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RESEARCH ARTICLE

A comparative analysis of the ACPE accreditation standards and the FIP developmental goals and impact on pharmacy education

Suleiman I. Sharif, Riad M. Abdelrahman, Taha H. Musa, Ismail A. Arbab, Mohsen Hussein Suliman, Khalid A. Mohamad

Clinical Pharmacy Program, School of Health & Medical Sciences, Libyan International University, Benghazi, Libya

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Correspondence
Suleiman I. Sharif
Clinical Pharmacy Program
School of Health & Medical Sciences
Libyan International University
Benghazi
Libya
suleiman_elsharif@limu.edu.ly

Abstract

Background: This study aims to compare the 2025 Accreditation Council for Pharmacy Education (ACPE) standards and the International Pharmaceutical Federation (FIP) developmental goals. Tracking similarities and differences between international pharmacy organisations may encourage collaboration and symmetry in advancing pharmacy education. **Methods:** The review occurred in three phases. Five authors individually examined the ACPE standards and FIP DGs, aiming for consensus on the comparison of ACPE subdomains with FIP elements. In the second phase, the same reviewers evaluated each other's mappings as a group. Finally, two reviewers confirmed the validity of the mapping results. **Results:** The mapping showed similarities between the two frameworks, with varying matches. The proportion of ACPE subdomains aligned with FIP DG elements ranged from 5% to 33%. The "*Curriculum*" standard aligned most significantly with FIP goals, covering DGs 1, 5, 7, 8, 15, 17, and 19, which accounted for 33%. "*Experiential learning*" matched FIP goals 1, 2, 4, 9, 14, and 18, totalling 29%, while "*Assessment*" fully aligned with the FIP goals.. **Conclusion:** This review's findings could prompt accrediting bodies and pharmacy educators to unify standards and goals, fostering knowledge exchange and innovation. This collaboration would support the sustainable development of the pharmacy profession and address changing patient needs.

Introduction

Changing health needs, growing public expectations, and ambitious new health goals are raising the bar for health systems to produce better health outcomes and higher social value. The health system needs high-quality healthcare professionals to respond to the current dynamic healthcare demands. Healthcare professionals must be equipped to deal with the vast and evolving medical and technical developments and contemporary health priorities (Kruk *et al.,* 2018).

The pharmacy profession is pivotal to maintaining the health and wellness of the public. To prepare qualified pharmacists to fulfil this role, pharmacy education must be directed and controlled by specific standards. Pharmacy education is changing significantly globally to improve patient outcomes and advance pharmacy practice (Al-Ghananeem *et al.,* 2019).

Many countries face challenges in ensuring sufficient pharmacy workforce capacity to meet national health requirements. Investment in education and training has been recognised as a crucial factor for the sustainable development of the capacity of the health workforce (Aqqad *et al.,* 2024). Low- and lower-middle-income countries may face the additional challenge of a limited number of pharmacists, coupled with insufficient capacity and experience to advance pharmacy education and training. Therefore, there is a need to address workforce capacity, workforce development, needs-based education, quality assurance, and advocacy challenges in these contexts (Babar, 2021). Collaboration between health education and health

services is critical for meaningful reform in health education. However, this collaboration is often hindered by limited resources, underdeveloped curricula, faculty shortages, misalignment with accreditation standards, globalisation, and cultural diversity (Bheekie *et al.,* 2019).

Collaboration between the Accreditation Council for Pharmacy Education (ACPE), the International Pharmaceutical Federation (FIP), and regional pharmacy organisations is essential for developing effective strategies to overcome these challenges and ensure high-quality pharmacy education worldwide. National priorities and populations' health needs drive the FIP's efforts to advance pharmacy education (Anderson et al., 2009).

Numerous countries have established pharmacy education standards, mandating pharmacy institutions to assess their programmes and provide the necessary education to satisfy healthcare needs and meet national standards (Law et al., 2020). Pharmacy curricula are now required to be standardised, and school-based pharmacy education must adhere to internationally recognised quality standards and national standards. Many significant changes have occurred in the dimension of "*quality of pharmacy education*" in developed countries. However, there is considerable variation in the quality of pharmacy education in the rest of the world due to many factors specific to each country (Almusallam, 2013).

In most nations worldwide, government agencies like the Ministry of Education are in charge of higher education accreditation. However, in the United States (and other nations), private organisations like ACPE carry out the quality assurance process independently of the government. In many countries worldwide, authorities have taken steps to improve the quality of pharmacy education and expand pharmacy practice to ensure graduates and practitioners have adequate experiential opportunities and institutional support (Al-Ghananeem et al., 2019).

Needs-based and evidence-based policies are essential for transforming pharmaceutical education. The FIP development goals (DGs), published in 2020, provide a systematic framework to support countries in achieving this objective. These DGS are designed to advance pharmaceutical science, practice, education, and workforce development (FIP, 2022b). Developed to provide structured guidance for the progress of pharmacy practice and workforce transformation, the FIP DGs—alongside tools such as the FIP Global Competency Framework (GbCF) and the FIP Global Advanced Development Framework (GADF)—have been adopted in several countries to inform national strategies for practice enhancement and workforce development (FIP, 2021; FIP, 2024).

Building on global efforts to guide the advancement of pharmaceutical education and workforce development, international organisations play a central role in promoting quality and consistency. The FIP advances pharmacy worldwide by sharing best practices, fostering innovation, and bringing together practitioners, researchers, educators, and pharmacy leaders (FIP, 2022a). Regarding ACPE, it is an independent national agency for the accreditation of professional degree programmes in pharmacy. Established in 1932, ACPE expanded its activities in 2011 through its International Services Program (ISP) to include evaluation and international accreditation of professional degree programs. Since 1952, ACPE has been continuously recognised by the U.S. Department of Education (USDE) as an accrediting agency. Programmes accredited by ACPE are required to meet the expectations of all 25 accreditation standards, which were merged into seven standards in the latest revision published in July 2024 (ACPE, 2024).

Research aim

The relationship between ACPE's accreditation standards and the FIP DGs has not been systematically examined. As more countries adopt international benchmarks to reform pharmacy education, there is a growing need for alignment and coherence between global and national efforts. This study aims to map the ACPE accreditation standards to the FIP DGs (Sacre *et al.,* 2021), providing a basis for collaborative initiatives, guiding educational reforms and enhancing the interface between global and national frameworks.

Methods

The 2025 ACPE version is organised into 7 standards, 26 domains, and 128 subdomains (ACPE, 2024) (Table 1). In parallel, the FIP DGs comprise 21 goals supported by 233 mechanisms. Accordingly, the mapping was conducted at the level of subdomains and mechanisms. While both frameworks cover aspects of pharmacy education, the FIP DGs adopt a broader perspective by addressing the development of the pharmacy profession as a whole.

The mapping process was conducted in three phases. In the first phase, five authors independently assessed an electronically shared document of the ACPE subdomains and the FIP DG mechanisms. Each reviewer compared both frameworks and commented on potential alignment (Table 1). Given the broader scope of the FIP DGs, the proportion of ACPE subdomains that

matched FIP mechanisms was calculated as a percentage. Consensus was considered when agreement on the mapping results was unanimous. In the second phase, the same five reviewers met to evaluate the individual mapping results. In the third phase, two reviewers independently assessed the final mapping results for face validity. The reviewers referred to the official documentation from each organisation, including the ACPE "*Standards 2025 Crosswalk to Standards 2016*", to support an inclusive mapping approach. ACPE components were mapped to multiple FIP goals where applicable, and final results were analysed to highlight areas of alignment and divergence between the two frameworks.

Results

Table I presents ACPE subdomains and FIP mechanisms. The results of mapping are shown in Table II, Table III, and Figure 1. In total, 128 subdomains from the ACPE standards were mapped to 233 mechanisms of the FIP DGs.

Each ACPE subdomain was assessed for alignment with FIP DG mechanisms. A full match was considered when all elements of an ACPE subdomain corresponded to mechanisms within a single FIP DG. When only partial alignment was identified, the degree of alignment was calculated as a percentage.

The "*Organisation and Governance*" standard partially aligned with FIP DGs 6, 8, 10, 13, and 15, representing 24% of the total DGs. The "*Curriculum*" standard had the broadest scope of alignment, mapping partially seven FIP goals (1, 5, 7, 8, 15, 17, and 19), which collectively accounted for 33% of the DGs. The "*Experiential Learning*" standard fully matched six DGs (1, 2, 4, 9, 14, and 18), representing 29% of the goals. The "*Students & Student Services*" standard partially matched three goals, i.e., "*Equity and equality*", "*Communicable diseases*", and "*Antimicrobial stewardship*", covering 14% of the goals.

The "*Resources*" standard aligned partially with "*Digital health*", accounting for only 5% of the FIP goals. Standard seven (Assessment) fully matched "*Quality assurance*", "*Pharmacy intelligence*", and "*Sustainability in pharmacy*" goals, accounting for 14% of the DGs. The "*Faculty & Staff*" standard partially matched "*Advancing integrated services*" and "*Impact and outcomes*", representing 10% of the FIP goals.

Table I: ACPE subdomains and FIP mechanisms

ACPE Standards	Number of subdomains	FIP goals	Number of mechanisms
1. Organisation and Governance	24	1. Academic capacity	13
2. Curriculum	27	2. Early career training strategy	10
3. Experiential Learning	16	3. Quality assurance	13
4. Students and Student Services	24	4. Advanced and specialist development	12
5. Faculty and Staff	11	5. Competency development	9
6. Resources	7	6. Leadership development	10
7. Assessment	19	7. Advancing integrated services	14
Total substandards	**128**	8. Working with others	11
		9. Continuing professional development strategies	11
		10. Equity and equality	13
		11. Impact and outcomes	12
		12. Pharmacy intelligence	10
		13. Policy development	10
		14. Medicines expertise	10
		15. People-centered care	13
		16. Communicable diseases	10
		17. Antimicrobial stewardship	8
		18. Access to medicines, devices & services	14
		19. Patient safety	11
		20. Digital health	11
		21. Sustainability in pharmacy	8
		Total mechanisms	**233**

Table II: Mapping of the ACPE to the FIP development goals

FIP development goals	ACPE standards						
	1 Organisation & governance	2 Curriculum	3 Experiential learning	4 Students & student services	5 Faculty & staff	6 Resources	7 Assessment
1. Academic capacity							
2. Early career training strategy							
3. Quality assurance							
4. Advanced and specialist development							
5. Competency development							
6. Leadership development							
7. Advancing integrated services							
8. Working with others							
9. Continuing professional development strategies							
10. Equity and equality							
11. Impact and outcomes							
12. Pharmacy intelligence							
13. Policy development							
14. Medicines expertise							
15. People-centred care							
16. Communicable diseases							
17. Antimicrobial stewardship							
18. Access to medicines, devices & services							
19. Patient safety							
20. Digital health							
21. Sustainability in pharmacy							

Full match; Partial match

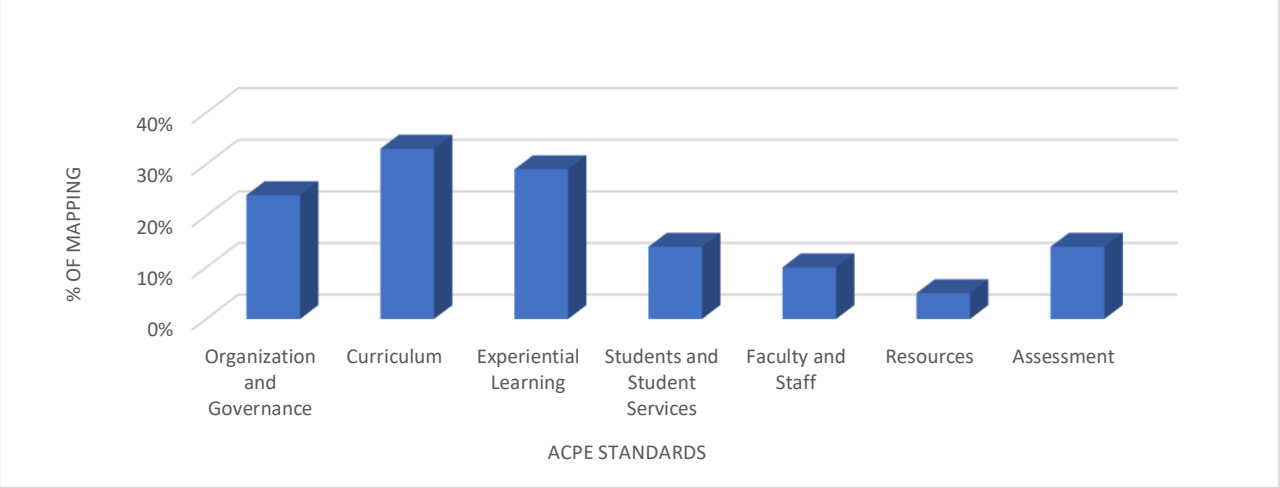

Figure 1: ACPE standards mapped to FIP goals

Table III: ACPE standards' matching patterns to each FIP goal

ACPE standard	No of subdomains	The matching FIP goal	No of mechanisms	% of mapping
1. Organisation and Governance	24	6, 8, 10, 13, 15	57	24%
2. Curriculum	27	1, 5, 7, 8, 15, 17, 19	71	33%
3. Experiential Learning	16	1, 2, 4, 9, 14, 18	70	29%
4. Students and Student Services	24	10, 16, 17	31	14%
5. Faculty and Staff	11	7, 11	26	10%
6. Resources	7	20	11	5%
7. Assessment	19	3, 12, 21	31	14%
Total	**128**		**297**	

Discussion

The 2025 ACPE standards consist of seven standards subdivided into 26 domains and 128 subdomains (ACPE, 2024). In comparison, the FIP DGs comprise 21 goals supported by 233 mechanisms. Given this structural complexity, one ACPE standard was expected to match, fully or partially, more than one FIP goal. The mapping exercise revealed instances of both full and partial alignment, with the percentage of mapped ACPE subdomains to FIP goals ranging from 5 to 33%.

Despite some similarities, the limited degree of overlap might be due to philosophical and scope-related differences between the two frameworks. The FIP DGs adopt a broader, global perspective that encompasses education, workforce, science, and practice, whereas ACPE standards concentrate more specifically on the structure and delivery of pharmacy curricula. For example, while it was anticipated that the "*Curriculum*" standard would align with most FIP DGs, it only mapped to seven goals (1, 5, 7, 8, 15, 17, and 19), accounting for 33% of the DGs and suggesting a narrower focus in the ACPE framework. Notably, FIP DGs 7 (Advancing Integrated Services), 8 (Working with Others), 10 (Equity and Equality), 15 (People-Centred Care), and 17 (Antimicrobial Stewardship) were the most frequently aligned with ACPE standards, with two matching for each.

The FIP DGs also cover critical themes not addressed by the ACPE, such as the "*Policy Development*", which calls for robust, enforceable, and needs-based legislative frameworks across all settings and stages of professional development. This gap highlights an area where the ACPE, as a national accrediting agency, should update their standards to address this goal. Similarly, the FIP DGs give considerable attention to digital transformation within the pharmacy workforce, encouraging the integration of digital health into education and development policies. In contrast, this area remains scarcely addressed in the ACPE framework. Moreover, neither the FIP DGs nor the ACPE standards tackle the use of artificial intelligence in pharmacy, despite its growing relevance to the profession globally.

The FIP DGs represent an umbrella for the pharmacy profession, providing a valuable benchmark for national and international accreditation agencies. Accreditation bodies that follow ACPE standards or other international frameworks may benefit from mapping their standards to the FIP DGs. Political, economic, and contextual issues should not deter such mapping.

Sustained dialogue, collaboration, and knowledge exchange between national and global accreditation bodies are essential to harmonise goals, unify standards, and advance the profession, extending beyond education into professional development.

Limitations

Several limitations were identified in this study. Achieving precise mapping for some standards was challenging due to variations in scope and interpretation. The reviewers may not have captured all interpretations of the mapping due to their diverse pharmaceutical backgrounds. Consequently, the results should be interpreted with caution, particularly when considering the applicability of this mapping.

Despite these challenges, identifying shared elements and gaps between the ACPE standards and the FIP DGs provides a foundational framework that can support the advancement of pharmacy education. Future work should include a larger group of reviewers, and further research comparing national standards with the FIP DGs could help highlight differences between national pharmacy education and global ideals.

Conclusion

This mapping review highlights areas of alignment and differences between the ACPE 2025 accreditation standards and the FIP Development Goals (DGs). While some standards, such as assessment, showed full alignment, others demonstrated only partial overlap. These findings offer a foundation for advancing coherence between national accreditation frameworks and global development priorities in pharmacy education. Strengthening such alignments may support more unified approaches to quality assurance, curriculum development, and workforce readiness to meet evolving healthcare needs worldwide.

Conflict of interest

The authors declare no conflict of interest.

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