman and simply be a physician, colourless, un-Black’.

Navigating this tension is essential for PIF instructional methods to stay relevant to both students who enter the profession and the society they serve.

Teachers did not set out to revise professionalism during the pandemic, but their innovations did highlight the plasticity of that concept. The pandemic-induced pause on training provided an opportunity to envision a more community-focused, interprofessional, interconnected and inclusive conceptualisation of professional identity formation.

The pandemic-induced pause on training provided an opportunity to envision a more community-focused, interprofessional, interconnected and inclusive conceptualisation of professional identity formation.

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