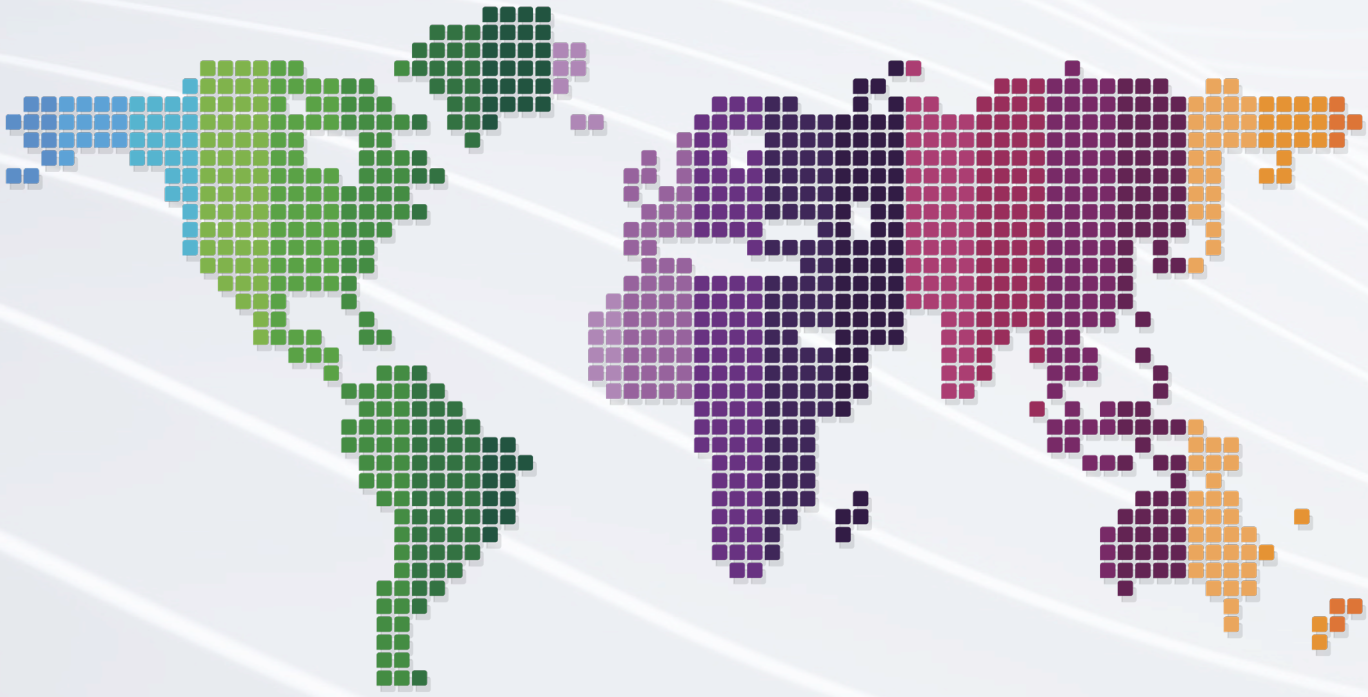
# The FIP Development Goals

Transforming global pharmacy

2020



fip DEVELOPMENT GOALS

# Colophon

Copyright 2020 International Pharmaceutical Federation (FIP)

International Pharmaceutical Federation (FIP)
Andries Bickerweg 5
2517 JP The Hague
The Netherlands
www.fip.org

All rights reserved. No part of this publication may be stored in any retrieval system or transcribed by any form or means – electronic, mechanical, recording, or otherwise without citation of the source. FIP shall not be held liable for any damages incurred resulting from the use of any data and information from this report. All measures have been taken to ensure accuracy of the data and information presented in this report.

Design and layout:
YUPLDN

Recommended citation
International Pharmaceutical Federation (FIP). The FIP Development Goals: Transforming global pharmacy. The Hague: International Pharmaceutical Federation; 2020.

# Contents

**Foreword** ..... **4**
**Acknowledgements** ..... **5**
**Part 1: About the FIP Development Goals** ..... **6**
1.1 The drivers & imperatives ..... 6
1.1.1 The global imperative for "One FIP" goals ..... 6
1.1.2 The journey from workforce goals to the FIP Development Goals ..... 7
1.2 The method and components ..... 9
1.2.1 Development approach and launch ..... 9
1.2.2 Structure and components ..... 9
1.2.3 Workforce elements and pharmaceutical education ..... 10
**Part 2: FIP Development Goals** ..... **11**
FIP Development Goal 1: Academic capacity ..... 12
FIP Development Goal 2: Early career training strategy ..... 14
FIP Development Goal 3: Quality assurance ..... 16
FIP Development Goal 4: Advanced and specialist development ..... 18
FIP Development Goal 5: Competency development ..... 20
FIP Development Goal 6: Leadership development ..... 22
FIP Development Goal 7: Advancing integrated services ..... 24
FIP Development Goal 8: Working with others ..... 26
FIP Development Goal 9: Continuing professional development strategies ..... 28
FIP Development Goal 10: Equity and equality ..... 30
FIP Development Goal 11: Impact and outcomes ..... 32
FIP Development Goal 12: Pharmacy intelligence ..... 34
FIP Development Goal 13: Policy development ..... 36
FIP Development Goal 14: Medicines expertise ..... 38
FIP Development Goal 15: People-centred care ..... 40
FIP Development Goal 16: Communicable diseases ..... 42
FIP Development Goal 17: Antimicrobial stewardship ..... 44
FIP Development Goal 18: Access to medicines, devices & services ..... 46
FIP Development Goal 19: Patient safety ..... 48
FIP Development Goal 20: Digital health ..... 50
FIP Development Goal 21: Sustainability in pharmacy ..... 52
**Part 3: Implementation & transformation** ..... **54**
3.1 Transforming pharmacy using the FIP Development Goals ..... 54
3.2 Supporting our members with prioritisation ..... 54

# Foreword

As the articulation of a ONE-FIP approach became clearer during the autumn of 2018, and the FIP strategy and imperatives were being agreed, the International Pharmaceutical Federation (FIP) supported the Astana Declaration and overtly promoted the role of pharmacy as essential to deliver Primary Health Care globally and, as such, ensure progression towards Universal Health Coverage.

To achieve these aims over the coming decade there was a renewed focus at FIP:

1. The need for FIP to support members (organisations, science organisations, academic institutions, and individuals) to be enabled and empowered to achieve their role in Universal Health Coverage.
2. The need to identify the priorities in country and across regions that were relevant to the pharmaceutical workforce at every level.
3. The need to articulate the goals for the next decade that would enable us to deliver these ambitions.
4. The need for us to support developments, make bridges between our Organisations and enable the sharing of learning and best practices and to evaluate this progress through data and evidence.

Therefore, the development of the FIP Development Goals alongside the evidence generation, collection and display through our FIP Global Pharmaceutical Observatory and FIP Atlas, and the FIP provider model provide bridges between our members and partners to share and support developments nationally, regionally and globally.

An extensive development process underpinning the FIP Development Goals and building on the FIP Pharmaceutical Workforce Development Goals ensure that a systematic integrated framework can facilitate the needs-based transformation of pharmaceutical practice, science and workforce & education.

With the FIP Development Goals, FIP is set to transform global pharmacy working in partnership and collaboration with our members everywhere.

Dominique Jordan
FIP President

Catherine Duggan
FIP Chief Executive Officer

# Acknowledgements

FIP would like to acknowledge the full support received from the Chairs & Members of the Executive Committees of the Board of Pharmaceutical Practice (BPP), Board of Pharmaceutical Science (BPS), and FIP Education (FIPEd); as well as the support received from the FIP Executive Committee, FIP Bureau and FIP Council.

FIP also wishes to thank the following groups for their valuable contribution to the development and delivery of the FIP Development Goals:

## *FIP Development Goals Core Project Team*

Project Chair & Executive Sponsor:
**Catherine Duggan**, FIP Chief Executive Officer (The Netherlands)

***Team Members:***
**Ema Paulino**, FIP Professional Secretary (Portugal)
**Giovanni Pauletti**, FIP Scientific Secretary (USA)
**Ian Bates**, Director of the FIP Workforce Development Hub, UCL-FIP Collaborating Centre, University College London, School of Pharmacy (United Kingdom)
**Diala Koudmani**, PhD Candidate, UCL-FIP Collaborating Centre, University College London, School of Pharmacy (United Kingdom)
**Christopher John**, FIP Lead for Data and Intelligence (United Kingdom)
**Gonçalo Sousa Pinto**, FIP Lead for Practice Development and Transformation (Spain)
**Nilhan Uzman**, FIP Lead for Education Policy and Implementation (The Netherlands)

Project Managers:
Programme Lead for the FIP Development Goals
**Lina R. Bader**, FIP Lead for Workforce Transformation and Development (The Netherlands)

Lead for FIP Development Goals Science Elements
**Zuzana Kusynová**, FIP Lead for Policy, Practice and Compliance (The Netherlands)

## *FIP Development Goals Internal Reference Group*

***FIP Education (FIPEd) Members:***
Interim Chair of FIPEd: **Ralph Altiere**
FIP Workforce Development Hub (WDH): **Marwan Akel; Mariet Eksteen; Barbel Holbein**
Academic Institutional Membership (AIM): **Lilian Azzopardi**
Academic Pharmacy Section (AcPS) – also a BPP Section: **John Pieper; Naoko Arakawa**

***FIP Board of Pharmaceutical Practice (BPP) Members:***
Chair of BPP: **Paul Sinclair**
Military & Emergency Pharmacy Section (MEPS): **Jane Dawson**
Hospital Pharmacy Section (HPS): **Ryan Forrey**
Community Pharmacy Section (CPS): **Manjiri Gharat**
Social & Administrative Pharmacy Section (SAPS): **Tara Hehir**
Industrial Pharmacy Section (IPS): **Sini Eskola; Ulf Janzon**
Health and Medicines Information Section (HaMIS): **Boyan Todorov**

***FIP Board of Pharmaceutical Science (BPS) Members:***
Chair of BPS: **Tatsuro Irimura**
BPS Executive Committee: **Linda Hakes; Marilyn Morris; Shinji Yamashita**
BPS Nominated Members: **Don Mager; Hiroshi Suzuki; Geoff Tucker**

FIP Young Pharmacists Group Member: **Sherly Meilianti**

# Part 1: About the FIP Development Goals

## 1.1 The drivers & imperatives

### 1.1.1 The global imperative for "One FIP" goals

The FIP Development Goals (DGs) are a major global initiative for pharmacy (Figure 1). They build on the innovations that led to the launch of the FIP Pharmaceutical Workforce Development Goals (PWDGs) in November 2016 at the FIP Global Conference on Pharmacy and Pharmaceutical Sciences Education in Nanjing, China. In turn, the PWDGs were inspired and adapted from the concepts underpinning the UN Sustainable Development Goals (SDGs) to ensure alignment of the pharmaceutical workforce to the wider global imperatives.

Conceptually, 'goals' provide an organisation, a profession and the end-user with tangible, achievable and purposeful scope of work, set against clear priorities. The evolution of the FIP DGs represents a systematic and integrated framework to guide development globally, regionally and locally across science, practice and workforce development. Rather than a mandate for direction, the FIP DGs form a foundation for systematic action to meet national, regional and global healthcare needs.

The FIP DGs provide the framework for needs assessments and prioritisation for member organisations to undertake, relevant to their national situation. In turn, the priorities can provide each organisation with the foundations for mapping the progress and transformations for their workforce, practice and pharmaceutical science. This means FIP supports each organisation with their needs and priorities, rather than enforce a programme upon them.

Having a clear and supportive, systematic and integrated global framework for the entire profession has many benefits. The FIP DGs can be used as a framework for applied research and evaluation (for example, in education and professional practice) by universities and professional leadership bodies. The framework can also be a basis for investment in pharmacy healthcare by governmental agencies and funding authorities and for national planning and delivery of policy initiatives.

Furthermore, a systematic and integrated framework facilitates global monitoring for trends and supports a global dashboard to monitor progress in pharmaceutical care, education, applied science and national health impact. Finally, the FIP DGs are a basis for the sharing of best practice, in both a global and national context, and will foster and encourage global cohesion, solidarity and concerted action. This is, and will remain, a work in progress for the decade ahead.

Figure 1. The FIP Development Goals to transform global pharmacy

### 1.1.2 The journey from workforce goals to the FIP Development Goals

The FIP DGs build on the work that was conducted to develop and launch the FIP Pharmaceutical Workforce Development Goals (PWDGs), and they align with our mission to support global health by enabling the advancement of pharmaceutical practice, sciences and education.

The WHO Global Strategy for Human Resources for Health: Workforce 2030 focused on "No health without a workforce". Building on this statement, FIP renewed its strategic plan to map and meet national and global health challenges through workforce development and transformation. This now extends to practice transformation and innovation through pharmaceutical science.

In 2016, FIP put workforce at the start of the transformation that is needed for our profession to deliver services and innovations to meet the evolving needs of our populations. The thirteen PWDGs for workforce development & education were developed and published and have been the basis for targeted transformation programmes across WHO regions. The pharmaceutical workforce is a unique profession with diverse expertise covering science, practice and education.

Having a set of "One FIP" Development Goals enables us to identify commonalities across all areas of FIP, as well as some unique attributes in each area. We believe it is imperative to bring science, practice and workforce & education together into one transformative framework for our members and the wider profession to clearly set out the goals for development for the next decade.

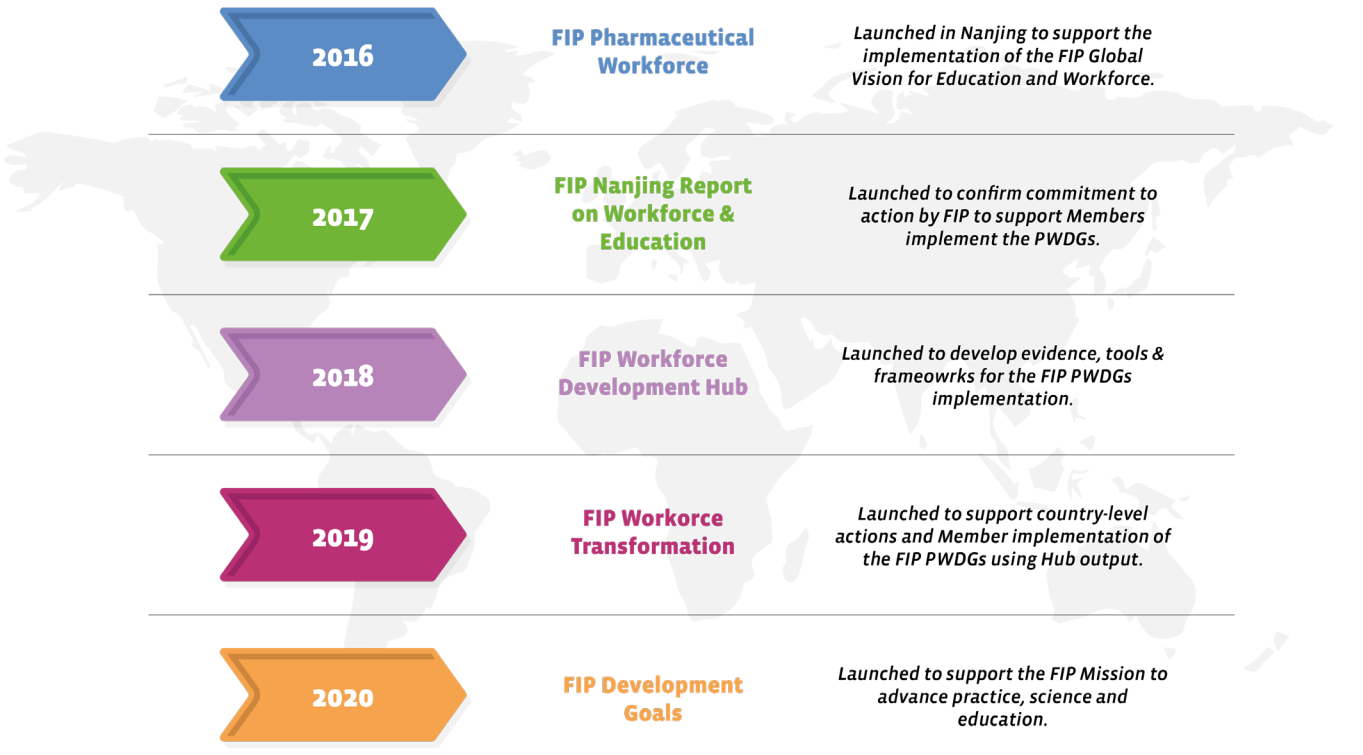



Figure 2. The journey from the FIP Pharmaceutical Workforce Development Goals to the FIP Development Goals

[1] International Pharmaceutical Federation (FIP). Pharmaceutical Workforce Development Goals. The Hague: International Pharmaceutical Federation; 2016. Available here: https://www.fip.org/www/streamfile.php?filename=fip/PharmacyEducation/2016_report/2016-11-Education-workforce-development-goals.pdf

[2] United Nations (UN). Sustainable Development Goals. 2015. Available here: http://www.un.org/sustainabledevelopment/sustainabledevelopment-goals/

[3] Pharmaceutical workforce – in this document, refers to the whole of the pharmacy related workforce (e.g. registered pharmacist practitioners, pharmaceutical scientists, pharmacy technicians and other pharmacy support workforce cadres, pre-service students/trainees) working in a diversity of settings (e.g. community, hospital, research and development, industry, military, regulatory, academia and other sectors) with a diversity of scope of practice.

The FIP DGs are designed to ensure collaborative working across all areas of FIP and other leadership agencies. The Goals provide global pharmacy with a logical next step to link the pharmaceutical workforce with pharmaceutical healthcare provision and the pharmaceutical services we deliver, underpinned by pharmaceutical science.

Together with the existing Goals for workforce & education, new goals have been developed for practice and science form the core elements of the FIP DGs. The FIP DGs package includes tools and structures to facilitate and support the process of transformation. Indicators will be a way to measure and monitor progress via the data we collate in the FIP Global Pharmaceutical Observatory.

These FIP DGs will be key to developing country-level metrics to monitor and measure trends and progress across pharmaceutical practice, science and workforce/education along with concrete and tangible mechanisms. 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 and member organisation.

FIP believes that we can have no pharmaceutical care without a pharmaceutical workforce, and we can have no pharmaceutical care without a scientific foundation (Figure 3).

Figure 3. The FIP Development Goals aim to transform pharmaceutical science, practice and workforce & education

## 1.2 The method and components

### 1.2.1 Development approach and launch

As the articulation of a ONE-FIP approach became clearer during the autumn of 2018, and the FIP strategy and imperatives were being agreed, we supported the WHO Astana Declaration and overtly promoted the role of pharmacy as essential to deliver Primary Health Care globally and, as such, ensure progression towards Universal Health Coverage.

To achieve these aims over the coming decade there was a renewed focus at FIP:

1. The need for FIP to support members (organisations, science organisations, academic institutions and individuals) to be enabled and empowered to achieve their role in Universal Health Coverage
2. The need to identify the priorities in country and across regions that were relevant to the pharmaceutical workforce at every level.
3. The need to articulate the goals for the next decade that would enable us to deliver these ambitions.
4. The need for us to support developments, make bridges between our Organisations and enable the sharing of learning and best practices and to evaluate this progress through data and evidence.

Therefore, the development of the FIP DGs, beyond the PWDGs, was prioritised alongside the evidence generation, collection and display through our FIP Global Pharmaceutical Observatory and FIP Atlas, and the FIP provider model to develop bridges between our members and partners to share and support developments nationally, regionally and globally.

An extensive process of consultation started in January 2019 through to August 2020, building on the methodology used in the development of the PWDGs and adapted to develop the practice and science elements in the new goals. FIP experts, members, partners and stakeholders have all taken part in this work to ensure that the goals are relevant, measurable and achievable. The FIP Boards of Pharmaceutical Practice and Science were involved in the development of the practice and science components respectively.

The development process also included a consultation with the FIP Council in 2019; the Council is FIP's highest organ which includes all national pharmaceutical associations (member organisations) and national pharmaceutical scientific associations (predominantly scientific member organisations). In 2020, a cross-FIP Internal Reference Group was commissioned to provide feedback and input into the draft Goals; the Group included representatives from FIP Boards of practice and science, FIP Education as well as the FIP Young Pharmacists Group.

### 1.2.2 Structure and components

As stated throughout the document, the approach taken was to preserve the integrity of the existing PWDGs (which had been built with science and practice Elements embedded) and then to extend significant science and practice components whilst preserving the PWDGs content was carefully considered and sought:

1. Practice and science Elements were developed and the wider set extended to 21 FIP DGs to accommodate additional practice and science themes.
2. Each of the 21 FIP DGs provides a focus for transforming global pharmacy.
3. Each of 21 FIP DGs comprises essential workforce, practice and science Elements.
4. The existing 13 PWDG (2016) descriptions and mechanisms remain as an underpinning to the workforce Elements of the FIP Development Goals 1-13.
5. Workforce Elements are now included in FIP DGs 14-21 which make reference and cross reference to the original PWDGs.
6. Each of the workforce, practice and science Elements is denoted with:

**WORKFORCE [w]**

for pharmaceutical workforce & education

**PRACTICE [p]**

for pharmaceutical practice

**SCIENCE [s]**

for pharmaceutical science

Figure 4 illustrates the structure and components of the FIP Development Goals as well as the purpose of each component.

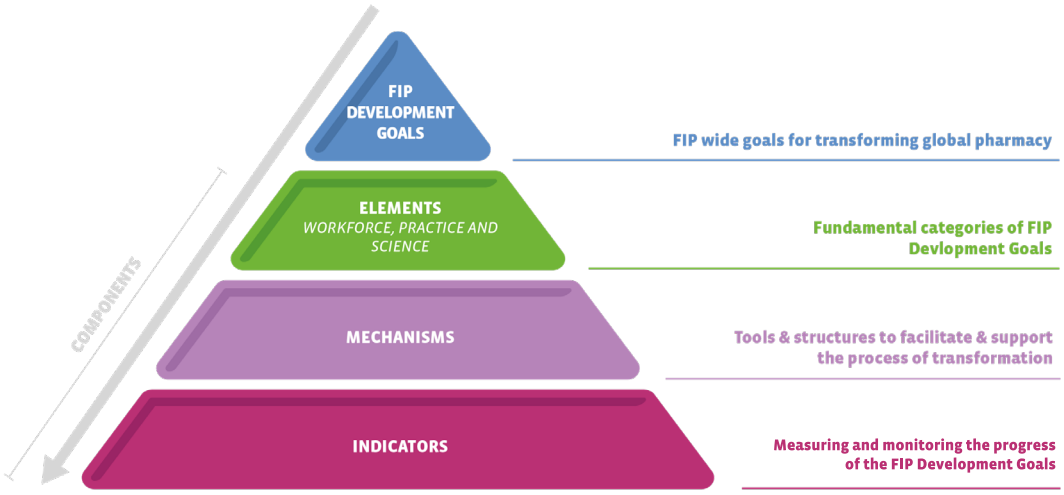



Figure 4. The FIP Development Goals structure and components

### 1.2.3 Workforce elements and pharmaceutical education

There is no workforce without education. Following the Nanjing Conference, FIP has developed a comprehensive roadmap to transform pharmacy and pharmaceutical sciences education in the context of workforce development. This roadmap includes a Global Vision for Education and Workforce, FIP Nanjing Statements and FIP PWDGs. FIP PWDGs encompass education in every goal, while specific goals are targeting good, timely and high-quality delivery of pharmaceutical education.

It is important to clarify that pharmaceutical education is embedded within the workforce Elements of the goals – as they have been since the FIP Pharmaceutical Workforce Development Goals were adopted at the FIP Nanjing Conference in 2016. Since then the term 'workforce' has been used by FIP as an umbrella term that includes both initial & continuing education, alongside other components that focus on post-graduate development (e.g. leadership development, workforce intelligence, advanced practice, interprofessional collaboration and many others).

Some of the workforce Elements of the FIP Development Goals are more relevant to education than others such as those Elements in FIP Development Goal 1 (Academic capacity), FIP Development Goal 3 (Quality assurance) and FIP Development Goal 9 (Continuing professional development strategies). These Goals and others can support pharmacy education institutions and education providers in transformation. In addition, for initial education, the "Nanjing Statements" provide an additional framework for development.

Building on FIP PWDGs, FIP Development Goals include mechanisms of transformations in education linked with the workforce Elements. Pharmacy schools, education providers, academics and students can use these goals for self-assessment and monitoring (at country or education provider level), identification of gaps and strategic planning, improving the process of education as well as engagement and dialogue with policy-makers.

In addition, it pertinent to highlight that education essentially acts as a component for all transformative policies. Through education we can enable measurable achievements in workforce, practice, and science. From this perspective, looking at any of the FIP Development Goals, it is easy to see immediately all have education as a component – so across the whole range of DGs, education as a concept can be seen as integral and is therefore an essential part of the delivery of the FIP DGs.

[4] International Pharmaceutical Federation (FIP). Pharmaceutical Workforce Development Goals. The Hague: International Pharmaceutical Federation; 2016. Available here: https://www.fip.org/www/streamfile.php?filename=fip/PharmacyEducation/2016_report/2016-11-Education-workforce-development-goals.pdf

[5] International Pharmaceutical Federation (FIP). Nanjing Statements: Statements on pharmacy and pharmaceutical sciences education. The Hague: International Pharmaceutical Federation; 2017. Available here: https://www.fip.org/files/content/priority-areas/workforce/nanjing-statements.pdf

# Part 2: FIP Development Goals

# FIP Development Goal 1: Academic capacity

**FIP DG 1 ELEMENTS**

Globally, we will have...

**MECHANISMS**

**FIP Development Goal 1 [w]**

Engagement with pharmaceutical higher education development policies and ready access to leaders in all sectors of pharmacy practice and pharmaceutical science in order to support supply-side workforce development agendas.

- Increase the capacity to provide a competent pharmaceutical workforce by developing initial education and training programmes that are fit for purpose, according to national health resource needs (clinical practice, pharmaceutical science areas and stakeholders across all cadres).
- Develop new and innovative ways to attract young pharmacists into all areas of pharmaceutical practice and science (e.g., encourage young pharmacists to consider careers in clinical academia, as preceptors/ trainers, in industrial pharmacy, regulatory sciences, nuclear and veterinary pharmacy, among others).
- Capacity building should include the ability to meet minimum national standards of facilities, educators and student support in order to ensure access to quality education for all students.
- Enhance interdisciplinary & interprofessional education and collaboration with key stakeholders, including governments, national and international health & pharmaceutical organisations and patient advocacy groups to achieve sustainable solutions for capacity development.
- The clinical academic educator workforce needs more attention to training, career development and capacity building, which must, importantly, include research capacity enhancement.
- Using data and evidence to support investment in pharmaceutical higher education

**FIP Development Goal 1 [p]**

Capacity for in-practice training and development linked with education providers; pathways for professional advancement from foundation training through to advanced practice and/or specialisation.

- Develop the capacity and infrastructures for teacher practitioners and in-practice education providers to support practice advancements including the provision of specialist training.
- Develop frameworks, standards, and structures for post-graduate and advanced education and training.
- Develop interprofessional and interdisciplinary education and training structures integrated in practice.
- Develop robust training performance indicators that can be utilised within training programs across a variety of practice settings, allowing for evaluation of performances and assessment of competences

**FIP Development Goal 1 [s]**

Institutional academic capacity to deliver quality pharmaceutical sciences education and training for pharmacists and pharmaceutical scientists who contribute to patient care, new discoveries and development, clinical utilisation, marketing regulations, and the economic assessment of health products.

- Collaborate with academic leaders, professional organizations, regulatory bodies, and the pharmaceutical industry to define regional and global needs for the pharmaceutical sciences.
- Build relationships with relevant stakeholders to best align scientific content of academic courses with contemporary professional practice in pharmacy and pharmaceutical sciences.
- Inventory global pharmaceutical sciences training opportunities to broaden student access to curricular content.

# FIP Development Goal 2: Early career training strategy

**FIP DG 2 ELEMENTS**

Globally, we will have...

**MECHANISMS**

**FIP Development Goal 2 [w]**

Engagement with pharmaceutical higher Foundation training infrastructures in place for the early post-registration (post-licensing) years of the pharmaceutical workforce as a basis for consolidating initial education and training and progressing the novice workforce towards advanced practice.

- Create clear and purposeful education and training pathways/ programmes to support post-registration (post-graduation) foundation training (clinical practice and pharmaceutical science areas).
- Develop early career maps and frameworks to support a seamless transition into early career practice and towards advanced practice.
- Develop structured approaches to early career mentoring systems to support novice practitioners to engage with peers and preceptors (including clinical practice and pharmaceutical science areas across the pharmaceutical workforce).
- Using data and evidence to support investment in early career training

**FIP Development Goal 2 [p]**

Training strategy and infrastructures providing structured journeys for early career pharmacy practitioners including and pharmacy support workers linked towards advanced practice and specialisation frameworks and professional recognition and certification.

- Develop structured opportunities for in-practice early-career training.
- Provide career and mentorship support for early career practitioners.
- Provide appropriate conditions for reconciling early-career practice and personal circumstances with education and training pathways/ programmes.
- Provide appropriate incentives, recognition and certification of practice development.

**FIP Development Goal 2 [s]**

Education and training of graduate/post-graduate students and early career pharmaceutical scientists to advance their skills in basic, translational, clinical, and regulatory sciences.

- Develop mentoring programmes that connect trainees and early career pharmaceutical scientists to qualified mentors with experience in academia, industry and regulatory bodies.
- Establish dedicated discussion forums for trainees and early career scientists to facilitate networking and professional development opportunities.

# FIP Development Goal 3: Quality assurance

**FIP DG 3 ELEMENTS**

Globally, we will have...

**MECHANISMS**

**FIP Development Goal 3 [w]**

Transparent, contemporary and innovative processes for the quality assurance of needs-based education and training systems.

- Ensure the quality of the workforce by quality assuring the continuous development and the delivery of adequate and appropriate education and training; quality assurance needs to address academic and institutional infrastructure in order to deliver the required needs and competency-based education and training.
- Establish standards-based global guidance for quality assurance of pharmacy and pharmaceutical science education in the context of local needs and practice.
- Implement fair, effective and transparent policies and procedures for quality assurance of pharmacy and pharmaceutical science education and training.
- Define critical stakeholder input on development of adequate education and training and fair and effective policies, including necessary student input.

**FIP Development Goal 3 [p]**

Transparent, contemporary and innovative processes for the quality assessment, monitoring and improvement of services in practice.

- Define standards for practice by pharmacists and pharmacy support workforce in community, hospital and other direct patient care roles.
- Develop standards-based guidance, practice support tools and self-assessment tools for the implementation and delivery of professional services that are aligned with patient, community and health system needs.
- Ensure systems are in place for upholding ethical practice across all areas of pharmaceutical practice.
- Establish mechanisms and indicators for quality improvement including collaborative working, patient safety and professional standards.
- Ensure the quality and effectiveness of pharmaceutical services by assuring the education, training, performance and professional development standards that develop a workforce fit to deliver those services.
- Establish mechanisms for ('real world') pragmatic and useful evidence-based service implementation and service evaluation and monitoring such as audit systems, patient feedback, health outcomes research and cost effectiveness measures.

**FIP Development Goal 3 [s]**

Quality and integrity in pharmaceutical research, development, manufacturing, and regulations to assure access to safe and effective medical products globally.

- Create an accessible library of guidance documents defining quality assurance criteria for various pharmaceutical sciences focus areas.
- Develop tools to improve knowledge of national regulatory requirements for medical products
- Collaborate with global and regional stakeholders to develop mechanisms aimed at reducing substandard and falsified medical products.

# FIP Development Goal 4: Advanced and specialist development

| FIP DG 4 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 4 [w]**<br>Education and training infrastructures in place for the recognised advancement of the pharmaceutical workforce as a basis for enhancing patient care and health system deliverables. | • Need for a common and shared understanding of what is meant by 'specialisation' and 'advanced practice' in the context of scope of practice and the responsible use of medicines.<br>• Ensure competency and capability of an advanced and expert pharmacist in all sectors (including specialisations extending to industry and administration settings) for greater optimisation of complex pharmaceutical patient care. This may now include prescribing roles within a recognised scope of practice.<br>• Systematic use of professional recognition programmes, systems and frameworks as markers for advancement and specialisation across the workforce, including advanced pharmaceutical scientists. |

**FIP Development Goal 4 [p]**

Sector-specific competency and development frameworks and infrastructures for advanced and/or specialised pharmacy practice and people-centred services.

- Develop practice infrastructures to support advanced practice and specialisation such as board certification, residency training, continuing professional development, proof of attainment of competencies.
- Establish regulatory requirements for advanced practitioners and specialists in the appropriate settings, to ensure an adequate response to patient needs and optimal integrative care.
- Establish pathways and plans for the development and delivery of advanced services.
- Ensure mechanisms are in place so that pharmacists and pharmacy support workers are able to practice at the top of their license.
- Ensure appropriate recognition of advanced competences and specialisation, and alignment with formal career progression systems and adequate incentives (remuneration and other).
- Increase capacity for specialised training and/or certification programs.

**FIP Development Goal 4 [s]**

Education, training, and mentoring to foster innovation and expertise in pharmaceutical sciences.

- Develop guidance on how specialised pharmaceutical science expertise is acquired in different settings.
- Establish mechanisms to recognise expertise in pharmaceutical sciences such as patents, fellowship status, grants received, and promotions.
- Collaborate with industry and academia to define programmes that offer additional mentoring, networking, international exposure, and leadership development for scientists at all levels.

# FIP Development Goal 5: Competency development

| FIP DG 5 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 5 [w]**<br>Clear and accessible developmental frameworks describing competencies and scope of practice for all stages of professional careers. This should include leadership development frameworks for the pharmaceutical workforce. | • Use of evidence-based developmental frameworks to support the translation of pharmaceutical science within scope of practice, across all settings and according to local/national needs.<br>• Support professional career development by using tools, such as competency frameworks, describing competencies and behaviours across all settings.<br>• Evidence of clear policy that links leadership development (from early years) with competence attainment for the advancement of practice activities. |

**FIP Development Goal 5 [p]**

Clearly defined developmental frameworks for practitioners describing competencies linked to professional services delivered in practice.

- Use evidence-based competency frameworks that support the development of practitioners to deliver specific professional services within their scope of practice, such as medicines use review, adherence optimisation, compounding, prescribing, vaccinating or managing communicable and non-communicable diseases, to name a few.
- Define lists of essential and advanced services delivered by pharmacists and pharmacy support workers within their scope of practice.
- Define lists of competencies needed to deliver those services within specific scopes of practice.
- Ensure developmental frameworks that support leadership, humanistic and ethics development of the workforce.
- Support the development and training of service-led competencies through short courses, certifications and other continuing professional development opportunities.

**FIP Development Goal 5 [s]**

Framework describing competencies for all stages of professional careers in pharmaceutical sciences.

- Define evidence-based competency frameworks for pharmaceutical scientists to effectively meet the needs in academia, industry, and regulatory bodies.

# FIP Development Goal 6: Leadership development

| FIP DG 6 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 6 [w]**<br>Strategies and programmes in place that develop professional leadership skills (including clinical and executive leadership) for all stages of career development, including pharmaceutical sciences and initial education and training. | • Creation of programmes and strategies for the development of leadership skills (including tools and mentoring systems), to support pharmacists and pharmaceutical scientists through their careers.<br>• Advocacy for leadership development in healthcare teams, linked to collaborative working activities (for example, promotion of team-based approaches to healthcare service delivery).<br>• Ideally, this should be linked with competency and foundation and early year career development activities. |

**FIP Development Goal 6 [p]**

Strategies and programmes for professional leadership which incorporates team- and collaborative performance, service development in line with local needs, and clinical leadership which demonstrates responsibility, accountability, decision-making ownership and professional autonomy.

- Promote the development of leadership skills that warrant professional autonomy and decision-making ownership, clinical responsibility and accountability for patient outcomes, as well as for economic and environmental impacts.
- Promote the development of leadership in quality assurance of professional performance (one's own and team performance) and collaborative approaches to healthcare delivery and in reviewing processes accordingly.
- Recognise clinical leadership as a means to enhancing quality and transforming people-centred clinical services for excellence.
- Promote the development of professional advocacy skills to empower pharmacists to effectively advocate for the profession to governments, regulators, policy makers and other stakeholders, and to become themselves key decision-makers and influencers at all these levels.

**FIP Development Goal 6 [s]**

Strategies and programmes for scientific leadership are in place to sustain excellence in pharmaceutical sciences research, development, manufacturing, and regulations.

- Partner with accessible leadership programmes & agencies to provide a unique and structured FIP Leadership programme for pharmaceutical scientists.
- Implement mentorship programmes with experienced pharmaceutical sciences leaders in academia, industry, and regulatory bodies.
- Establish an inventory of quality leadership programs in pharmaceutical sciences to expand professional development opportunities.

# FIP Development Goal 7: Advancing integrated services

**FIP DG 7 ELEMENTS**

Globally, we will have...

**MECHANISMS**

**FIP Development Goal 7 [w]**

A patient-centred and integrated health services foundation for workforce development, relevant to social determinants of health and needs-based approaches to workforce development.

- Systematic development of education and training activities based on local healthcare systems, their capacity and funding.
- Evidence of systematic development policies and strategies for the strengthening and transforming pharmaceutical workforce education and the systematic training of trainers and educators.
- Education providers must ensure, by the provision of evidence-based approaches, that lecturers, teachers and trainers are themselves appropriately trained for capability and competency.
- Enable the pharmaceutical workforce and key stakeholders to promote health equity through actions related to social determinants of health.

**FIP Development Goal 7 [p]**

A people-centred and integrated health care provision that is based on an interprofessional and cross-setting seamless continuum including pharmacist-delivered professional services.

- Define clear processes and procedures for developing and delivering integrated, needs-based services in practice and across all health care settings.
- Develop and implement systems for the design, delivery and evaluation of such services in primary, secondary, tertiary, and urgent and emergency care services.
- Recognise that people-centred integrated quality health services are the foundation for optimal clinical, humanistic, economic and sustainable health care outcomes.
- Clearly identify patient and population needs that support the development and delivery of pharmaceutical services that are relevant to health needs.
- Ensure capacity to deliver interprofessional integrated services during humanitarian crises, disasters and emergency situations.
- Ensure collaborative working with others within the pharmacy team and other health care providers especially through transitions of care and lifespan care.
- Implement quality measures of all outcomes of health care, from an integrated, holistic perspective, which take into account the Person's Journey.

**FIP Development Goal 7 [s]**

Scientific strategies to evaluate expanded professional pharmacy services and programmes, including translational and reverse-translational research.

- Create evidence of team-based, interdisciplinary science.
- Establish a forum to facilitate translational and reverse translational research, with the goal to expand pharmaceutical services and drive innovative research.
- Foster collaboration between pharmaceutical scientists and pharmacists to evaluate advanced services and help document the value added to healthcare systems.

# FIP Development Goal 8: Working with others

| FIP DG 8 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| **FIP Development Goal 8 [w]** Clearly identifiable elements of collaborative working and interprofessional education and training which should be a feature of all workforce development programmes and policies. | • Evidence of policy formation to demonstrate how healthcare professionals can develop and engage in partnerships to achieve better health outcomes.<br>• Develop education and training strategies and programmes to ensure collaboration within the pharmaceutical workforce and training on medicines for other healthcare professionals.<br>• Ideally, this should be linked with formal professional development activities. |

**FIP Development Goal 8 [p]**

Clearly identifiable elements of inter- and intra-professional collaboration and multi-disciplinary healthcare, delivered through cohesive and interdependent teams working across interfaces and transitions of care.

- Develop structures and systems for multidisciplinary intra- and interprofessional teams of all relevant health cadres to work together in a coordinated manner across all levels of care. This should include pharmaceutical practice for optimal people-centred care delivery in primary, secondary and tertiary health settings.
- Work across interfaces and transitions of the health system (including digital interfaces) to ensure continuity of care between levels of care and care journeys through mechanisms such as appropriate communications and health data sharing, shared decision-making, shared accountability for patient outcomes, and services such as medicines reconciliation or collaborative management of long-term conditions.
- Support the development of policies where pharmacists and the support workforce are key actors in collaborative practice and integrated care.
- Work with stakeholders, agencies, and other health professional associations to enable legislative change and development.
- Ensure engagement of patients, formal and informal caregivers and community health workers in multidisciplinary health decision making through their empowerment, improved health literacy and orientation, participation and connectivity in the team as ambassadors for their own and their communities' health.
- Recognise own professional autonomy and leadership, equal responsibility and accountability with other health professionals in terms of the scope of practice.
- Recognise collaborative practice as a quality indicator for care delivery and capacity improvement.
- Develop and implement intra- and interdisciplinary programmes for workforce willing to change from practice to sciences and vice versa or develop career paths in associated fields.

**FIP Development Goal 8 [s]**

Transdisciplinary collaboration to advance education, research, development, manufacturing and regulations that collectively improve access to medical products.

- Establish opportunities for pharmaceutical scientists and clinical practitioners to collaborate.
- Broaden pharmaceutical sciences education by integrating other disciplines that contribute to innovation, development and manufacturing, and regulations of medical products.
- Foster transdisciplinary collaboration by enabling trainees and early career researchers to work with mentors from different fields.

# FIP Development Goal 9: Continuing professional development strategies

| FIP DG 9 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 9 [w]**<br>All professional development activity clearly linked with needs-based health policy initiatives and pharmaceutical career development pathways. | • Evidence of an effective continuing professional development strategy according to national and local needs.<br>• Development of programmes to support professional development across all settings of practice and all stages of a pharmacist's career.<br>• Ideally, this should be linked with all professional development activities across the workforce.<br>• Education in continuing professional development strategies and self-directed behaviours should be initiated at the student level.<br>• Development of programmes to support return to practice after career breaks or sector changes. |

**FIP Development Goal 9 [p]**

In-practice and needs-based continuing professional development (CPD) and continuing education (CE) linked to career development pathways and practice frameworks.

- Develop and implement CPD requirements for renewal of licensure, registration and/or advanced practice and specialist recognition.
- Ensure the provision of continuing education opportunities in the workplace.
- Recognise life-long learning within pharmacists' professional journey.
- Develop online programmes for continuing education and training which lead to certification or credentialing.

**FIP Development Goal 9 [s]**

Integrate professional development as an essential component of advanced pharmaceutical sciences.

- Facilitate collaboration between academia, industry, and government to identify professional development priorities for pharmaceutical scientists.
- Inventory professional development opportunities for pharmaceutical scientists.

# FIP Development Goal 10: Equity and equality

| FIP DG 10 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 10 [w]**<br>Clear strategies for addressing equity and diversity inequalities in pharmaceutical workforce development, continued education and training, and career progression opportunities. | • Demonstration of strategies to address the equity and diversity inequalities across all pharmaceutical workforce and career development opportunities.<br>• Ensure full and effective participation and equal opportunities for leadership at all levels of decision-making in pharmaceutical environments; avoidable barriers to participation for all social categories are identified and addressed.<br>• Engagement and adoption of workforce development policies and enforceable legislation for the promotion of equity and equality; policies and cultures for the empowerment of all without bias.<br>• This should be applicable to academic capacity and leadership development activities. |

**FIP Development Goal 10 [p]**

Clear strategies for equity and diversity in pharmaceutical services delivery, service access and service impact so that all people have access to quality pharmaceutical care.

- Develop and deliver pharmaceutical care services based on patient, population and health-system needs, taking into consideration diverse socio-economic and demographic needs and expectations.
- Develop and implement strategies to address equal accessibility of patients and populations to services including access to medicines and medicines information pharmaceutical workforce and medicines expertise, disease prevention (including vaccination) and public health services, and digital health services.
- Recognise and effectively address the social determinants of health and the specific health needs of frail, vulnerable populations, and underserved communities.
- Ensure access by patients and populations to the pharmacy workforce across areas (e.g. urban and rural environments) and health care systems (e.g. both private and public).
- Ensure the availability and use of service and workforce data and intelligence to understand and identify equity and equality issues and develop evidence-based policies to address them.
- Engage patients in identifying and prioritising needs and advocate for and on behalf of those under-serviced or under-utilising services; consider acceptability of services by patients when delivering pharmaceutical care.
- Recognise the importance of social accountability in delivering value-based healthcare.

**FIP Development Goal 10 [s]**

Equity in global capacity of pharmaceutical sciences training, research infrastructure, development and manufacturing capabilities, and evidence-based regulatory oversight.

- Advocate for equitable career pathways to augment pharmaceutical sciences workforce in academia, industry, and regulatory bodies.
- Monitor success of strategies implemented across the spectrum of pharmaceutical sciences to ensure sustained equity and diversity.

# FIP Development Goal 11: Impact & outcomes

| FIP DG 11 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| **FIP Development Goal 11 [w]** Evidence of the impact of the pharmaceutical workforce within health systems and health improvement. | • Engagement with systems to measure the impact of the pharmaceutical workforce on health improvement and healthcare outcomes. Links with needs-based education, training and workforce planning.<br>• Gather continuous data points to monitor the performance of the pharmaceutical workforce.<br>• Ideally, this should be linked with strategies to enhance workforce intelligence. |

**FIP Development Goal 11 [p]**

Evidence of the impact of pharmaceutical services in terms of health outcomes and quality of life, improved efficiency of health systems and sustainability.

- Recognise, assess and take accountability for the societal impact of pharmaceutical services in terms of health outcomes and quality of life, improved efficiency and resilience of health systems, availability and accessibility of services, equity and equitability, and overall sustainability (economic, organisational and environmental).
- Implement systems to measure and monitor service impact and outcomes that are based on agreed definitions and standards, quality and performance indicators, real-world outcomes metrics (including public and patient-reported outcomes) and other data and service assessment intelligence for all professional services, from essential to advanced and specialised.
- Enable and promote practice-based research, health impact assessment and evaluation mechanisms that facilitate practitioner-led evidence generation.
- Implement systems to measure cost effectiveness, including cost-effectivity analysis, cost-benefit and cost–utility analysis, and budgetary impact of pharmacists' professional services.
- Promote the transparent and rigorous exchange and publication of impact assessment data for pharmaceutical services to inform practice development, policy and funding strategies at local, national and international level.

**FIP Development Goal 11 [s]**

Strategies and programmes in place to enable timely access to safe, effective, and affordable medical products.

- Monitor and report on the positive and negative consequences of new medical products.
- Use of transparent evaluation processes to establish value of outcomes of pharmacy practice service delivered or pharmaceutical science outcomes delivered.
- Promote scientific research to continuously improve patient care using innovative technologies.
- Disseminate the contributions of pharmaceutical sciences underpinning sustained success in drug discovery, development, and utilisation.

# FIP Development Goal 12: Pharmacy intelligence

| FIP DG 12 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 12 [w]**<br>A national strategy and corresponding actions to collate and share workforce data and workforce planning activities (skill mixes, advanced and specialist practice, capacity). Without workforce intelligence data there can be no strategic workforce development. | • An operational global pharmaceutical observatory<br>• Develop monitoring systems to identify workforce trends to enable decision making on deployment and supply of pharmaceutical workforce, noting that time-lags are often present in these activities.<br>• Ideally, this should be linked with stewardship and leadership for professional leadership bodies. |

**FIP Development Goal 12 [p]**

A comprehensive national strategy to collate, share and utilise intelligence on service provision, development, delivery and needs to inform evidence-based pharmaceutical services development, policymaking and funding decisions.

- Develop agreed frameworks for the provision of professional services that include clear definitions, requirements and standards against which it becomes possible to assess service delivery and generate professional service intelligence.
- Develop and implement systems for collating data and gathering and processing evidence on service delivery and availability across all jurisdictions and populations at country level.
- Define and recognise at country level a set of minimum indicators and metrics for service intelligence.
- Develop integrated databases for service delivery, workforce and science intelligence. Develop mechanisms for the rigorous and transparent exchange and sharing of service intelligence with stakeholders, partners and other professionals at local, national and international level.
- Develop the capacity to utilise big data generated in practice and in science, and to perform horizon scanning, trends assessment and predictions (e.g. demographic evolution, health needs trends, pandemics and other emergencies).

**FIP Development Goal 12 [s]**

Data-driven decision strategies to accelerate pharmaceutical research, development, manufacturing, and market approval of medical products in order to maximise clinical benefits for individual patients.

- Enable access to virtual hubs for information sharing and enhancement of collaborations.
- Promote “open science” gathering of data and information to accelerate all aspects of pharmaceutical sciences as a means of enabling pharmaceutical research intelligence production.

# FIP Development Goal 13: Policy development

**FIP DG 13 ELEMENTS**

Globally, we will have...

**MECHANISMS**

**FIP Development Goal 13 [w]**

Clear and manageable strategies to implement comprehensive needs-based development of the pharmaceutical workforce throughout the entire professional career life cycle.

- Adopt and strengthen sound policies and enforceable legislation for holistic needs-based approaches to professional development across all settings and stages.
- Develop strategies where pharmaceutical science and professional services are the driving forces for this activity.
- Strategies to include policies addressing pharmaceutical workforce welfare, well-being and safety in the workplace.

**FIP Development Goal 13 [p]**

Clear pharmacy-led strategies to develop and implement needs- and evidence-based practice-related policies on service implementation, integration and remuneration, aligned with broader national health policies and priorities.

- Develop and implement policies and regulations through appropriate statutory and regulatory reform, that responds to patient and societal needs and extends the scope of pharmacy practice accordingly.
- Use policy tools and regulations to support and shape pharmacy practice in all jurisdictions and provide adequate frameworks for service implementation, integration and remuneration.
- Develop policies and mechanisms to incentivise and encourage intra- and inter-professional collaboration integrated care delivery.
- Implement policy review systems that measure the validity, relevance, implementation and uptake of policies.
- Develop emergency and contingency action plans to expand the scope of practice in emergency situations.

**FIP Development Goal 13 [s]**

Defined strategies to implement needs-based pharmaceutical policies that drive national research priorities, intellectual property protection, licensing, and pricing decisions for medical products.

- Contribute to the development of global standards in regulation.
- Support science-based policies guiding development and assessment of medicinal & medical products.

# FIP Development Goal 14: Medicines expertise

**FIP DG 14 ELEMENTS**

Globally, we will have...

**MECHANISMS**

**FIP Development Goal 14 [w]**

Strategies and systems in place to prepare and train a workforce that can deliver quality medicines expertise.

- Ensure academic capacity (FIP Development Goal 1 [w]) to deliver education and training to enhance medicines expertise in initial education.
- Incorporate expert information and advice provision skills in early career training strategy (FIP Development Goal 2 [w]) and continuing professional development strategies (FIP Development Goal 9).
- Utilise advanced and specialist development systems and frameworks (FIP Development Goal 4 [w]) to develop medicines expertise as an advanced or specialist area for the workforce, in addition to being embedded within leadership development programmes (FIP Development Goal 6 [w]).
- Incorporate medicines expertise competencies and skills in competency development frameworks for pharmacy (FIP Development Goal 5 [w]).

**FIP Development Goal 14 [p]**

Strategies and systems in place on pharmaceutical expert information and advice provision to patients, formal and informal caregivers, health care professionals and relevant agencies and stakeholders.

- Provide medicines and medical devices expertise and advice to patients, formal and informal caregivers, health care professionals and relevant agencies and stakeholders to inform policymaking, clinical decision-making and prescribing practices, individual health care options and other medicines or medical devices related decisions.
- Empower patients, formal and informal caregivers, and communities by increasing health literacy towards better care and self-care.
- Utilise appropriate communication and counselling pathways and skills to provide quality and appropriate information, taking into considerations cultural and language factors and other specific care needs (e.g. people with functional diversity, migrant and refugee populations, etc).
- Utilise formal resources including formularies and medicines information management systems to convey objective, evidence-based and systematically organised information about medicines and medical devices to support pharmacy practice and service delivery, as well as the practice of other healthcare professionals.

**FIP Development Goal 13 [s]**

Encourage provision of science-based information on medicines.

- Promote responsible use of medicines by mobilising medicines expertise.
- Implement high-value cognitive services to review and optimise medicines use.

# FIP Development Goal 15: People-centred care

**FIP DG 15 ELEMENTS**

Globally, we will have...

**MECHANISMS**

**FIP Development Goal 15 [w]**

Strategies in place to develop pharmaceutical education and the workforce to support the delivery of people-centred care in practice.

- Ensure academic capacity infrastructures in place to develop people-centred-care knowledge and skills in initial education and training (FIP Development Goal 1 [w]), including in interprofessional education development (FIP Development Goal 8 [w]).
- Embed people-centred care as a strategic outcome in earlier career training (FIP Development Goal 2 [w]) as well as throughout advanced and expert specialist development (FIP Development Goal 4 [w]).
- Utilise people-centred care as an indicator for evaluating and developing quality assurance in education (FIP Development Goal 3 [w]), as well as for monitoring workforce impact (FIP Development Goal 11 [w]).
- Develop competency frameworks across all stages of workforce development with people-centred care at the core (FIP Development Goal 5 [w]).

**FIP Development Goal 15 [p]**

Collaborative interprofessional strategies and people-centred professional services to support the prevention, screening, clinical management and therapeutic optimisation of non-communicable diseases (NCDs) and long-terms conditions (LTCs) including cardiovascular diseases, chronic respiratory conditions (such as asthma and chronic obstructive pulmonary disease, COPD), diabetes, cancer, mental health conditions, dermatological conditions and others.

- Develop and implement structured and evidence-based disease prevention (and secondary prevention) strategies and professional services for NCDs and LTCs, that effectively address and modify or minimise risk factors.
- Develop and implement structured and evidence-based strategies and professional services for community-based screening and monitoring of NCDs and LTCs and their risk factors, symptoms and clinical signs through point-of-care tests and other assessment methods like structured tools and questionnaires to identify individuals that may require further diagnostics and/or care.
- Develop and implement structured systems and protocols for the referral of potential patients to other HealthCare Professionals, and for sharing clinical findings from patient screening and monitoring across the health care team and system, namely via shared access (for consultation and input) to the patient's (electronic) health records.
- Develop and implement structured and evidence-based strategies and professional services for the optimisation of treatments and medicines use, to ensure optimal clinical and quality of life outcomes and resource utilisation.
- Develop and implement structured and evidence-based strategies and professional services for special patient populations with long-term conditions and specific needs, such as older adults, people with functional diversity, rare disease patients, poor and vulnerable patients, illiterate patients, migrant populations, refugees and other groups.

**FIP Development Goal 15 [s]**

Capacity to monitor and understand health-related characteristics leading to innovative personalized approaches for improved people-centred care.

- Promote provision of science-based medicine information.
- Collaborate with stakeholder to make available the latest relevant scientific information.
- Support development of new medical products to meet healthcare needs.
- Collaborate with global (the World Health Organization) and regional stakeholders to develop strategies for repurposing of licensed medicines for other conditions.

# FIP Development Goal 16: Communicable diseases

| FIP DG 16 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 16 [w]**<br>Education and training infrastructures in place to develop a workforce prepared to deliver quality services around communicable and vector-borne diseases. | • Ensure adequate education and training for the effective performance of the roles described above at part of foundation training of the pharmaceutical workforce (FIP Development Goal 2) as well as in postgraduate and continuing professional development pathways (FIP Development Goals 4 & 9 [w]).<br>• Develop competency for vaccination delivery and related roles as part of undergraduate education and/or CPD pathways whenever the regulatory frameworks for pharmacists' scope of practice supports the delivery of these services (FIP Development Goal 5 & 7 [w]). |

**FIP Development Goal 16 [p]**

Strategies and people-centred professional services for the prevention, surveillance, management and therapeutic optimisation of communicable and vector-borne diseases.

- Develop and implement structured and evidence-based disease prevention strategies and professional services for vector-borne and communicable diseases by all types of etiological agents (viruses, bacteria, fungi, parasites).
- Develop and implement structures and mechanisms to contribute to overall integrated prevention health strategies that aim to prevent or slow the progression and spread of diseases and vectors.
- Engage with stakeholders and policy makers to implement strategies and policies that support the delivery of vaccines by the pharmaceutical workforce.
- Develop and implement clear and comprehensive strategies on readiness for dealing with and delivering urgent and emergency pharmaceutical care and services during pandemics, epidemics, and disease outbreaks.
- Develop and utilise tools, resources, and expertise to educate patients and caregivers in an appropriate and timely manner on communicable and vector-borne diseases including sexual health education in the context of preventing sexually transmitted diseases.

**FIP Development Goal 16 [s]**

Capacity to monitor and respond to communicable with innovative approaches for prevention and treatment.

- Facilitate information sharing about disease prevalence and innovative treatment strategies.
- Inventory and disseminate educational programmes and tools to accelerate innovative preventive and treatment strategies.
- Monitor the development of innovative diagnostic, preventative and therapeutic pharmaceutical products.

# FIP Development Goal 17: Antimicrobial stewardship

| FIP DG 17 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 17 [w]**<br>Strategies and systems in place to develop a pharmaceutical workforce prepared to deliver quality services for antimicrobial stewardship. | • Enable the workforce to acquire knowledge and skills necessary in initial education (FIP Development Goal 1 [w]), early career training (FIP Development Goal 2 [w]) and continuing professional development (FIP Development Goal 9 [w]).<br>• Identify competencies needed for antimicrobial stewardship services delivery and incorporate them in competency frameworks and advanced/specialist development (FIP Development Goals 4 & 5 [w]). |

**FIP Development Goal 17 [p]**

Infrastructures and frameworks in place to deliver services for antimicrobial stewardship.

- Develop and implement systems and structures to deliver antimicrobial stewardship services as a coordinated programme that promotes the appropriate use of antimicrobials, improves patient outcomes and decreases the spread of infections caused by multidrug-resistant organisms.
- Utilise and assess data and metrics to improve and optimise antimicrobial stewardship services.
- Advocate for and support the responsible use of antimicrobials.

**FIP Development Goal 17 [s]**

Promote research and development of new antimicrobials, new antimicrobial combinations and new techniques and evaluate the impact of antibiotic stewardship programmes.

- Promote strategies mitigating antimicrobial resistance in community- and hospital-acquired infections and in the use of antibiotics in livestock production and agriculture.
- Report research data underlining the relevance and impact of antibiotic stewardship programmes.
- Raise awareness of powerful pharmaceutical sciences technologies such as bioinformatics and quantitative systems pharmacology to identify novel combinatorial therapies.

# FIP Development Goal 18: Access to medicines, devices & services

| FIP DG 18 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 18 [w]**<br>Strategies in place to widen access to medicines & services through a responsive, capable, available and well-distributed pharmaceutical workforce. | • Ensure workforce development strategies are in line with services in needs (FIP Development Goal 7 [w]).<br>• Develop medicines expertise competencies in the workforce to deliver quality care (FIP Development Goal 14 [w]).<br>• Link gender and diversity balances in the workforce with optimisation of service delivery such as to improve access to minority groups and special patient populations (FIP Development Goal 10 [w]) .<br>• Utilise workforce intelligence and date to inform strategies for workforce production, distribution, and capacity improvement (FIP Development Goal 12 [w]). |

**FIP Development Goal 18 [p]**

Systems in place to optimise access to effective medicines and pharmaceutical care services through appropriate supply chains, quality standards, self-care & prevention services, and affordability and fair pricing policies.

- Develop systems and structures to ensure appropriate supply of and access to medicines and other health products (including medical devices).
- Develop and implement contingency plans for shortages of medicines and medical devices.
- Develop and implement quality standards and guidelines to ensure access to safe and effective medicines and medical devices, prevent the entry of substandard or falsified medicines in the legitimate supply chain, and ensure the stability of medicines in different environmental conditions, in addition to other safety and quality indicators.
- Advocate for and contribute to the development and implementation of policies and initiatives addressing affordability and fair pricing of medicines, medical products and devices, and services that aim to ensure equitable access for all, and especially for fragile and vulnerable communities, as well as access to specialised and innovative therapies.
- Ensure access to optimal treatment outcomes and promote the responsible and optimal use of medicines through the provision of appropriate pharmaceutical care, considering advanced capabilities.
- Develop and implement pharmaceutical workforce and education policies to increase capacity and competence to increase access to pharmaceutical expertise in primary health care settings, in collaboration with the wider health care team and system.

**FIP Development Goal 18 [s]**

Access to innovative science and information, new/innovative therapies, new delivery/ manufacturing processes.

- Collaborate with stakeholders to achieve harmonisation of regulatory processes around the world.
- Promote dissemination of accurate scientific information on innovative medical products.
- Define mechanisms to increase access to innovative medical products at affordable cost.
- Educate, train, and mentor pharmaceutical scientists to develop effective and affordable medical products.

# FIP Development Goal 19: Patient safety

| FIP DG 19 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 19 [w]**<br>Workforce and education strategies linked to patient safety mechanism and reducing medication-related harm in practice. | • Ensure academic capacity (FIP Development Goal 1 [w]) to deliver education and training to enhance patient safety mechanisms.<br>• Incorporate patient safety and medication-related harm reduction skills in early career training strategy (FIP Development Goal 2 [w]) and continuing professional development strategies (FIP Development Goal 9 [w]).<br>• Utilise advanced and specialist development systems and frameworks (FIP Development Goal 4 [w]) to develop patient safety as an advanced or specialist area for the workforce, in addition to being embedded within leadership development programmes (FIP Development Goal 6 [w]).<br>• Incorporate patient safety and medication-related harm reduction in competencies and skills in competency development frameworks for pharmacy (FIP Development Goal 5 [w]). |

**FIP Development Goal 19 [p]**

Patient safety mechanisms linked to reducing medication-related harm, quality assurance processes and legislation & regulations.

- Advocate for both safer medication management systems and a culture of patient safety in health care organisations.
- Encourage all health care professionals and other key stakeholders, including patients and their caregivers, managers, policy makers, and educators to consider designing/optimising services collaboratively to improve patient safety.
- In collaboration with health care professionals, health care organisations, patient/consumer organisations and researchers, develop, implement and monitor indicators and tools to proactively measure patient or consumer safety in practice; the outcomes of which can be used to promote and monitor the development of a safety culture.
- Initiate and support ongoing programmes to educate the public about the safe use of medications and the roles of pharmacists in this context.
- Develop, implement, promote, monitor and review medication safety policies, procedures and outcomes in hospital, primary care, community and residential care facilities and other relevant facilities to prevent patient safety incidents and improve patient outcomes.
- Ensure systems are in place for the supply of medications in times of shortages and for access to medications by patients most in need. Develop strategies to combat substandard and falsified medicines.

**FIP Development Goal 19 [s]**

Safety in the development and use of medicines is promoted through the advancement of drug safety science.

- Support development of a globally harmonised approach to medicines safety monitoring with a science-based judgment of risk assessment and risk mitigation.

# FIP Development Goal 20: Digital health

**FIP DG 20 ELEMENTS**

Globally, we will have...

**FIP Development Goal 20 [w]**

Enablers of digital transformation within the pharmacy workforce and effective processes to facilitate the development of a digitally literate pharmaceutical workforce.

**MECHANISMS**

- Develop courses, training material and experiential learning opportunities in initial education & early career training to prepare a digitally literate workforce (FIP Development Goals 1 & 2 [w]).
- Incorporate digital health and literacy competencies and skills in pharmaceutical competency, advanced and specialist frameworks (FIP Development Goals 4 & 5 [w]).
- Multi-disciplinary learning strategies for digital health literacy that include interprofessional education (FIP Development Goal 8 [w]).
- Provide opportunities for continuous education and development to ensure the workforce remains up to date with digital health changes and innovations (FIP Development Goal 9 [w]).
- Incorporate digital health within workforce development policies including employment policies such as employment opportunities in digital health sector (FIP Development Goal 13 [w]).

**FIP Development Goal 20 [p]**

Systems and structures in place to develop and deliver quality digital health and pharmaceutical care services through the digital literacy and utilisation of technology and digital enablers, configuration of responsive digital services to widen access and equity.

- Utilise digital enablers and new technologies such as shared electronic health records, applications, and artificial intelligence to support the delivery of innovative services and the appropriate care and decision making.
- Demonstrate digital literacy and understanding of governance issues surrounding data ownership, ethics, privacy, quality information; and have policies in place to support the development of the workforce as managers of health data.
- Recognise digital health as a mechanism for widening access and equity including access to digital pharmaceutical care.
- Identify and understand ethical and operational implications of digital technologies, as well as the implications in terms of professional accountability for patient outcomes of expanded access to patient information, shared electronic records.

**FIP Development Goal 20 [s]**

Application of digital technology in healthcare delivery and development of innovative medical products.

- Promote the use and interpretation of digital technology and information during training and education of pharmacists and pharmaceutical scientists.
- Enable integration of “data science” solutions to improve patient care.

# FIP Development Goal 21: Sustainability in pharmacy

| FIP DG 21 ELEMENTS | MECHANISMS |
| --- | --- |
| Globally, we will have... | |
| <br>**FIP Development Goal 21 [w]**<br>Strategies and systems in place that utilise the workforce to enhance sustainable pharmacy and services. | • Academic workforce capacity to conduct pharmacy practice research, outcomes, evaluation processes for sustainability (FIP Development Goal 1 [w]).<br>• Align workforce education and development strategies with needed integrated services (FIP Development Goal 7 [w]).<br>• Understand the capacity needed to produce and train sufficient workforce members that are available and accessible to ensure continued pharmaceutical care delivery (FIP Development Goal 12 [w]).<br>• Engage members of the workforce from all sectors in the sustainability discussions and align with workforce policy development (FIP Development Goal 13 [w]). |

**FIP Development Goal 21 [p]**

Policies, regulations and strategies to ensure the sustainability of the environment and minimise the impact of pharmaceuticals and pharmacy practice, but also the appropriate mechanisms to ensure the sustainability of pharmacy practice itself, through appropriate remuneration models for pharmaceutical services.

- In terms of ecological sustainability, advocate for and contribute to the development and implementation of policies and strategies that recognise, minimise and mitigate the environmental effects of pharmaceuticals and medicines-related practices. This includes the research, development, manufacturing, marketing, distribution, dispensing, use and disposal of medicines; the administrative and legislative processes regulating medicines; all aspects of pharmacy practice; and the education and training of the pharmaceutical workforce for such roles.
- In terms of social, societal and economical sustainability around pharmacy services, advocate for and contribute for the value of pharmaceutical services that ensure equity in access to such services, incentivise their delivery and promote their sustainability and appropriate integration in health care system funding, public or private.

**FIP Development Goal 21 [s]**

Scientific strategies and policies in place to maintain consistent supply of medicinal products throughout lifecycle while limiting negative consequences for the environment.

- Collaborate with stakeholders on strategies for environmental monitoring of the impact of pharmaceuticals.
- Promote ecological, social, societal, economical sustainability throughout the life cycle of medical products.

# Part 3: Implementation & transformation

## 3.1 Transforming pharmacy using the FIP Development Goals

Along with concrete and tangible mechanisms, the FIP Development Goals package will include FIP global tools, structures, indicators and transformation programmes to facilitate and support the process of transformation.

Indicators & country level metrics will be developed as way to measure and monitor progress via the data we collect in the FIP Global Pharmaceutical Observatory.

The FIP DGs aim to facilitate global monitoring for trends and development of a global dashboard, global sharing best practice development, supports global cohesion, and solidarity and action. National transformation programmes, such as the FIP Workforce Transformation Programme, will provide a pathway for needs-assessment, prioritisation & implementation of action plans tailored for each country.

The FIP DGs serve as a systematic framework that guides the basis for needs assessment and form as a foundation for transformation mapping. The FIP DGs also allows for research and evaluation by universities working with Member Organisations and pharmacy & health leadership bodies, allows framework for national funding for development, maps to national policy initiatives.

## 3.2 Supporting our Members with prioritisation

Each country and member are to identify their needs and prioritise. FIP also will use the FIP DGs to engage our structures and constituencies around one FIP. As such it is helpful to identify the 'Lead Elements' for each Goal that most appropriately mirrors the leadership element within FIP. Figure 5 illustrates how weighting the FIP DGs can support with prioritisation and the identification of the 'Lead Element' within each, based on needs.

A similar approach to weighting the FIP DGs Elements can be used by our Members to support prioritisation processes or projects. Such methods form part of our transformation programmes, specifically the fundamental needs-assessment phases by which we can support our members.

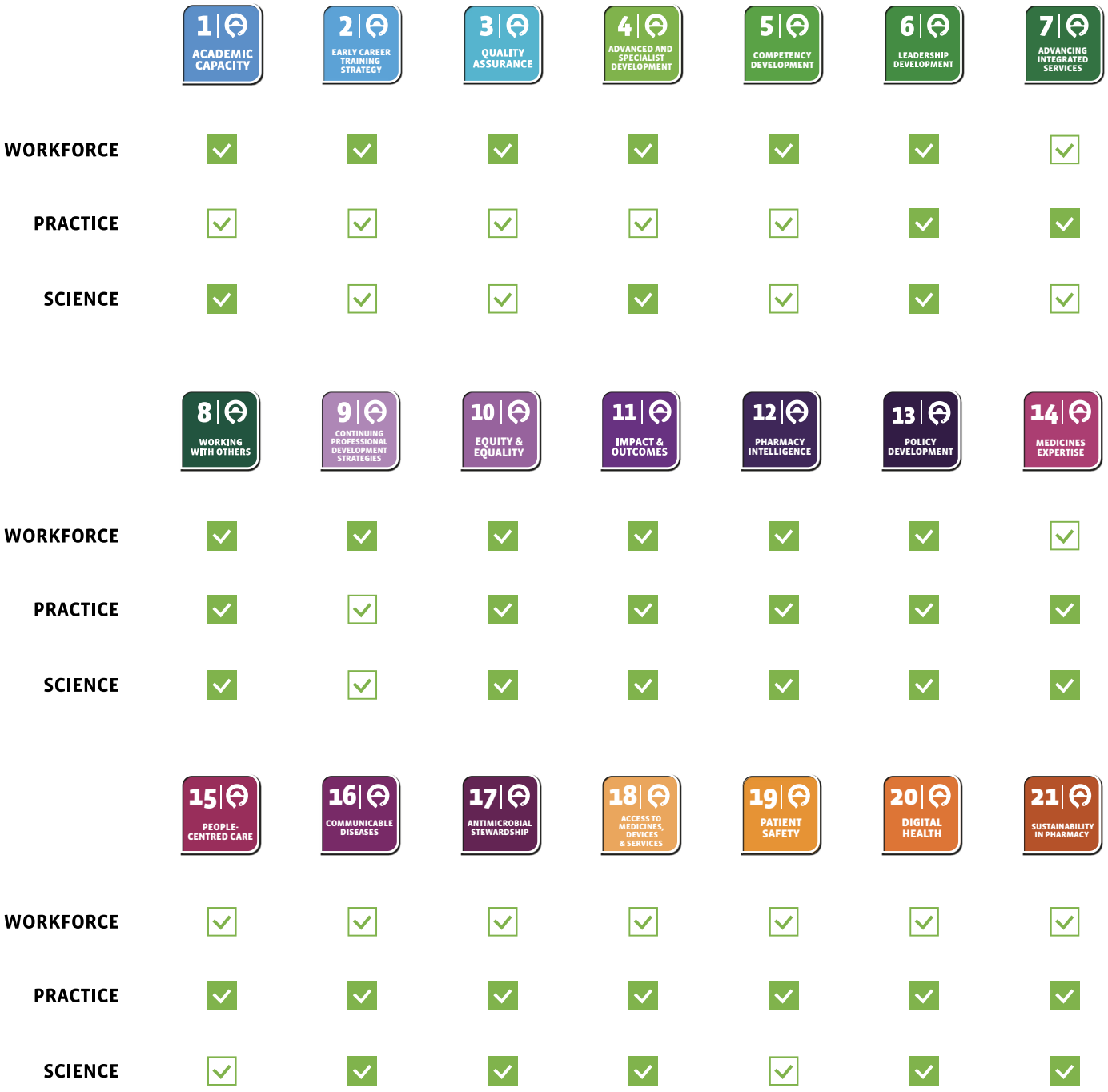



Figure 5. Weighting the FIP Development Goals Elements can support the prioritisation process

International
Pharmaceutical
Federation

Fédération
Internationale
Pharmaceutique

Andries Bickerweg 5
2517 JP The Hague
The Netherlands
-
T +31 (0)70 302 19 70
F +31 (0)70 302 19 99
fip@fip.org
-
www.fip.org