Integrated Health Sciences (IHS) is a relatively new undergraduate degree in the United States focused on preparing students for entry into the healthcare and community health workforces in clinical, administrative, and educational capacities. As universities adapt to teaching in evolving societal, technological, and healthcare landscapes, IHS programs have gained prominence due to their broad scope and potential to meet the employment demands of the healthcare sector. The specific programmatic and curricular goals of IHS degree programs, particularly in terms of offered concentrations, vary from school to school.

Typical IHS concentrations include health education, healthcare management, and pre-professional/clinical tracks. Unlike programs in nursing, social work, or emergency medical services, the IHS major does not entail industry-specific accreditation or post-graduation certification. As an emerging degree with an explicitly broad scope, the IHS degree presents both opportunities and challenges for universities seeking to meet the demands of the ever-changing healthcare landscape.

In spring 2023, faculty from several universities held a formal meeting to discuss these matters. Based on the findings of this Symposium, our aim in this paper is to: 1) shed light on opportunities and challenges facing IHS programs; 2) point toward promising pedagogical practices; and 3) sketch directions for future research in the pedagogy of IHS.

Symposium participants discussed the diversity of IHS programs and identified key items for consideration in the design of health sciences tracks, focusing on the utility of the health sciences degree to job-seeking graduates. Participants shared approaches to undergraduate IHS education that were earmarked for ongoing discussion with the broader community of researchers and institutions. What follows is a set of promising practices identified by symposium participants representing various health sciences programs. These items have not, to the best of our knowledge, been assessed in the scholarly literature for the IHS major and represent a starting point for ongoing inquiry.

**IHS Programs Should Focus on Employability**

Participants concluded that the question of degree value should inform the development of IHS programs and that IHS curricula should therefore be informed by the needs of healthcare and allied health employers offering meaningful career pathways.

**IHS Programs Should Teach Both Hard and Soft Skills**
Participants agreed that IHS programs should provide students with both: 1) the broad-based preparation necessary to thrive as future leaders in the health sciences (soft skills); and 2) the specific technical training necessary to succeed in their pursuit of employment upon graduation (hard skills).

IHS Programs Should Collect Employment Data on Alumni
Participants noted that recent graduates can provide valuable information regarding which hard and soft skills are in demand and identified the collection of alumni employment data as a promising practice which can contribute to improved understanding of both student outcomes and employer expectations.

IHS Programs Should Develop Relationships with Both Employers and Peer Institutions
Participants concluded that developing a clear pathway to success for programs and their graduates will likely entail robust engagement with employers (who can provide insight on skills needed, market trends, and opportunities for internships and jobs) and with peer institutions (who can share their own experiences of barriers and facilitators to program success).

IHS Programs Should Develop an Essential Core Curriculum and Distinct Concentrations
Symposium participants discussed the curricular elements of their respective IHS programs, noting that each had different core requirements and concentrations. Due in part to the perceived flexibility of the degree, participants noted a growing demand for the IHS major, and agreed that a measure of consistency between IHS degree programs would support growing familiarity with, and respect for, the major among both students and employers. Further, given the broad scope of the major, participants concluded that the development of clearly demarcated concentrations would contribute to both programmatic clarity and alumni employability.

IHS Programs Should Be Responsive to Health Inequities Driven By The Social Determinants Of Health (SDOH) And Should Attend To Issues Of Educational Justice, Access, And Quality For Historically Underrepresented Student Populations
The uniqueness of the United States’ healthcare industry, in terms of its tremendous cost, relatively limited accessibility, and low international quality rankings, is a topic of interest to multiple stakeholder groups. Related issues surface in access to, and quality of, higher education experienced by historically marginalized student populations. Further, the need to bridge the longstanding “siloes” of clinical medicine and public health in the United States has been dramatically underscored by challenges arising from the nation’s management of the COVID-19 pandemic. Symposium participants therefore underscored the importance of the integration of health policy and public health education in IHS curricula, to include how health science and policy can address SDOH, health disparities, and inequities in healthcare cost, access, and quality. They posited that a symbiotic relationship between responsive IHS curricula and equitable educational opportunities for diverse learners holds the potential to drive a paradigm shift in healthcare, addressing systemic imbalances while fostering a generation of health professionals equipped to navigate the complexities of modern healthcare systems.

The purpose of post-secondary education is increasingly being called into question given its high cost, time commitment, and unclear value-proposition to students pursuing a diverse array of careers. The perceived value of a bachelor’s degree is typically measured by the subsequent career earnings of degree-holders. IHS programs should respond to this context through a robust focus on employability. Further, while media accounts report a growing concern among the American public that four-year degrees are decreasing in value, the overall perceived value of college education among employers remains strong. This value is complicated, however, by employer-reported deficits in both hard and soft skills of new graduates, and universities are challenged to determine a broadly applicable set of skills to include in IHS curricula.

Still, understanding the relationship between academic preparation and the health sciences job market should be a priority for IHS programs. Systematic reviews and industry reporting show that employers highly value skills associated with liberal education (e.g., professional communication, time management, coachability, and critical thinking), and IHS programs should respond to this
reality in curricular development. Given the increasing focus on technical skills across industries, hard skills should also receive significant curricular attention. Developing technical curricula can be daunting given the diversity of skills required across health sciences and the slow pace of change within academic settings compared to the private sector, where expectations change faster than university programming.

Relationships between universities and employers can be a potent factor impacting graduate outcomes. Arranz et al. found that employer perceptions of graduates and their overall employability were associated with increased social capital achieved through cooperative efforts, such as internships, between schools and employers. Through these partnerships, pedagogical practice in IHS can be further strengthened through the collection of data from graduates, who are in a unique position to express which program components did, and did not, serve them well upon graduation.

A central issue that arose in the Symposium was a shared sense of identity crisis among IHS programs, as the IHS major does not entail industry-specific accreditation or postgraduate certification, potentially diminishing its signal value. Different programs have addressed this challenge in different ways. One Symposium participant described their program’s core courses as being designed to qualify students to sit for the Certified Health Education Specialist (CHES) exam (National Commission for Health Education Credentialing, 2023). While this approach may not work for all IHS programs, the development of a core curriculum may increase the value and recognizability of the degree over time.

Typical IHS concentrations include health education, healthcare management, and pre-professional/clinical tracks. Symposium participants discussed the importance of clear differentiation between concentrations as an important first step in understanding their value. Pre-clinical students are likely to require a common set of core science courses that can be inferred from clinical graduate program admissions requirements, for example, whereas developing curricula for aspiring healthcare administrators may prove more reliant on employer feedback, strategic partnerships, and alumni data collection.

A final consideration discussed among participants relates to faculty. While entry into many health fields entails matriculation from accredited programs featuring professionally certified faculty, IHS programs with non-clinical concentrations may benefit from recruiting faculty with deep industry experience (Northeastern University, 2023). Diversity of professional experience in faculty, gained beyond the classroom, will support student success in preparation for employment.

While the health science programs participating in the Symposium shared similar content and concerns, the programs’ different histories and contexts result in notable differences; for example, some schools and programs bearing the term “integrated health sciences” are more focused on clinical disciplines than others. Symposium participants agreed, however, that future mixed-methods research and scholarship in this area should focus on: 1) the ongoing development and characteristics of existing IHS programs; 2) exploration of the post-graduation experiences of IHS alumni; and 3) the perspectives of employers on areas of most urgent needs and perceived value of the IHS degree.

References


