

Global workforce symposium: Accelerating towards 2030 — Workforce transformation for better health

The Brisbane review

2023



FIP Development Goals



Colophon

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Executive summary

The International Pharmaceutical Federation (FIP) convened a symposium on 26 September 2023 during the 81st FIP World Congress of Pharmacy and Pharmaceutical Sciences in Brisbane, Australia, entitled “Accelerating towards 2030: Workforce transformation for better health”. This symposium emerged as a mid-point review to assess the efforts taken since the 2016 FIP Global Conference on Pharmacy and Pharmaceutical Sciences Education in Nanjing, China. The agenda focussed on examining the progress, reassessing our goals, and setting a clear roadmap for pharmacy workforce development worldwide, heading into 2030.

The outputs of the 2016 Nanjing conference, specifically the Pharmaceutical Workforce Development Goals; the Nanjing Statements on pharmacy education; and the global vision for education and workforce, have been instrumental in forging progress between 2016 and 2023. Drawing on these outcomes, FIP compiled a collaborative workforce development strategy, championed by the FIP Hub, the FIP Global Pharmaceutical Observatory, FIP Ed (FIP Education) and the FIP boards, sections and special interest groups (SIGs), aligned with the Astana Declaration’s focus on strengthening primary health care provision and universal health coverage.

As we end 2023, it is important to note it has been seven years since the last dedicated leadership event centred on pharmacy workforce development in November 2016. The healthcare landscape has seen dramatic shifts in this period, especially in the aftermath of the COVID-19 pandemic which has emphasised the pressing need for a recalibrated approach to our strategic goals. This sentiment was echoed strongly at the Fifth WHO Global Forum on Human Resources for Health in April 2023.

The Brisbane workforce symposium followed a similar format to the 2016 Nanjing Conference, centring on active engagement with members, leading to actionable outcomes. The sessions were designed to include current updates from FIP, comprehensive panel discussions, and hands-on policy focused workshops. With this inclusive approach, participants explored a variety of areas, including highlighting WHO drivers, understanding lessons from the COVID-19 pandemic, and setting clear priorities for workforce development leading up to 2030.

The programme for the day was filled with insights and dialogue:

- “Context, background and rationale” set the stage by emphasising the importance of building a future-ready global pharmaceutical workforce.
- “Deconstructing the workforce model” sessions highlighted capacity development, early career development, and the advancement of practice, urging participants to critically evaluate the current state and envision the desired future.
- Wrapping up with the “Policy round-up”, the symposium looked ahead, charting the next stages leading to 2030.

The symposium’s objective was clear — to formulate and endorse realistic policy directions that mobilises the global transformation of the pharmacy and pharmaceutical sciences workforce. Then, to summarise, the symposium marked the critical midpoint review for FIP and our members, fostering collaboration, setting clear directions, and ensuring that the pharmaceutical workforce is primed to meet the evolving challenges and expectations of global health. The outcomes will shape the direction of pharmacy workforce development in the coming years.

Current backdrop for the global health workforce and WHO update

As global health challenges continue to evolve and diversify, the integral role of a strong healthcare workforce becomes increasingly important. This significance was accentuated in the aftermath of the COVID-19 pandemic and is further compounded by ongoing issues such as the rise of non-communicable diseases.¹ The World Health Organization (WHO) has consistently underscored this imperative, setting ambitious targets for 2030 in the pursuit of holistic health and well-being for all ages.² Achieving these targets mandates a healthcare workforce that is resilient, proficient and equipped to deliver optimal health services universally.

The Fifth WHO Global Forum on Human Resources for Health in April 2023 served as a clear call to amplify efforts in protection, safeguarding and investment in the health workforce, inclusive of the pharmaceutical (pharmacy professions) sector. Such emphasis is essential not only for addressing immediate concerns but also for focusing on the broader horizon and the global advancements necessary to tackle upcoming health challenges. Countries, non-governmental organisations (NGOs) and health systems cannot realise their health objectives without an adequate and adaptive health workforce at their foundation.

Within this broader context, two salient points warrant discussion: “the global workforce context” and “unveiling global health priorities from WHA-76”.

1. The former captures a holistic view of the trajectory of global health workforce development since the seminal 2016 Nanjing conference. It casts light on the goals set, the milestones achieved and the gaps that still need bridging.
2. The latter, on the other hand, dives deep into the deliberations and resolutions of the 76th World Health Assembly, highlighting the collective global stance on pressing health issues and the path charted for the future.

The global healthcare workforce context

The global imperative for a robust healthcare workforce has never been more critical. As countries, NGOs and health systems contend with escalating health challenges, following the aftermath of the COVID-19 pandemic and the continuing rise of NCDs and co morbidities, the need for a well-trained, well-distributed and well-resourced healthcare workforce is paramount.

The WHO has recognised this need and has set ambitious targets for 2030 to ensure healthy lives and well-being for all, at all ages. Achieving these targets requires a resilient healthcare workforce that can deliver quality health services to all.

Following the Fifth WHO Global Forum on Human Resources for Health, April 2023, it has become increasingly important to protect, safeguard and invest in the health workforce, including the pharmaceutical workforce. It is now imperative for us to refocus on our entire workforce and to demonstrate our commitment to global advancement, because there is no health without a workforce.

The following paragraphs describe key global policy documents relevant for the symposium.

2014: A universal truth: No health without a workforce



The WHO published [this report](#) — “A universal truth: No health without a workforce” — to emphasise the critical role of the healthcare workforce in achieving health outcomes. The report underscored the importance of workforce intelligence, which provides strategic analysis and information needed to support health workforce planning.

2015: UN Sustainable Development Goals

In 2015, the United Nations introduced the [Sustainable Development Goals \(SDGs\)](#), a collection of 17 global goals designed to be a “blueprint to achieve a better and more sustainable future for all” by 2030. One of these goals, specifically SDG 3, aims to ensure healthy lives and promote well-being for all at all ages. A key target of this goal is to achieve universal health coverage (UHC) by 2030.

This ambitious goal necessitates significant improvements in global health, particularly in the advanced development of a global healthcare workforce. The healthcare workforce is the backbone of any health system and plays a critical role in achieving UHC. It includes a diverse range of professionals such as pharmacists, doctors, nurses, allied health professionals, community health workers, and health managers.



2016: WHO Global Strategy on Human Resources for Health

The WHO Human Resources for Health report in 2016, titled “[Global Strategy on Human Resources for Health: Workforce 2030](#)”, is a policy agenda set by the WHO to ensure a health workforce that is fit for purpose to attain the targets of UHC and the SDGs.

This strategy was developed in response to a request from member states for the WHO director-general to develop and submit a new global strategy for human resources for health. ³

Over 200 experts from all WHO regions contributed to consolidating the evidence around a comprehensive health labour market framework for UHC. The report provides policy options for member states on health workforce education, regulation, retention, and skills mix optimisation. ⁴



2018: Astana Declaration

[The Astana Declaration](#) was unanimously endorsed by all WHO member states at the Global Conference on Primary Health Care in Astana, Kazakhstan, in October 2018. The declaration emphasises the critical role of primary health care around the world. The document is a global update of the historic Alma Ata declaration of 1978.

The declaration aims to refocus efforts on primary health care to ensure that everyone everywhere is able to enjoy the highest possible attainable standard of health. It has renewed political commitment to primary health care from governments, NGOs, professional organisations, academia, and global health and development organisations.

The Astana Declaration makes pledges in four key areas: ⁵

- (i) make bold political choices for health across all sectors;
- (ii) build sustainable primary health care;
- (iii) empower individuals and communities; and
- (iv) align stakeholder support to national policies, strategies and plans.

The Astana Declaration represents a significant milestone in global health workforce efforts. It underscores the importance of primary health care and sets a clear direction for achieving UHC and other global health objectives. FIP made a significant commitment to support the Astana Declaration and many of FIP's current policies are directed towards progress to meeting the challenges outlined in this key document.

2019: Delivered by women, led by men

[The report](#) "Delivered by women, led by men: A gender and equity analysis of the global health and social workforce" was produced by the WHO Global Health Workforce Network's Gender Equity Hub, co-chaired by Women in Global Health.

The report provides a comprehensive gender and equity analysis of the global health workforce. It looks at issues of leadership, decent working conditions free from all forms of discrimination and harassment, including sexual harassment, the gender pay gap, and occupational segregation across the entire workforce. The report confirms that women health workers are more often concentrated in lower status, lower paid and sometimes unpaid roles, facing the harsh realities of gender bias and harassment.

The report calls for gender transformative policies and measures to be put in place urgently if global health targets such as UHC are to be achieved.

2020: A more recent global perspective

In 2020, the WHO reported a significant milestone in global health workforce development. The global health workforce was estimated to be 65 million, reflecting a growth of 29% since the adoption of the “Global Strategy on Human Resources for Health: Workforce 2030” in 2016. According to the findings of a comprehensive global workforce surveillance study conducted by FIP in 2022, encompassing a sample of 85 countries and territories, the pharmacy workforce is projected to experience capacity growth of 24% by the year 2030.

The increase in the health workforce is a testament to the efforts of countries around the world to invest in their health systems and prioritise health workforce development. It shows progress towards achieving UHC and other global health objectives.

However, despite this overall growth, challenges remain. The health workforce shortage projections have been revised from 18 million in 2016 to 15 million in 2022, and potentially, it could be reduced to 10 million by 2030. Addressing this shortfall will require continued investment in health workforce education, recruitment, retention and performance. The global pharmaceutical workforce will be discussed later, but there remains a wide variance in capacity across countries, regions and economies.

It is important to note that these data and projections are based mainly on pre-COVID-19 trends, and the pandemic’s impact on our health and care workforce was significant.

2022: Working for health 2022–2030 action plan

The WHO “[Working for health 2022–2030 action plan](#)” presents how the WHO, member states and stakeholders can jointly support countries to optimise, build and strengthen their health and care workforce.

The action plan focuses on three key and cross-cutting priority areas: (i) planning and financing; (ii) education and employment; and (iii) protection and performance.

Three thematic briefs accompanied this action plan, serving as a background and rationale to the related actions of the Working for Health progression model:

- [Protection and performance](#)
- [Education and employment](#)
- [Planning and financing](#)

2023: The WHO updated health workforce support and safeguards list

The WHO renewed its alert on safeguards for health worker recruitment in 2023. ⁶ The updated [WHO health workforce support and safeguards list](#) for 2023 identifies 55 countries as “vulnerable” based on availability of health workers required to achieve the UN SDG target for UHC by 2030.

2023: The WHO Fifth Global Forum on Human Resources for Health

The WHO held its Fifth Global Forum on Human Resources for Health in April 2023. The forum took place during “World Health Worker Week” and was centred around the theme of “Protecting, safeguarding, and investing in the health and care workforce”.

The forum marked more than five years since the adoption of the “Global strategy on human resources for health: Workforce 2030”. It provided updates on progress in implementation and shared evidence and experiences on

workforce development, as well as opportunities for a post-COVID-19 era, that will inform the implementation of the “Working for health 2022–2030 action plan.

The forum examined the required policy solutions, investments, and multi-sectoral partnerships to address health and care workforce challenges and advance health systems toward UHC and health security. The outcomes of the forum will inform the United Nations General Assembly’s High-Level Meeting on UHC in September 2023.^{7,8}

2024–2029: Strategy towards 2030

It is important to note that efforts towards achieving UHC and the “Global strategy on human resources for health: Workforce 2030” will continue during this period.

Every three years, the WHO reviews the collaboration with FIP and decides on the desirability of maintaining the NGO in Official Relations with WHO status. FIP last renewed the status in 2021, for period of 2022-2024. The plan for collaboration between WHO and FIP (2022-2024) is in line with the WHO Global Programme of Work, alongside a memorandum of understanding (MOU) which was signed during the WHA 2019.

In addition, FIP was one of the signatories of the MoU with WHO specific on strengthening collaboration with the health care workforce that was prepared in collaboration with the five international organisations of the World Health Professions Alliance (WHPA).

On 7 November 2022, the World Health Organization (WHO) signed a memorandum of understanding with the five members of the World Health Professions Alliance (WHPA): FDI World Dental Federation (FDI), International Pharmaceutical Federation (FIP), International Council of Nurses (ICN), World Physiotherapy, and World Medical Association (WMA). Together these five organisations represent more than 41 million health professionals worldwide and assemble essential knowledge and experience from the key health professions in more than 130 countries.

The signing ceremony represents a historic event, bringing together the five global organizations representing the world’s dentists, pharmacists, nurses, physiotherapists and physicians with WHO to enhance their joint collaboration on protecting and investing in the health workforce to provide safe, quality and equitable care in all settings.



WHO MoU signing with Members of the World Health Professions Alliance, with Director General Dr Tedros and Health Workforce Director Jim Campbell

“There is no health without health workers,” said WHO Director-General Dr Tedros Adhanom Ghebreyesus. “With this MoU, WHPA and WHO will support health care professional associations and governments to protect and invest in the multi-disciplinary teams of health workers needed to deliver essential health services and prevent and respond to emergencies.”

The new MoU reflects the importance of investing in the health workforce through a multi-stakeholder integrated approach. It provides a framework for joint action between the five organizations and the WHO. They specifically commit to collaborate on priority health workforce issues as well as universal health coverage, noncommunicable diseases, and ageing populations. The framework will also contribute to reinforcing national and regional health systems and services.

The WHPA and WHO have pursued common goals prior to and through the pandemic. Both have worked to ensure vaccination of health and care workers across all countries and continued advocacy with countries to strengthen health systems, including by providing better recognition, workplace environments, and decent working conditions for health and care workers.

2030: Global aim

The year 2030 is the target year for achieving UHC and fulfilling the “Global strategy on human resources for health: Workforce 2030”. The WHO estimates a potential global shortage of 10 million health workers based on current trends. We should note that this estimation includes both regulated and non-regulated healthcare workers.

In 2018, the WHO projected a shortfall of 18 million health workers. This alarming prediction led to significant efforts to address the issue, including the publication of the [Global strategy on human resources for health: Workforce 2030 by the WHO](#) and the [Pharmacy Workforce Intelligence: Global Trends Report by the International Pharmaceutical Federation \(FIP\)](#). These initiatives aimed to transform the global health workforce and ensure its sustainability.

By 2023, the estimated shortfall had decreased to 10 million. This reduction can be attributed to the growth of the global health workforce, improved data availability, and predicted employment trends. However, it’s important to note that these projections are based mainly on pre-COVID-19 trends, and the pandemic’s impact on our health and care workforce is substantial.

In this context, the role of the pharmacy workforce — the third largest regulated workforce — is crucial. Pharmacists, as integral members of the healthcare team, play a key role in improving health outcomes. However, like other healthcare professions, the pharmacy workforce faces challenges. These include a shortage of pharmacists in many parts of the world, differing education, and training programmes (including approaches to Continuing Professional Development (CPD)), and a need for greater enhancement and continued development of professional roles and recognition.

FIP's work on pharmacy workforce milestones: A summary timeline up to 2023

FIP has been leading global efforts to advance the pharmacy workforce. Below is a timeline summary of its initiatives:

2008

A global Taskforce on Pharmacy Education and Workforce was set up leading to the establishment, for the first time, of a focused effort through FIP Education (FIP*Ed*) initiatives. Among other developments, this led to the formation of a global deans' forum and the academic institutional (universities) membership (AIM), an education development team, and the subsequent incorporation into FIP statutes as FIP*Ed*.

2016–2017

FIP made significant strides in workforce development in 2016. In the report "[Transforming Our Workforce](#)", FIP discusses the systems, tools, and navigation needed for developing the healthcare workforce of the future. The report emphasises that workforce development, workforce planning and workforce intelligence were becoming key issues for global healthcare reform.

In addition, 2016 was also the date for the outcomes of the historic first [Global Conference on Pharmacy and Pharmaceutical Sciences Education](#), which took place in Nanjing, China, in November 2016. This consensus-building conference brought together more than 600 participants from 95 countries and regions, representing different sectors and stakeholders of pharmacy and pharmaceutical sciences.⁹ The conference set out the milestones for the education and workforce development of pharmacists and pharmaceutical scientists and created a global vision for the transformation of pharmacy and pharmaceutical sciences education.

Following extensive consultation, three seminal documents were presented and adopted at the global conference, which have been subsequently used worldwide. These were:

- [A Global Vision for Education and Workforce](#), which provided a description of the future directions of our profession and how education can support the evolution of science and practice.
- A set of agreed 13 [Pharmaceutical Workforce Development Goals \(PWDGs\)](#) that supported the delivery of a pharmaceutical workforce as part of the global challenge. The PWDGs provided a global vision and framework for advancing the pharmacy workforce in various aspects, such as education, competency, leadership, advocacy, diversity and well-being. These were supported by a set of FIP Statements (standards) launched at the FIP Nanjing conference in November 2016.
- [The Nanjing Statements](#), which are a set of 67 statements that describe an envisioned future for education, to enable the enhancement of professional education standards worldwide. These statements were launched to confirm commitment to action by FIP to support members implementing the PWDGs. (The FIP Council agreed in September 2021 to update the 2016 Nanjing Statements for adoption in 2024. To update the Nanjing Statements, FIP has established a FIP Policy Committee to review and the statements.)

These key documents provided a global framework and guidance for advancing the pharmacy workforce and its contribution to health care. They also reflect the principles of the WHO Global Strategy on Human Resources for Health, which calls for strengthening the health workforce as a key component of achieving UHC and PHC.

2018

In 2018, the FIP launched the [Pharmaceutical Workforce Development Hub \(WDH\)](#) as a platform to support the implementation of the PWDGs. The implementation of the hub was a progression from the previous, and highly successful, education development team, which was itself established by the FIP*Ed* initiatives of 2012. The WDH aimed to gain a better understanding of the global education landscape, innovations in education, and new methods and tools

in specific areas of workforce development. WDH experts work with wider forums and expert groups to implement their work plan through literature reviews, case-study development, policy analyses, and quantitative and qualitative research, in order to develop evidence-based frameworks and guidance, and to inform policy and practice development.

The WDH also connected and supported units within FIP and external to FIP (for example WHO Human Resources for Health) to achieve the goal of transforming the global pharmaceutical workforce to meet the health needs of societies.

The year 2018 was also the [publication date](#) of a major workforce intelligence report that looked at current capacity within the global workforce and for the first time was able to analyse the growth trends in the workforce. This data-gathering effort also helped to kick-start discussions on establishing a more sustainable Global Observatory for members, subsequently launched as the FIP Global Pharmaceutical Observatory (GPO).¹⁰

In the same year, FIP published a summative report titled “[Pharmacy at a glance: 2015-2017](#)”, which outlined the evidence base for the contribution of pharmacy to the global health workforce agendas. The report presented data and information on the global pharmacy workforce, such as the number, distribution, density, education, regulation and roles of pharmacists and pharmacy technicians. The report also highlighted the achievements and challenges of FIP’s work on workforce development, education and transformation. The report aimed to inform and inspire FIP members and partners to act towards achieving the PWDGs and improving the health outcomes of their populations.

Historically, in 2018, FIP was a signatory of the “[Astana Declaration on Primary Health Care: From Alma-Ata towards UHC and SDGs](#)”. The declaration was signed by the WHO, UNICEF and representatives of states and governments in Astana, Kazakhstan, in October 2018. The declaration reaffirmed the commitment to strengthen PHC as the foundation of UHC. The declaration emphasised the critical role of PHC around the world and called for action from all stakeholders to achieve it. FIP was a signatory to this declaration.

2019

Following adoption of the Astana declaration, the organisation regrouped the principal FIP workstreams into three primary policy areas (mapped to the UN delivery targets), namely, non-communicable diseases, safety and prevention.

Within just six months of Astana, FIP held its first regional conference, in the Eastern Mediterranean region, on ways and means of transforming primary health care (Amman, Jordan, April 2019). Around 1,200 pharmacy leaders and participants from more than 30 countries gathered to sign the first pharmacy commitment to PHC as our collective response to the Astana Declaration: the “[Amman Commitment to Action on Primary Health Care](#)” to transform pharmacy for better primary health care.

A subsequent FIP regional conference for the European region — “Delivering primary health care: Pharmacists taking the next leap forward” — was a landmark event that brought together over 800 pharmacy professionals from 37 countries to share their experiences, challenges and best practices on workforce development, education, and transformation. The conference was jointly organised by FIP and the Turkish Pharmacists’ Association in Ankara in October 2018. At this conference, pharmacy leaders and pharmacists representing 37 countries signed the [Ankara Commitment to Action on Primary Health Care](#).

In 2019, FIP and the WHO took a further significant and historic step towards ensuring healthy lives and well-being for all. A joint [Memorandum of Understanding \(MOU\) with WHO](#) was negotiated, which served to strengthen global collaboration in these critical areas. FIP remains one of the very few healthcare professions to have negotiated and signed such an agreement with WHO.



FIP CEO, Dr Catherine Duggan and
WHO Director-General, Dr Tedros Adhanom
Ghebreyesus

This historic MOU was not just the beginning of a new partnership, but rather a reaffirmation and intensification of a relationship that has been in place since 1948. For over seven decades, FIP and the WHO have been working together to improve global health outcomes, and this MOU marked a renewed commitment to these goals. Key areas of collaboration include:

- Patient safety;
- Antimicrobial resistance;
- Medicines shortages;
- Strengthening pharmaceutical workforce and education;
- Access to safe and quality medicines; and
- Non-communicable diseases.

2020

In 2020, the release of updated versions of FIP’s Global Advanced Development Framework and FIP Global Competency Frameworks have been made:

- [FIP Global Competency Framework](#) is a validated framework intended to act as a “mapping tool” for individuals to progress towards effective and sustained performance and to pave the way into advanced practice. The framework defines behavioural competencies that can contribute towards supporting foundation level practitioner development.
- [FIP Global Advanced Development Framework](#) is a validated tool intended to support the professional development and recognition of the pharmacy workforce.

Following the widespread successes of the Nanjing Workforce Development Goals (see 2016 above), in September 2020, FIP launched the FIP Development Goals (DGs). These goals are a key resource for transforming the pharmacy profession over the next decade globally, regionally and nationally. They are designed to align with the FIP mission to support global health by enabling the advancement of pharmaceutical practice, sciences, and education. The work built on the original PWDGs, eventually resulting in 21 FIP Development Goals — worldwide goals for transforming global pharmacy.

Each of the goals is composed of practice, science and workforce elements. Alongside each element is a set of tools and structures to facilitate and support the process of transformation. Watch the FIP Development Goals digital launch event [here](#).



2021–2022

Since the launch of the Development Goals, FIP has conducted structured work to identify priorities and challenges across nations linked to the DGs. “The FIP Development Goals Report 2021: Setting goals for the decade ahead” provides a global status update on the goals one year on since their launch. In particular, the FIP GPO has been conducting surveillance work with members under the Multinational Needs-based Assessment Programme (MNAP).

In 2022, FIP developed and published a global [roadmap to 2030](#). This roadmap offers our members and partners a strategic glimpse into FIP’s future vision for transforming pharmacy on a global scale, aligning with the United Nations 2030 Sustainable Development Agenda. It tackles the challenges related to progress and transformation, asking the question “How can global pharmacy evolve and contribute to the global Sustainable Development agenda?” The roadmap is designed to serve as a facilitative tool for all our constituencies.

Moreover, in June 2022, the FIP Bureau gave approval for ambitious plans to implement the migration of the existing Workforce Development Hub into a wider scope and more integrated FIP Hub, supporting the delivery of our “One FIP” programmes across all principal constituencies of FIP.

The culmination of this transition and official launch of the new integrated FIP Hub was announced on **4 September 2023**. The new Hub encapsulates all elements of the current FIP Development Goals framework, offering a dedicated space for related project work and development activities. Moreover, it reinforces the broader FIP mission, uniting our constituencies in a shared purpose. Aligned with our commitment to the Astana Declaration on primary health care in 2018, the FIP Hub will serve as a focal point for engaged and impactful global development of workforce, practice and science.

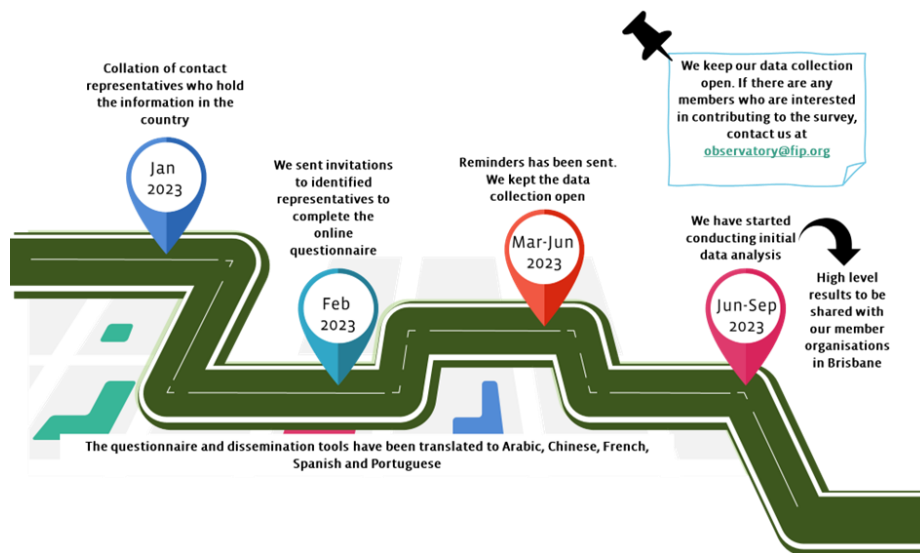
FIP published the [Competency-based Education \(CBE\) Implementation Handbook](#) in 2022 in order to support continued progression for FIP DG 5 (Competency development) in particular. The handbook is a step-by-step guidance document for educators to support implementation of CBE concepts into initial pharmacy education and training and in continuing professional development, post-graduate programmes and other lifelong learning settings. The pharmaceutical workforce needs to be able to demonstrate the skills, competencies and abilities to cope with the complex health needs of civil society and to be better able to apply their practice to improve holistic pharmaceutical patient care. CBE is a cornerstone in this workforce dimension. The use of this handbook, together with the competency-based frameworks previously developed by FIP, completes the circle of transformational tools. The handbook has additional relevance with DG 1 (Academic capacity). It builds on evidence, including a systematic review and a global survey on CBE in pharmacy education.

Moreover, in 2021, the “[FIP Global Humanitarian Competency Framework](#) — Supporting pharmacists and the pharmaceutical workforce in a humanitarian arena” was developed by an FIP working group comprising practitioners in areas of conflict or emergency, including in disaster response and refugee camps, advisors to United Nations and other

non-governmental international agencies, and experts in the development of competency frameworks. This framework guides the development of pharmacists practising or wishing to practise in the humanitarian field, providing pharmaceutical expertise and services during disasters, including wars. Then, in 2022, FIP committed to [humanitarian support](#) in crises and disasters.

2023

In 2023, FIP undertook global workforce capacity surveillance. It has updated data on global pharmacy workforce intelligence to monitor capacity trends of the pharmacy workforce from 2006 to 2022. This is important for health workforce planning and decision making.



In conclusion, for the past decade and more, FIP has been at the forefront of collaborative transformation of pharmacy and pharmaceutical sciences workforce development and career-long education. Through its initiatives and resources and partnership working, it continues to shape the future of the pharmaceutical workforce globally.



Unveiling global health priorities from WHA76

FIP has attended the World Health Assembly (WHA) since the beginning of its collaboration with the WHO. The WHA is the assembly of member states that form the decision-making body of the WHO, is held annually in Geneva, Switzerland. This changed during the COVID-19 pandemic, when the WHO, like other global organisations, held the first ever virtual meeting of its governing bodies. In 2020, the WHA focused primarily on the fight against the COVID-19 pandemic. It adopted a landmark resolution to bring the world together to control the pandemic and for equitable access to and fair distribution of all essential health technologies and products to combat the virus. It also called for an independent and comprehensive evaluation of the global response, including, but not limited to, the performance of WHO itself.

These efforts continued throughout 2021 when the WHA focused on equitable access to vaccines, the accuracy of information, the fight against disinformation spreading, and infection prevention and control strategies. In 2022, in-person meetings were resumed, and the agenda broadened to include the wide and pertinent topics of interest, such as patient safety, antimicrobial resistance and NCDs, and FIP represented pharmacy's voice on these matters.

The 76th World Health Assembly (WHA76) was held in Geneva, Switzerland, from 21 to 30 May 2023. The theme was "WHO at 75: Saving lives, driving health for all". The WHA76 saw active and impactful engagement from the FIP delegation, consisting of 21 members, including the Bureau, the CEO, member organisations, Early Career Pharmacy Group representatives and FIP staff.

Throughout WHA76, FIP made significant contributions by presenting three constituency statements on the WHO's preparedness and response to health emergencies, as well as on UHC agenda items. Additionally, FIP delivered five individual statements covering crucial topics such as public health emergencies, medical products, infection prevention and control, well-being and health promotion, social determinants of health, patient safety, and women's, children's and adolescents' health.

WHA76 featured a series of strategic roundtables that brought together global health stakeholders to address critical issues and shape the future of global health. These roundtables covered a range of topics, including pandemic preparedness, health workforce investment, climate action, tuberculosis eradication, immunisation and tobacco control. Chapter 5 of the summary report provides an overview of the discussions, outcomes, and collaborative efforts that emerged from the [WHA76 strategic roundtables](#).

Below are some of the key topics discussed and resolutions adopted from WHA76.



1. Pandemic prevention, preparedness and response accord:

WHA76 adopted a landmark accord that aims to strengthen the global architecture for health emergency preparedness, response and resilience. The accord outlines the principles, commitments and actions that member states, the WHO and other stakeholders will take to prevent, prepare for and respond to future pandemics. The accord also calls for the establishment of a special session of the World Health Assembly in November 2023 to consider the development of a convention, agreement or other international instrument on pandemic prevention, preparedness and response.



2. Proposed programme budget 2024–2025:

WHA76 adopted the proposed programme budget 2024–2025 that outlines the strategic priorities and resource requirements for the WHO's work in the next biennium. The proposed programme budget is aligned with the WHO General Programme of Work 2019–2023 and reflects the lessons learned from the COVID-19 pandemic. The proposed programme budget also includes a new financing dialogue mechanism that aims to increase the predictability, alignment and flexibility of WHO funding.



3. Global Strategy for Women's, Children's and Adolescents' Health (2016–2030):

WHA76 reviewed the progress and challenges in implementing the strategy and endorsed a new action plan to accelerate its achievement. The action plan focuses on six priority areas: strengthening leadership and accountability; improving quality, equity and dignity of care; addressing the health impacts of climate change and environmental degradation; advancing sexual and reproductive health and rights; harnessing innovation and digital health; and mobilising sufficient, sustainable and equitable financing.



4. Reorienting health systems to primary health care:

WHA76 recognized the importance of primary health care as a resilient foundation for UHC and agreed to prepare for a high-level meeting of the United Nations General Assembly on UHC in 2024. WHA76 also adopted a resolution that urges member states to implement the Astana Declaration on Primary Health Care (2018) and to strengthen their health systems based on the principles of equity, solidarity, participation and multisectoral action.



5. Social determinants of health:

WHA76 adopted a resolution that calls for a comprehensive approach to address the social, economic and environmental factors that influence health outcomes and health equity. The resolution urges member states to implement the recommendations of the report of the WHO Commission on Social Determinants of Health (2008) and to adopt a whole-of-government and whole-of-society approach to tackle the root causes of health inequities. The resolution also requests the WHO to provide technical support and guidance to member states on social determinants of health.



6. Non-communicable diseases and mental health:

WHA76 adopted a resolution that urges member states to implement the recommendations of the political declaration of the third high-level meeting of the General Assembly on the prevention and control of non-communicable diseases (2018), and to adopt an acceleration plan to prevent and manage obesity over the life course. The resolution also calls for increased investment and action on mental health, especially in the context of the COVID-19 pandemic. The resolution also requests the WHO to monitor and report on the progress and challenges in addressing NCDs and mental health.



7. Achieving well-being:

WHA76 adopted a resolution that proposes a draft global framework for integrating well-being into public health using a health promotion approach. The resolution recognises that well-being is a multidimensional concept that encompasses physical, mental, social, spiritual and environmental aspects of human life. The resolution also invites member states to consider adopting national policies and strategies on well-being, based on evidence-based interventions and best practices.



8. Poliomyelitis:

WHA76 adopted two resolutions that reaffirm the commitment to polio eradication and call for effective transition planning and post-certification strategies to sustain the gains and benefits of polio eradication. The first resolution urges member states to intensify their efforts to interrupt wild poliovirus transmission in Afghanistan and Pakistan, as well as to prevent outbreaks of circulating vaccine-derived polioviruses in other countries. The second resolution calls for comprehensive polio transition planning at national and global levels, as well as for developing a post-certification strategy that will ensure the continuity of essential polio functions after global certification.



9. Health conditions in the occupied Palestinian territory, including east Jerusalem, and in the occupied Syrian Golan:

WHA76 adopted a resolution that expresses concern over the health situation in these areas and requests the WHO to continue providing technical assistance and support to address the health needs of the affected populations. The resolution also calls for the respect of international humanitarian law and human rights law in relation to the provision of health services and access to health care in these areas.

Current backdrop for global pharmacy workforce and FIP update

In a global context characterised by ever-evolving health challenges and innovative therapeutic frontiers, the role of the pharmacy workforce has evolved far beyond its traditional confines. As medicine's frontline stewards and patient care advocates, pharmacists stand at an important intersection in the global health framework.

However, much like the broader health sector, the pharmacy landscape is not without its distinct challenges — ranging from workforce shortages and technological advancements to adapting to new modalities of care delivery. In parallel, leading organisations, such as FIP, have been pioneering transformative efforts, guiding the pharmacy sector through pivotal milestones and laying down strategic pathways for the future.

Taking these issues and the drivers from WHA 76 into account, three key areas come into sharp focus.

1. First, “Workforce challenges: Navigating a complex landscape” offers a comprehensive analysis of the multifaceted challenges that are reshaping the pharmacy workforce. Whether it be the pressing ramifications of the COVID-19 pandemic or the implications of an ageing population and increased drug complexities, understanding these challenges is vital for future-oriented strategies and actions.
2. Secondly, the segment on “FIP’s work on pharmacy workforce milestones: A summary timeline up to 2023” chronicles the strategic endeavours of FIP. As the leading global voice in the pharmacy landscape, FIP’s efforts, from landmark conferences to ground-breaking reports, have been instrumental in both defining and advancing the global pharmacy workforce discourse.
3. Lastly, the “Workforce dimensions and model” segment presents an in-depth examination of the key dimensions that shape the healthcare workforce. Diving into these dimensions, with their interplaying factors and strategies, allows us to envision a roadmap for a resilient, skilled, and adaptable pharmacy workforce.

In the subsequent sections, these themes will be analysed in detail, aiming to provide a coherent understanding of the challenges, milestones, and future directions that define the global pharmacy workforce landscape.

Workforce challenges: Navigating a complex landscape

The pharmacy workforce is at the crossroads of a rapidly evolving healthcare landscape, facing myriad challenges that require immediate attention and long-term strategies. Understanding these challenges is critical for the development of a resilient, competent and adaptable pharmacy workforce. Some of the key challenges include:

Staff shortages and pandemic impact — The COVID-19 pandemic has exacerbated existing staff shortages, with more than 60% of hospitals reporting shortages of front-line pharmacists and 74% reporting shortages of entry-level pharmacy technicians.

Workforce distribution and global inequity — The distribution of pharmacists varies significantly across countries and regions, leading to inequalities in access to medicines and pharmaceutical expertise.¹¹ This disparity is particularly evident in the context of ageing populations, increasing chronic diseases, and the escalating burden of communicable diseases and pandemic risks.

Rising demand for pharmacy services — Population ageing, the growing incidence of chronic disease and the availability of new medicines is leading to increases in the number and complexity of medication interventions, requiring more pharmacists to provide safe and effective care for increasingly complex conditions. Increasing rates of hospital admissions also bring about pressures on demand, as pharmacists are involved in medication reconciliation, discharge planning, antimicrobial stewardship and other direct clinical services. Moreover, the COVID-19 pandemic has highlighted the essential role of pharmacists in public health emergencies, such as vaccine administration, testing, education and research.^{12, 13}

Skill mismatch and talent gap — The requirements of using, testing, managing and maintaining clinical IT systems increase workload and require new skills for pharmacists. Changes in models of care and shifts to multidisciplinary approaches also generate new demands on pharmacists, such as prescribing, consulting and collaborating with other health professionals. However, many pharmacists feel lacking in the necessary competencies or training to meet these demands, creating a skill mismatch and a competency gap in the workforce.¹⁴

Workforce dissatisfaction and attrition — Many pharmacists experience low levels of job satisfaction and high levels of stress, burnout and turnover due to various factors. They include concerns about pay, excessive workload and pressure, inflexible working hours and a lack of opportunities for career progression. These factors can negatively affect quality of care, patient safety and organisational performance. Moreover, they can deter potential candidates from entering or staying in the profession, exacerbating workforce shortages.

Economic constraints and underinvestment — Pharmacist access and availability correlates with measures of national income and health expenditure. Countries with lower economic indicators tend to have fewer pharmacists and pharmacy technicians. This under-investment in the education and training of health workers contributes to continuous shortages.¹⁵

Other challenges — Pharmacies and public access to medicines expertise face serious challenges with drug shortages, staffing obstacles and the economics of health payments systems.

These challenges, both in combination and individually, require urgent and coordinated actions from all pharmacy education, practice, policy maker and research stakeholders.

Alongside these challenges, FIP Development Goals play a pivotal role in shaping our response and strategies. These goals resonate with the global imperatives of access, equity, and sustainability as outlined in the UN Sustainable Development Goals. They provide a comprehensive framework that addresses workforce challenges, promotes equitable access to healthcare resources, and supports the sustainability of healthcare practices. This holistic approach is crucial for strengthening the pharmacy workforce globally and ensuring that it can effectively meet the dynamic demands of healthcare today and in the future.

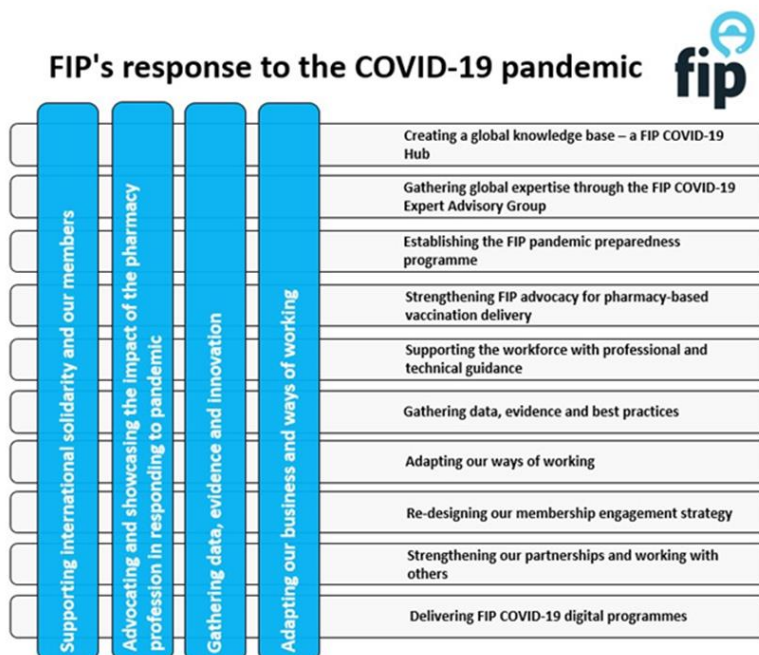
FIP pandemic preparedness, response and recovery: Publications

The report, [“The global response of pharmacy to the pandemic: The contribution of the profession to COVID-19”](#), published in October 2022, details how the profession responded to the COVID-19 pandemic and charts the learnings and responses during 1,000 days, starting from the WHO declared the new coronavirus a public health emergency of international concern, to the 1,000th day (4th anniversary of Astana) in 10 blocks of 100 days.

The report documents the actions taken by FIP since January 2020, describing how the federation supported international solidarity, advocated the value of pharmacy on pandemic response, gathered evidence of impact and adapted its ways of working. The report presents the findings of a sample of FIP member organisations on their pandemic activities to February 2022, with information coming from 42 countries and territories.

The responses of these national professional organisations included: developing and updating of clinical guidance, public education programmes, providing education for health professionals, facilitating supplies of medicines and personal protective equipment, supporting diagnostic testing and vaccinations in pharmacies, science and research, and progressing changes in law. The organisations’ main challenges during the pandemic, how some of these have been overcome, and their leadership strategies are also shared in the report.

The Figure below highlights 10 themes across four response areas of FIP’s response to the COVID-19 pandemic



Following the pandemic, leadership and support for members became a core priority for FIP. As we move on from responding directly to COVID-19 to responding to the aftermath and to readying ourselves for future pandemics and health emergencies, FIP sought to publish key lessons, recommendations and considerations for the future in a further global report, [“Pandemic Preparedness, Response and Recovery: Lessons Learnt for Global Pharmacy”](#).

The key learnings for pharmacy are presented in this report in six sections focusing on lessons from country leadership, system transformation, science and innovation, pharmaceutical practice, workforce and education, and life-course immunisation.

This report is accompanied by a [digital supplement](#) on pandemic preparedness, response and recovery, which collates key resources from the global health community, other health professions and key research outputs. Our work on pandemic preparedness, which during the pandemic was a cornerstone of our sustainability portfolio, is now aligned with the FIP humanitarian and disaster management programme.

Workforce dimensions and models

Workforce dimensions

Understanding the complexities of the healthcare workforce is a prerequisite for informed policy making, effective management and, ultimately, the well-being of communities.

To navigate this complex landscape, we have identified four key dimensions that encapsulate the challenges and opportunities facing the healthcare workforce. Each of these dimensions is influenced by myriad factors, from demographic shifts and technological innovations to policy frameworks and societal expectations. By delving into these dimensions, we aim to build a comprehensive understanding that can inform strategies for improvement, innovation, and investment in the pharmacy workforce.

Health workforce shortages and capacity dimension — focuses on the challenges related to the availability and readiness of healthcare professionals to meet the demands of a growing and changing population. Key factors include population growth, ageing, urbanisation, migration, disease burden and health system performance. Strategies for Improvement include recruitment and retention, distribution and deployment, productivity and performance, interprofessional collaboration and telemedicine for regions with healthcare shortages.

Advancing practice and scope dimension — explores how healthcare roles are evolving due to technological advances, scientific discoveries, and changing patient needs. Key factors include changing health needs, patient expectations, technological innovations and scientific discoveries. Strategies for improvement include role expansion, skills development, evidence-based practices, quality and safety standards and telehealth capabilities.

Effective education and training dimension — emphasises the importance of equipping healthcare professionals with the skills and knowledge they need to be competent and responsive. Key factors include accreditation standards, faculty development and learning environment. Strategies for improvement include competency-based curricula, lifelong learning, theory-practice integration, and innovative pedagogies and technologies.

Effective and systematic policy formation dimension — looks at how policies can be formulated and implemented to support the other three dimensions, ensuring a robust and effective healthcare workforce. Strategies for Improvement include stakeholder engagement, data-driven decision-making, long-term planning, regulatory framework and policy evaluation.

Workforce modelling

At the heart of the healthcare workforce model is the convergence of several strategic drivers (imperatives driving healthcare workforce change), each playing a pivotal role in shaping the future of healthcare professionals. The Figure below provides a holistic view of the factors influencing the healthcare workforce model and the resulting implications for workforce planning are also listed.



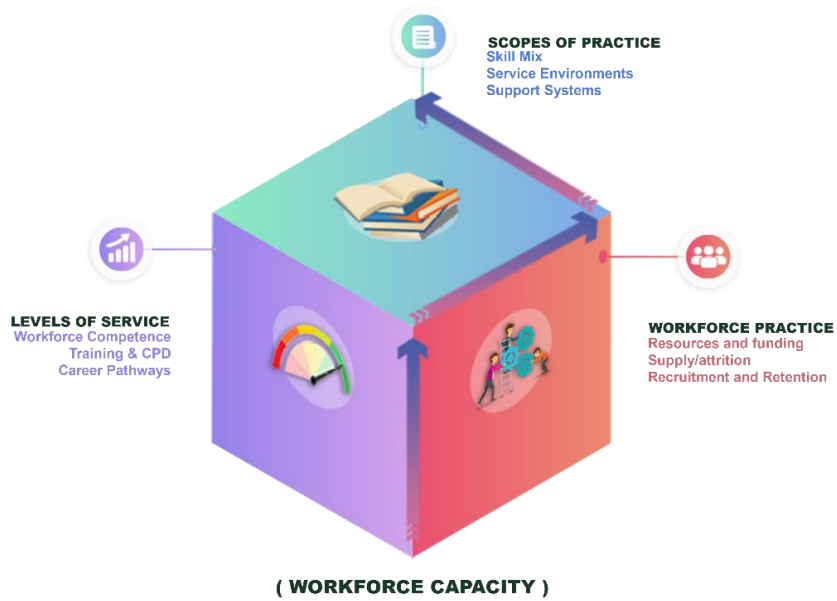
Implications for workforce planning include:

- **Workforce policies** — guidelines and strategic frameworks that guide the recruitment, training and deployment of healthcare workers, ensuring that the workforce is aligned with the healthcare system’s needs. FIP has a needs-based approach to healthcare policy guidance.
- **Financial/economic factors** — economic realities, including funding, compensation and resource allocation, influence the size, distribution and capabilities of the healthcare workforce.
- **Demographic trends** — changes in population size, age distribution and health needs directly impact the demand for healthcare services and, by extension, the required workforce.
- **Government policies** — beyond workforce-specific policies, broader government decisions on healthcare funding, priorities and regulations play a significant role in shaping the workforce landscape.
- **Knowledge/technology** — the rapid advancement of medical knowledge and technology dictates the skills and expertise required of healthcare professionals. This includes the evolution of pharmaceutical care services, which necessitates specialised training and knowledge.

When these drivers converge, the result is a transformative shift towards a healthcare workforce that is both flexible and competency-based. This means professionals who are able to adapt to changing needs, roles and technologies, and whose roles and responsibilities are defined by their skills and expertise. Such a model ensures that the healthcare system is resilient, responsive and equipped to deliver high-quality care in an ever-evolving landscape.

As healthcare landscapes evolve, the traditional boundaries between hospital and primary care settings are becoming increasingly blurred. This shift towards integrated healthcare necessitates a more flexible approach to the roles and responsibilities of healthcare professionals, particularly pharmacists. A competency-based educational model is essential for preparing them with a flexible skill set that adapts to various healthcare settings. This approach ensures that pharmacists are prepared to meet the diverse needs of patients, whether in a hospital, a community pharmacy, or other healthcare facilities.

The “Multidimensional healthcare workforce model: A comprehensive framework for future-ready pharmacists” serves as a comprehensive framework for analysing and addressing the complex challenges facing the pharmacy workforce today and in the future.



Strategic insights from the Brisbane review: Key outcomes and implications

The purpose of the Brisbane strategic review

The Brisbane strategic review, underlined by the symposium titled “Accelerating towards 2030: Workforce transformation for better health”, marks a key point in the evolution of global pharmacy and pharmaceutical sciences workforce. As the healthcare landscape constantly transforms, it is imperative for the pharmacy profession to reassess its strategies, performance and competencies to ensure they are aligned with both immediate challenges and future demands.

The overarching aim of the symposium was to recalibrate our policy directions, ensuring they align with the broader United Nations 2030 SDGs. This calls for a comprehensive review of the prevailing pharmacy healthcare workforce model, taking stock of its strengths and identifying areas of improvement.

Below are outlined the four overarching objectives of the symposium.

1. Understanding WHO drivers and FIP development trajectory

The first objective concentrated on recognising the current WHO influences for human resources for health (HRH) and tracing the evolution and progress of FIP PWDGs, along with the subsequent FIP DGs since 2016.

This objective sketched out the main factors and forces that are shaping the present and future needs and challenges of the pharmacy and pharmaceutical sciences workforce. It also highlighted the significant achievements and milestones of FIP and its partners in pushing forward the workforce development agenda since 2016.

Apart from these influences, which stem from WHO HRH and the FIP DGs, the FIP Global Pharmaceutical Observatory has become a global data hub. The GPO collects, analyses and disseminates information on the pharmacy profession, education, science and practice worldwide. It plays a crucial role in supporting evidence-based decision-making and policy development for the workforce.

2. Learning from the pandemic and WHA76 resolutions

The second objective concentrated on drawing lessons from the COVID-19 pandemic and the priorities set by WHA 76 by the WHO and FIP and understanding the need for a workforce response.

It was explored how the pharmacy and pharmaceutical sciences workforce can respond to and prepare for emerging global health challenges (especially in primary health care) and opportunities. Some of the topics we had covered include:

- **COVID-19** — The COVID-19 pandemic response and recovery underscored the crucial role of pharmacists and pharmaceutical scientists in ensuring access to safe, effective and quality medicines and vaccines. This has paved the way for new avenues of workforce development, along with new regulatory means of service provision. It will be discussed whether our workforce is prepared for these significant shifts in role and scope.
- **WHA76** — The WHA 76 (2023) resolutions and priorities spotlighted some of the most urgent health issues. We need to identify our workforce’s response and adaptation. The symposium delved into how pharmacists and pharmaceutical scientists have adapted their practices and competencies to meet the changing needs and expectations of patients, communities and health systems during and after the pandemic.
- **Opportunities and challenges** — Continued workforce opportunities and challenges will identify some of the potential areas for improvement and innovation for the pharmacy and pharmaceutical sciences workforce.

3. Reviewing current global outputs and evidence gathering

The third objective primarily concentrated on mapping out the contributions of FIP and the Hub, providing an overview of FIP's output, evidence review and long-term workforce surveillance.

We summarised outputs from FIP and global literature, discussing data and analysis on global, regional and national trends and patterns of the pharmacy and pharmaceutical sciences workforce. This also highlighted the evidence of the impact of workforce development on the innovation and progressive development of service delivery.

4. Setting workforce development priorities for 2030

The fourth objective concentrated on identifying priorities for global workforce development and planning as we approach 2030, building on the progress made since the 2016 Nanjing Symposium.

The symposium offered opportunities for setting priorities and planning actions based on evidence. The outputs will include a draft document and action plan developed by international delegates, titled "2030 Workforce agenda and roadmap".

This objective will also incorporate plans for implementation and monitoring. We discussed how FIP and its member organisations can operationalise the symposium roadmap and contribute to the surveillance of global development goals.

Symposium format

The format adopted for the symposium was tailored to ensure a systematic and collaborative approach to derive actionable insights for the transformation of the pharmacy workforce.

The symposium harnessed a modified Delphi technique executed in real-time. This technique involved several iterative rounds where participants were presented with questions related to workforce transformation. Each round allowed participants to review summarised responses from the previous round, ensuring that consensus was reached in an iterative manner.

The symposium agenda was designed to be both reflective and actionable:

Interactive elements included:

- In-depth analysis of WHO drivers and continuous evaluation of FIP's development trajectories;
- Extracting and understanding lessons from the COVID-19 pandemic, and the consequent implications from the WHA 76 resolutions;
- Emphasis on FIP's evidence-based contributions; and
- Collaborative brainstorming sessions to delineate workforce development priorities for 2030.

Throughout the symposium, continuous feedback was sought from the participants. The "Call to action" document emerged as a product of consensus-building, fuelled by expert opinions and corroborated by recent data from the FIP GPO and Hub. This document signifies a collective agreement of more than 120 participants from over 40 countries, underlining their commitment to the refreshed mission plan for the global workforce.

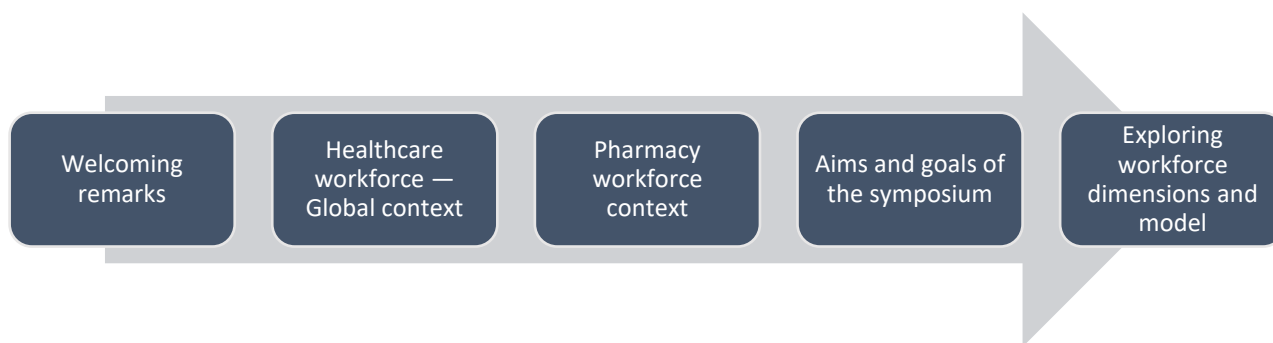
This methodological approach, interspersing structured sessions with collaborative discussions, was intended to foster an environment conducive to knowledge sharing, evaluation and strategic planning. By aligning with the broader UN 2030 SDGs, the symposium not only embarked on a comprehensive review of the existing pharmacy healthcare workforce model but also emphasised the pivotal role of pharmacy and pharmaceutical sciences in steering global health trajectories.

Symposium outcomes

Throughout the symposium, themes such as professional recognition, digital health competencies, surveillance and indicators, equity and inclusivity, and female participation were evident, aligning with the key concepts that will be highlighted in the "Brisbane call to actions" soon. The symposium summaries below highlight the collective aspiration for a resilient, adaptive and advanced pharmaceutical workforce that can effectively address global healthcare challenges.

Context, background and rationale

The need to recognise the evolving competencies and training of pharmacists was stressed. Recognising and pursuing these competencies can lead to achievement, recognition, responsibility, advancement and overall well-being. FIP has been instrumental in highlighting the importance of these competencies. Prof. Ian Bates, in collaboration with FIP, has worked on the "Towards a global competency framework" which emphasises the need for a standardised approach to pharmacist competencies across different practice settings. This aligns with the symposium's emphasis on the discrepancy between the expanded roles of pharmacists and the societal recognition of these roles.



There follows a summary of the speakers' presentations.

The 76th World Health Assembly (WHA76) has set the stage for addressing global healthcare workforce challenges. Key resolutions from WHA76 emphasised the importance of pandemic prevention, preparedness and response, highlighting the need for a robust global framework that encompasses not only systems but also the professionals who operate them. The WHA's strong recommendations for tackling NCDs and mental health underscore the urgency for immediate action and increased investment, especially in workforce training and support.

The renewed focus on UHC by the WHA, with the upcoming 2024 UN General Assembly meeting on UHC as a pivotal milestone, emphasises the need for healthcare systems to align with the principles of the Astana Declaration. These resolutions guide the path forward, emphasising the adoption of WHA guidelines into national healthcare policies, strengthening international collaboration, and realigning healthcare systems to focus on primary health care and addressing health inequities.

The strategic roundtable on pandemic prevention, preparedness and response highlighted the importance of strengthening early warning systems and addressing underlying drivers like climate change and poverty. From an FIP perspective, it is essential to understand and influence international healthcare regulations actively. The health and care workforce roundtable underscored the high prevalence of mental health challenges among health workers and the need for a global workforce strategy.

FIP's historical contributions, such as the establishment of a global taskforce on pharmacy education and workforce in 2008 and the significant strides made in 2016–2017, including the report titled "Transforming our workforce" and the global vision for education and workforce, align with the symposium's emphasis on the evolving competencies and training of pharmacists. FIP's continuous evolution, commitment to excellence and forward-looking approach, as evidenced by the global roadmap to 2030 and the humanitarian competency framework, further underscore the importance of recognising and addressing the evolving competencies and training needs of pharmacists.

In essence, the global context, as presented in the WHA resolutions and FIP's contributions, underscores the need to recognise the evolving competencies and training of pharmacists. This aligns with the symposium's emphasis on the discrepancy between the expanded roles of pharmacists and the societal recognition of these roles.

The slides from the workforce symposium can be viewed [here](#).

Deconstructing the workforce model: Part 1 — Capacity and intelligence

Diverse experiences were shared from different countries, addressing pharmacist salaries, technician roles, challenges in public sector payment and restrictions on pharmacist roles. FIP has been at the forefront of addressing these challenges, advocating the expanded roles of pharmacists. FIP publications have emphasised the importance of a global competency framework to ensure that pharmacists across different countries have a unified set of skills and knowledge. Symposium groups highlighted the need for pharmacists to do more than what is currently allowed, especially in physician-driven health systems. There was a call for FIP to evidence the benefits of expanded pharmacist services. The need for more flexible work environments, especially for women, and the challenges in the public sector were underscored. The critical roles of partnerships, workforce development and equity were stressed, with a focus on making pharmacy careers more rewarding and attractive. The importance of digital health tools in increasing the capacity of pharmacists, especially in low- and middle-income countries, was highlighted.



Drawing from the presentation on capacity and surveillance, the symposium shed light on global trends in workforce capacity from 2006 to 2022. This comprehensive overview highlighted the distribution, density and number of pharmacists and pharmaceutical personnel across various regions and countries, along with future projections.

The presentation titled “The female workforce — 2030 predictions” spotlighted the gender disparities in the pharmacy workforce. It addressed issues like attrition, working conditions and career development equity, emphasising the need for actionable insights to empower women in pharmacy. The symposium groups underscored the importance of flexible work environments, especially for women, and the challenges they face in the public sector.

In the presentation titles “Developing the pharmacy team: Role development and scope of practice”, insights from the WHO were shared on addressing health worker shortages by developing mid-cadre roles across different health professions, including pharmacy technicians. This aligns with the symposium’s emphasis on the challenges in public sector payment and restrictions on pharmacist roles.

Participants broke into working groups to brainstorm and suggest policy actions. The first theme, “Enhancing capacity building”, explored how to accelerate global capacity building, especially in lower-income countries. Questions revolved around the role of FIP in this process and how FIP can support its member organisations in these efforts.

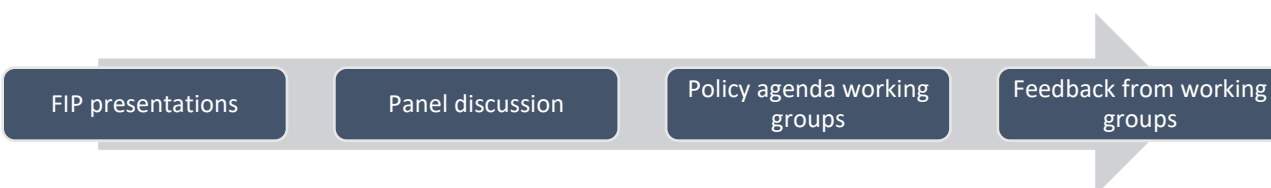
The second theme, “Addressing the implications of an increasing female workforce”, delved into the potential consequences and necessary support systems for an increasingly female participation in the workforce. Discussions centred on how FIP and its member organisations can contribute to these support systems.

Throughout the symposium, FIP’s role was evident in addressing these challenges and advocating the expanded roles of pharmacists.

The slides for this section of the symposium can be viewed [here](#).

Deconstructing the workforce model: Part 2 — Early career development

Job satisfaction and working conditions for early career pharmacists took centre stage. Participants emphasised the need for continued mentorship and structural support beyond initial training. There was a call to ensure global frameworks were followed nationally and to provide soft skills training. Recommendations included promoting pharmacy to younger generations and focusing on mentoring programmes for newly graduated professionals. FIP’s contributions, particularly in the realm of education and training, resonate with the symposium’s emphasis on the need for continued mentorship and structural support for early-career pharmacists. The importance of cultural competence and the need to match career expectations with reality were highlighted.



The symposium part delved into the often-overlooked aspect of early career development for pharmacists, questioning whether the formative years of a pharmacist’s career receive adequate attention, especially concerning scope of practice and professional growth. This focus aligns with the WHA 2023 health workforce agenda and the WHO’s emphasis on youth, including students and recent graduates.

The presentation on “Global health workforce agenda” provided insights into early career development in health care, framed within the broader WHA 2023 health workforce agenda. It also highlighted the WHO’s focus on youth, emphasising the importance of supporting students and recent graduates.

The segment titled “Supply side — Insights on faculties, schools and graduate numbers: A data-driven perspective” underscored the significance of data in shaping the future of pharmacy education and early career development. It presented FIP’s compiled data on the global distribution of pharmacy faculties, schools and graduates.

In the presentation “Job and career satisfaction: What are the data telling us?”, findings from GPO surveillance research were shared, exploring job and career satisfaction among pharmacists and how these factors relate to scope of practice, professional development and health outcomes.

The presentation on “Early career development: The importance of an effective education and training platform” delved into the impact of initial education and training on early career development. Best practices such as competency-based curricula, lifelong learning, mentorship and peer support were highlighted.

Participants engaged in working groups to brainstorm and suggest policy actions. The themes of these discussions included:

- Strategies for supporting early career pharmacists: Focusing on identifying and implementing strategies to better support novice pharmacists.
- Tools and policies for early career pharmacists: Exploring resources, tools, or policies that FIP and member organisations should consider to assist pharmacists at the onset of their careers.
- Improving job satisfaction and working conditions: Delving into how FIP and MOs can enhance job satisfaction and working conditions for early-career pharmacists.

In conclusion, the symposium emphasised the importance of supporting early career pharmacists, ensuring they have the tools, resources and mentorship needed to thrive in their profession. The discussions and presentations underscored the need for a holistic approach that encompasses education, job satisfaction and career development.

The slides for this section of the symposium can be viewed [here](#).

Deconstructing the workforce model: Part 3 — Advancement of practice

Part 3 focused on advancing pharmacy practice through specialisation and the role of prescribing pharmacists. The role of technological advancements, including AI and digital health tools, in advancing practice was discussed. FIP resources have been instrumental in promoting the role of pharmacists in advanced practice settings, emphasising the importance of technological advancements, including AI and digital health tools. Participants mentioned the importance of holistic patient assessments and care, and the need to adapt and optimise the role of the pharmacist in changing healthcare landscapes. The significance of digital health in the future of healthcare was underscored, including the need for education in this area and guidance on the use of AI.



In the evolving landscape of healthcare, the symposium sought to define and understand what “advancement of practice” truly means for pharmacists. As the scope of pharmacy practice expands, it is imperative to align this advancement with global health agendas, cater to the changing needs of communities and seamlessly integrate technological innovations.

The presentation titled “Global health workforce agenda: Overcoming challenges in expanding the scope of practice for healthcare professionals” provided an update on the WHA 2023 health workforce agenda. It focused on the challenges

and opportunities in advancing the scope of practice in pharmacy, addressing the health burden of disease and the rising demand for community experts in healthcare.

In the segment “Advancing pharmacy: Specialisation, advanced general practice and the prescribing pharmacist’s role in primary health care”, the term “advancement” in the context of pharmacy was clarified. The roles and impacts of both specialisation and advanced general practice were explored, advocating a comprehensive review of FIP’s Global Advanced Development Framework.

The presentation on “Preparing the workforce for digital health provision” delved into the current and future trends and implications of digital health for the pharmacy workforce. It emphasised the strategies and initiatives to equip and empower pharmacists to use digital health tools effectively and responsibly.

Participants engaged in working groups to brainstorm and suggest policy actions. The discussions revolved around:

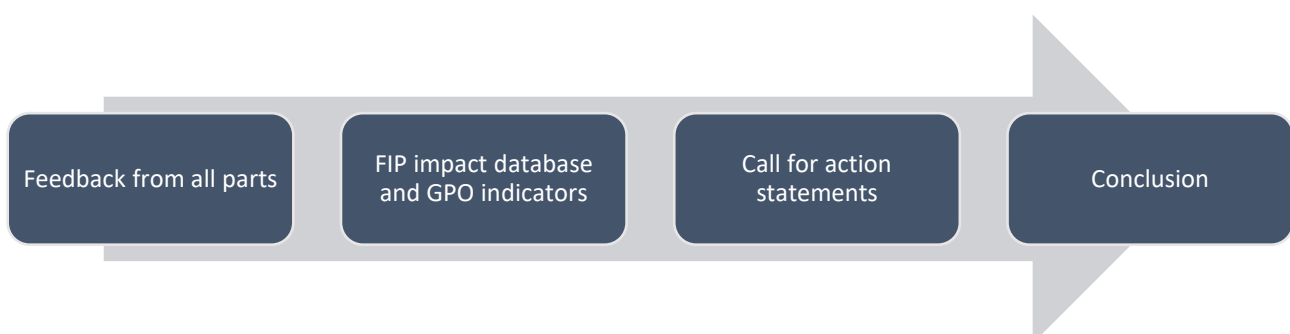
- Advancing pharmacy practice — This theme delved into the various avenues for advancing pharmacy practice, from specialisation and advanced general practice to the increasingly vital role of prescribing pharmacists in primary health care settings.
- Role of technological advancements — This theme explored the impact of technological advancements, such as digital health tools, artificial intelligence and telemedicine, on advanced practice. Discussions also centred on how practitioners can stay abreast of these rapid technological developments.

In conclusion, the symposium emphasised the multifaceted nature of the advancement of pharmacy practice, highlighting the importance of specialisation, technological integration and the evolving role of pharmacists in primary health care.

The slides for this section of the symposium can be viewed [here](#).

Policy round-up: Accelerating towards 2030

The policy round-up section underscored the need to ensure pharmacists’ capabilities to prescribe medicines and provide patient-centred medication optimisation. A call to action will be developed on the importance of recognising and training pathways to support global workforce development, developing a portal for sharing success stories, providing guidance technological tools’ use, and optimising skill-mix based on economic data. Drafted statements will also touch upon aligning education with practice advances, ensuring person-centred education, integrating digital health as a core competency and strengthening mentorship globally. The themes highlighted throughout the symposium resonate with the broader research on the evolving role of pharmacists. The collective aspiration is for a resilient, adaptive and advanced pharmaceutical workforce that can effectively address global healthcare challenges. The contributions of FIP has been pivotal in shaping this vision for the future of pharmacy.



The policy round-up served to synthesise the key insights, policy actions, and recommendations from the preceding parts. This final segment was not just a summary but a catalyst for action, ensuring that the rich dialogue from the symposium translates into tangible impact.

Throughout the symposium, the need to bolster pharmacists' capabilities to prescribe medicines and provide patient-centred medication optimisation was consistently underscored. The discussions highlighted the importance of

recognising and training pathways to support global workforce development and the potential of a portal for sharing success stories.

In essence, the themes highlighted throughout the symposium resonate deeply with the broader research on the evolving role of pharmacists. The collective aspiration is for a resilient, adaptive, and advanced pharmaceutical workforce that can effectively address global healthcare challenges. FIP's contributions have been instrumental in shaping this vision, and as we move forward, the insights from this symposium will undoubtedly guide our path.

The slides for this section of the symposium can be viewed [here](#).

Summary of plans: Accelerating towards 2030

Given the productive discussions and collaborative engagements during the “Accelerating towards 2030: Workforce transformation for better health” symposium, consolidating insights and charting a strategic path forward becomes imperative. The upcoming decade presents numerous opportunities for transformative changes in the pharmacy landscape. With collective expertise and passion demonstrated during the symposium, there is a unique opportunity to capitalise on these changes and reshape the future.

Call to action statements — [FIP Brisbane Call to Action](#) statements extend beyond mere reflections of the discussions and represent a collective voice and determination to drive change. During the symposium, the drafting process commenced. Refining these statements demanded the collaborative spirit fostered throughout. To ensure inclusivity and diverse perspectives, the statements were available for all participants to provide further insights. They have also been shared with FIP boards and sections to capture all perspectives. These statements in the call to action are anticipated to predominantly serve member organisations, members and global pharmacy agencies, becoming the foundation of the symposium declaration.

Below are the global call to actions:

1. Advocate for enhanced training pathways for professional recognition in order to accelerate global workforce development and better address the healthcare challenges we face.
2. Develop a global platform for sharing successful examples of best practices that will enhance the advancement and support of pharmacists and pharmacy support personnel to perform at a full scope of practice.
3. Provide contemporary guidance on the best practice use of digital health tools for the provision of pharmaceutical care and to ensure pharmaceutical digital health is embedded as a core competency in education programmes.
4. Develop guidance and best practice case studies that describe the optimal use of skill mix for pharmacy teams in all sectors, with a focus on primary care settings.
5. Increase efforts for global surveillance and data collation for monitoring the progress of the global pharmacy development goals, ensuring accessible data to enable global workforce planning.
6. Encourage equity, diversity and inclusiveness within the pharmaceutical workforce.
7. Advocate for programmes that will support the return and retention of pharmaceutical workforce personnel following career breaks.
8. Develop frameworks to support sustainable positive practice environments that are conducive to the health, well-being, and resilience of the pharmaceutical workforce.
9. Work with stakeholders to develop innovative experiential learning and continuing professional development mentoring systems that will support new pharmacy graduates and early career registrants for the current and future realities of practice.
10. Develop adaptable systems, tools and mechanisms, including competency development frameworks, that will support the development of a range of progressive roles for pharmacists, including preventive health care and prescribing roles.

Symposium report — Documenting the symposium comprehensively is vital. This report is not merely a historical record but a tool for future reference. It encompasses the discussions, the collaboration spirit and the key points highlighted

during the symposium. The report reinforces the essence of the symposium activities and stands as a testament to the dedication towards ushering in a new era for the pharmacy profession.

Global roadmap — Drawing from the insights and the symposium report, there is an intention to create a clear way forward with a global roadmap. This document will not only reflect past actions but will also serve as a visionary outline of future steps. The roadmap is designed to offer stakeholders clarity and direction. Upon completion, it will be proposed as a formal FIP policy, pending approval from the Council/Bureau. This document is set to become the blueprint for relentless work towards the 2030 vision.

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Appendix 1

The 12 FIP priority programmes for 2023 and 2024

The FIP primary health care (PHC) programme aims to support the profession and provide evidence and impact in line with the World Health Organization's Astana Declaration, 2018. The PHC programme develops policies for the pharmaceutical workforce and the provision of primary health care across nations, regions and globally. Deliverables include:

- [FIP Primary Health Care Digital Toolkit](#),
- [FIP Global Commitment to Action](#),
- [FIP Global Summit on Primary Health Care](#),
- [FIP Primary Health Care World Map](#).

Antimicrobial stewardship (AMS) programme

The FIP AMS programme supports pharmacists, pharmaceutical scientists, pharmacy educators and member organisations around the globe in their efforts to minimise antimicrobial resistance (AMR) and to champion antimicrobial stewardship (AMS) programmes within the country or region. Deliverables include:

- [FIP Repository of AMR](#)
- [FIP commitment on AMR and AMS by 2030](#),
- FIP Statement of policy on mitigating AMR through AMS.

Humanitarian programme

The humanitarian [programme](#) will showcase the different humanitarian initiatives carried out by pharmacists across the globe to demonstrate how adaptable the profession is, depending on the crisis at hand, and how colleagues can be more involved in supporting healthcare delivery in disaster and emergency settings, also highlighting the interprofessional collaboration among healthcare professionals in humanitarian arenas.

Patient safety programme

The [FIP Patient safety programme](#) is a high priority for our profession. Pharmacists and pharmaceutical scientists are responsible for ensuring that when a patient receives and uses a medicine, it will not cause harm. The programme is closely aligned with the WHO's patient safety programme to ensure advancing and advocating global patient safety, is in line with the ambitions of the FIP DG 19 (Patient safety) while contributing to the delivery of the other DGs and underpins the FIP vision for equitable access to safe and affordable medicines globally. Deliverables include:

- Substandard and falsified medicines,
- Medication safety in transition of care, high risk situations and polypharmacy,
- [FIP Statement at World Health Assembly-76](#).

Prevention programmes

Vaccination — FIP's work on vaccination is based on the conviction that improving vaccination coverage and promoting a life-course approach to vaccination are global imperatives to which pharmacists can greatly contribute.

Infectious diseases — Pharmacists play a vital role in the battle against infectious diseases due to their frontline contribution through prevention, screening and management strategies.

Self-care — The concept of self-care puts individuals responsible for their health and wellbeing. Pharmacists can empower patients to better manage their conditions, supporting self-care decisions. Deliverables include: Policy and advocacy, handbooks, toolkits, digital events.

Non-communicable diseases (NCDs) programme

The FIP [practice transformation programme on NCDs](#) aims to provide tools and strategic support to FIP member organisations to develop and implement pharmacy services that can have a sustained positive impact in the prevention, screening, management and treatment optimisation of NCDs for improved patient outcomes and health systems efficiency and sustainability.

Equity and equality programmes (including FIP WiSE)

The [FIP EquityRx programme](#) seeks to support equitable access to health care for all individuals, regardless of their social, demographic and health identifiers, and intersectionality that exists across all these characteristics. Some notable workstreams include vaccine equity, workforce diversity and health literacy. This programme is closely linked to the FIPWiSE (Women in Science and Education) programme.

FIP EquityRx focuses on health literacy, gender equity in the workforce, FIPWiSE, vaccine equity (linked to the prevention programme) and the gender pain gap. It also covers some activities and projects relating to rare diseases and orphan drugs, and access to medicines (linked to FIP DG 18).

Sustainability in pharmacy programme

The [FIP SustainabilityRx programme](#) focuses on sustainable pharmacy services and models as well as environmental and planetary health, and social aspects of sustainability. Besides the production of resources, FIP aims to fully engage all its constituencies and support delivery of concrete actions across them in this important area.

The programme supports the implementation and delivery of FIP DG 21 (Sustainability in pharmacy) and underpins the FIP vision for equitable access to safe and affordable medicines globally, both in terms of environmental sustainability and the sustainability of pharmaceutical services and workforce.

FIP SustainabilityRx consists of three main programmes: (i) environmental sustainability; (ii) economic sustainability; and (iii) social sustainability.

Transformation programmes: workforce, education, practice

Workforce — The transformation programme includes work related to FIP DGs. Along with concrete and tangible mechanisms, the FIP DGs package will include tools and structures to facilitate and support the process of transformation. Indicators and country level metrics will be developed as a way to measure and monitor progress via the data we collect in the FIP Global Pharmaceutical Observatory. National transformation programmes, such as the FIP Workforce Transformation Programme, will provide a pathway for needs-assessment, prioritisation and implementation of action plans tailored for each country.

Education — The FIP-UNESCO UNITWIN programme is the mechanism by which we deliver education transformation globally. Our workstreams and projects feed the surveillance programme and the provision programme and delivers against FIP AIM members needs through regional centres for excellence. Following the renewal of FIP's agreement with UNESCO in June 2023, the network is committed to strengthening our partnership with UNESCO to deliver UNITWIN globally.

Practice — The FIP Transformation Programme on NCDs aims to provide tools and strategic support to FIP member organisations to develop and implement pharmacy services that can have a sustained positive impact in the prevention, screening, management and treatment optimisation of NCDs for improved patient outcomes and health systems efficiency and sustainability. While the programme has a particular focus on low- and middle-income countries, it also encourages implementation by countries of all income levels, since the goals of optimising NCDs management and reducing the burden of these diseases are global imperatives.

Provision programme

The [FIP provision](#) programme supports the advancement of pharmacy worldwide and seeks to ensure all FIP members have access to the highest quality education, training and expertise to deliver the FIP vision. It directly contributes to our vision of a world where everyone benefits from access to safe, effective, quality and affordable medicines.

The programme's vision is also in line with FIP's vision and strategic objectives to support pharmaceutical workforce development (across practice, science and education) around the world. The programme is in line with ambitions described by all FIP DGs but primarily DG 3 (Quality assurance) and DG 9 (Continuing professional development).

Multinational needs assessment programme

The Multinational Needs Assessment Programme (MNAP) vision is to create a transformative framework that empowers FIP member organisations to address the diverse regional and global health needs through data-driven, evidence-led projects. MNAP aims to foster member engagement, identify priorities and highlight examples of excellence to support FIP members effectively and ensure access to best practices. By providing innovative data visualisation tools and facilitating interactive engagement across countries, regions and members, MNAP aims to revolutionise practice, workforce and innovation within the pharmaceutical industry. Through the efforts of the FIP Atlas and [the Global Pharmacy Observatory](#), our programme aims to facilitate comprehensive assessment and analysis, driving impactful improvements in healthcare worldwide.

Surveillance programme

The FIP vision is to be the global leader in collating, validating and analysing data on pharmacy workforce, practice and pharmaceutical science. Through our comprehensive analyses, we strive to provide accessible, high-quality intelligence that empowers our member organisations in their work. By focusing on FIP DG 12 (Pharmacy intelligence), we aim to establish and monitor the needs of nations and members, contributing to regional and global needs assessment. The Global Pharmacy Observatory embodies our vision of becoming the foremost and most respected source of data and intelligence on a global scale for pharmacy workforce, pharmacy practice and pharmaceutical science. Global pharmaceutical workforce data have been collated by FIP since 2006. The findings have been used by member organisations to monitor national, regional and global workforce capacity changes and trends, informing their workforce planning and leadership strategies.

Appendix 2

FIP workforce symposium speakers and chairs

Giorgio Cometto	WHO
Catherine Schuster	Pharmacy technicians advisory committee
Louisa Sullivan	FIP women in science and education initiative
Miranda Sertic	FIP women in science and education initiative
Li Lin Chai	FIP women in science and education initiative
Pierre Moreau	FIP academic institutional membership
Safiye Cagansel	Early career pharmaceutical group
Aysu Selcuk	World Health Assembly 2023 delegate, FIP Policy, Practice and Compliance Manager
Banan Mukhalalati	FIP Development Goal 3 lead
Naoko Arakawa	FIP Development Goal 5 lead
Arijana Mestrovic	FIP Development Goal 5 lead
Rebecka Isaksson	SIG New Generation of Pharmaceutical Scientists
Brian Cicali	SIG New Generation of Pharmaceutical Scientists
Toyin Tofade	FIP Development Goal 6 lead
Kirstie Galbraith	FIP Development Goal 4 lead
Rob Moss	FIP Technology Advisory Group
Shaun Gleason	FIP Development Goal 1 lead
Mark Koziol	FIP Data & Intelligence Commission
Ka-Chun Cheung	FIP Data & Intelligence Commission
Nadia Almazroui	FIP Hub
Amadi Chima	FIP Hub
Shaun Ellen Gleason	FIP Hub

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