

<p>What is the certainty of the anticipated effects?</p>	<table border="1"> <tr> <td><i>Very low</i></td> <td><i>Low</i></td> <td><i>Moderate</i></td> <td><i>High</i></td> <td><i>No evidence</i></td> <td><i>Varies</i></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	<i>Very low</i>	<i>Low</i>	<i>Moderate</i>	<i>High</i>	<i>No evidence</i>	<i>Varies</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>significantly more likely to practice in a rural setting (OR 3.14; 95% CI 1.96–5.1). A home prefecture recruiting scheme in Japan was successful in recruiting medical professionals from rural areas and retaining them as qualified professionals in medically underserved prefectures</p> <p>A number of literature reviews were identified but no systematic reviews</p> <p>Quantity There is a substantial body of evidence that selection according to geographic origin increases the number of graduates who practise in rural settings.</p> <p>Quality There is a considerable literature on admission criteria as a predictor of performance within the training experience, which takes as the end point course completion or attainment of a qualification (sometimes attainment before course completion).</p> <p>Relevance No specific evidence identified There is considerable evidence that students selected from rural areas are most likely to serve in rural areas, though this is not always the case.</p>	
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	CRITERIA	JUDGEMENT	EVIDENCE	QUERIES TO PANEL																						
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No	Probably no	Uncertain	Probably yes	Yes	Varies																					
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No	Probably no	Uncertain	Probably yes	Yes	Varies																					
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No	Probably no	Uncertain	Probably yes	Yes	Varies																					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>																					

PICO B10 RECOMMENDATION: Should targeted admissions policies seek to increase the ethnic and geographical diversity of students and be supported by mechanisms to ensure completion of education programmes versus no targeted admissions policies and supportive mechanisms?

Balance of consequences	Undesirable consequences <i>clearly outweigh</i> desirable consequences in most settings	Undesirable consequences <i>probably outweigh</i> desirable consequences in most settings	The balance between desirable and undesirable consequences <i>is uncertain</i>	Desirable consequences <i>probably outweigh</i> undesirable consequences in most settings	Desirable consequences <i>clearly outweigh</i> undesirable consequences in most settings
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Recommendation	<i>We recommend against the option</i>	<i>We recommend the option only in the context of rigorous research</i>	<i>We recommend the option in the context of close monitoring and evaluation</i>	<i>We recommend the option</i>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<p><input checked="" type="checkbox"/> There is an extensive literature on recruiting and retaining trained health workers for service in rural and remote areas, and this proved to be the most frequently encountered theme in the literature. Less well documented are published studies on minority groups, nursing and allied professions and medical mid-level providers.</p> <p>We are taking the question as relating to undergraduate (pre-qualification) education.</p>					
Justification	-				
Implementation considerations	<p>Quantity Admissions policies should be consistent with decisions concerning the supply of particular cadres of health workers. They should take into account the likely numbers of each cadre needed.</p> <p>Quality Admissions reforms tend to imply curriculum reforms as the student population changes. In some cases (e.g. China) there are different certificates available to graduates depending on their entry qualifications. However, students may still go on to pursue more advanced qualifications.</p> <p>Relevance There is evidence that students selected from rural areas are most likely to serve in rural areas, though this is not always the case. The preferences of applicants should be taken into account.</p> <p>Complexity and caution Admissions procedures by themselves will not overcome inequalities in health-care systems. Where targeted admissions policies are used, support mechanisms must be in place to ensure conditions in which students are able to complete programmes. These may include adjustments to the curriculum, teaching and learning methods and financial support. Currently, many of the students who do not complete their courses do so for financial reasons, so disadvantaged students would need financial support (South Africa subsidy system).</p> <p>The characteristics of underserved populations may vary from place to place. For example in Brazil populations in favelas may be less well served than populations in rural areas.</p>				
Key uncertainties	<ul style="list-style-type: none"> - The impact of admissions procedures on their own. - The impact of admissions policies on underserved populations across countries or even in the same country may vary. 				
Monitoring and evaluation	Close monitoring and evaluation is needed for admissions of innovative admissions policies but in particular monitoring of policies introduced with supportive mechanisms to obtain better information on their impact.				
Research priorities	<p>The literature on admissions criteria and practices is hugely biased in favour of rich countries. It is also biased in favour of medical education, to the relative neglect of nursing and allied health professions. This suggests a need to make research funding available in low- and middle-income countries to enable academics to replicate the types of studies that have been undertaken in developed countries, and to extend their scope particularly to types of health worker specific to those locations, for example medical assistants/clinical officers and pharmacy technicians.</p> <p>Make research funding available to low- and middle-income countries to enable academics to replicate the types of studies that have been undertaken in developed countries.</p> <p>Extend their scope, particularly to types of health workers specific to those locations, for example mid-level providers such as medical assistants/clinical officers/clinical associates/non physician clinicians. It would be helpful if cohort studies with large national samples following the entire pipeline from pre-admission characteristics through to long-term employment could be undertaken.</p> <p>Even in the rich countries, most of the studies encountered suffer from severe limitations of scope (restriction to one cadre or one training school), sample size (often below 100 and sometimes below 10 subjects) and weak methodology (low response rates, biased selection of subjects, failure to control for confounding variables, use of proxy outcome measures such as career intentions instead of observed career paths).</p>				

Educational pathways and ladder programmes

PICO C1: Should streamlined educational pathways, or ladder programmes, for the advancement of practicing health professionals be adapted in both undergraduate and postgraduate programmes, improve the quantity, quality, and relevance of health professionals?

Problem: Less adaptability of health professionals to the needs of their communities.
Option: Adapting streamlined educational pathways or ladder programmes for the advancement of practicing health professionals.
Comparison: Not adapting educational pathways or ladder programmes in both undergraduate and postgraduate programmes.
Setting: Global, with focus on underserved areas of low- and middle- income countries.

CRITERIA		JUDGEMENT						EVIDENCE				QUERIES TO PANEL
PROBLEM	Is the problem serious?	No	Probably no	Uncertain	Probably yes	Yes	Varies	Rigid professional boundaries between professionals makes less adaptable to the needs of the population. The problem is serious in underserved areas.				How regulation might affect this problem?
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
	Are a large number of people affected?	No	Probably no	Uncertain	Probably yes	Yes	Varies	The proportion of rural population is huge in developing countries (ex. 60% in SEARO region). Urban poor also can be served by the graduates of this ladder programmes.				
		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
BENEFITS & HARMS OF THE OPTIONS	Are the anticipated desirable effects large?	No	Probably no	Uncertain	Probably yes	Yes	Varies	Quantity	Quality	Relevance	Unintended effects	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Are the anticipated undesirable effects small?	No	Probably no	Uncertain	Probably yes	Yes	Varies	Quantity				
		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The intent to stay at the hospital for more than a year increased as nurses moved upward in the career ladder programme. No quantifiable measures reported although authors hypothesize retention might be due to intrinsic motivation factors such as updating of nursing knowledge and skills, personal development and possibility of salary increase when moving up along the ladder (Bjork 2007).				
What is the certainty of the anticipated effects?	Very low	Low	Moderate	High	No evidence	Varies	Quality					
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Participants in the ladder programme showed a higher involvement in leadership (p<0.001) quality improvement (p<0.02) and preceptorship (p<0.001) compared to non-career ladder professionals in the same job role (Nelson, Cook 2008).					
Are the anticipated desirable effects large relative to the undesirable effects?	No	Probably no	Uncertain	Probably yes	Yes	Varies	Relevance					
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Outcome not reported					

	CRITERIA	JUDGEMENT	EVIDENCE	QUERIES TO PANEL																				
RESOURCE USE	Are the resources required small?	<table border="0"> <tr> <td>No</td> <td>Probably no</td> <td>Uncertain</td> <td>Probably yes</td> <td>Yes</td> <td>Varies</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	No	Probably no	Uncertain	Probably yes	Yes	Varies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Main resource requirements</p> <table border="1"> <thead> <tr> <th>Resource</th> <th>Costs</th> </tr> </thead> <tbody> <tr> <td>Salary increases for the upper ladder</td> <td></td> </tr> <tr> <td>Dedicated staff for the ladder programme</td> <td></td> </tr> <tr> <td>Training/capacity building of current faculty</td> <td></td> </tr> </tbody> </table> <p>An observational study describing a 20-year clinical ladder programme. Resources needed to implement the clinical ladder included an annual budget plan highlighting salary increases reflecting advancement in the ladder and an initial benchmarking with known successful programmes in the same geographical area (Pierson 2010).</p>	Resource	Costs	Salary increases for the upper ladder		Dedicated staff for the ladder programme		Training/capacity building of current faculty		
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Reduced	Probably reduced	Uncertain	Probably increased	Increased	Varies																			
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No	Probably no	Uncertain	Probably yes	Yes	Varies																			
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No	Probably no	Uncertain	Probably yes	Yes	Varies																			
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PICO C1 RECOMMENDATION: Should streamlined educational pathways, or ladder programmes, for the advancement of practicing health professionals be adapted in both undergraduate and postgraduate programmes?

Balance of consequences	Undesirable consequences <i>clearly outweigh</i> desirable consequences in most settings	Undesirable consequences <i>probably outweigh</i> desirable consequences in most settings	The balance between desirable and undesirable consequences <i>is uncertain</i>	Desirable consequences <i>probably outweigh</i> undesirable consequences in most settings	Desirable consequences <i>clearly outweigh</i> undesirable consequences in most settings
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recommendation	<i>We recommend against the option</i>	<i>We recommend the option only in the context of rigorous research</i>	<i>We recommend the option in the context of close monitoring and evaluation</i>	<i>We recommend the option</i>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<input checked="" type="checkbox"/> Ladder programmes should be delivered - Specify conditions; available resources (training, faculty, cost, time) - Evidence of pilot interventions. Negative consequences also should be studied				
Justification	- -				
Implementation considerations	- ILO issued relevant documents. Duplication should be avoided. If its implementation is limited, this guideline can reinforce its implementation - Regulations should be carefully examined - Commitment by senior management and faculty - Interest and expertise among faculty and administrators - Budget plan for increasing the salary - Community contributions to implement the programme				
Key uncertainties	- Negative consequences of the ladder programmes are not well studied				
Monitoring and evaluation	- Careful monitoring of those who stepped up the ladders and those who wanted but failed				
Research priorities	- Gather more information on HRH problems that lend themselves to the application of educational and clinical ladders; (2) more specific costs and benefits of educational and clinical ladders through more evaluation or case studies				

Inter-professional education

PICO B7 : Should inter-professional education (IPE) be implemented in both undergraduate and postgraduate programmes versus no inter-professional education be used?

Problem: Low number, quality and relevance of health professionals.

Option: Inter-professional education.

Comparison: no Inter-professional education.

Setting: Global with focus on low- and middle-income countries.

CRITERIA		JUDGEMENT						EVIDENCE				QUERIES TO PANEL
PROBLEM	Is the problem serious?	No	Probably no	Uncertain	Probably yes	Yes	Varies	Patient care is a complex activity which demands that health and social care professionals work together in an effective manner. The evidence suggests that these professions do not effectively work well together. Interprofessional education (IPE) offers a possible way to improved collaboration and patient care. In this question, our judgement is on the problem of IPE, not on the question of whether professions do not effectively work well together.				
	Are a large number of people affected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
BENEFITS & HARMS OF THE OPTIONS	Are the anticipated desirable effects large?	No	Probably no	Uncertain	Probably yes	Yes	Varies	Quantity	Quality	Relevance	Unintended effects	<p>Only three small-size controlled trials assessing intermediate outcomes</p> <p>Quantity</p> <p>Not relevant. (We comment on 'quantity' below)</p> <p>Quality</p> <ul style="list-style-type: none"> - The evidence from controlled studies demonstrated that IPE resulted in increased confidence in their own professional identity and helped them value the difference making them better for clinical placement. - Students demonstrated more positive attitudes to team collaboration, improved communication skills - No practice-level impact assessment <p>Relevance</p> <ul style="list-style-type: none"> - Interdisciplinary community-oriented exercises during IPE offer unique opportunities for students to appreciate health problems as they occur in the community - Only one study which compared students from one school to another where there was no intervention did not show a significant difference
	Are the anticipated undesirable effects small?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
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	CRITERIA	JUDGEMENT	EVIDENCE	QUERIES TO PANEL																								
RESOURCE USE	Are the resources required small?	<table border="0"> <tr> <td>No</td> <td>Probably no</td> <td>Uncertain</td> <td>Probably yes</td> <td>Yes</td> <td>Varies</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	No	Probably no	Uncertain	Probably yes	Yes	Varies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><i>Main resource requirements (but, note, there may be potential resource savings as well)</i></p> <table border="0"> <tr> <td>Resource</td> <td>Costs</td> </tr> <tr> <td>Staff from different faculties, work settings and locations</td> <td></td> </tr> <tr> <td>Staff training</td> <td></td> </tr> <tr> <td>Significant layer of coordination for interprofessional educators and curriculum developers</td> <td></td> </tr> <tr> <td>Supervision of students</td> <td></td> </tr> <tr> <td>Space issues</td> <td></td> </tr> </table>	Resource	Costs	Staff from different faculties, work settings and locations		Staff training		Significant layer of coordination for interprofessional educators and curriculum developers		Supervision of students		Space issues		
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No	Probably no	Uncertain	Probably yes	Yes	Varies																							
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																							
EQUITY	What would be the impact on health equity?	<table border="0"> <tr> <td>Reduced</td> <td>Probably reduced</td> <td>Uncertain</td> <td>Probably increased</td> <td>Increased</td> <td>Varies</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table>	Reduced	Probably reduced	Uncertain	Probably increased	Increased	Varies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-													
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ACCEPTABILITY	Is the option acceptable to most stakeholders?	<table border="0"> <tr> <td>No</td> <td>Probably no</td> <td>Uncertain</td> <td>Probably yes</td> <td>Yes</td> <td>Varies</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	No	Probably no	Uncertain	Probably yes	Yes	Varies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Based on stakeholders survey, score on a scale from 1–9: Mean; 6.9 SD: 2.2 Refer to pages 51–52 for qualitative comments													
No	Probably no	Uncertain	Probably yes	Yes	Varies																							
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PICO B7 RECOMMENDATION: Should inter-professional education (IPE) be implemented in both undergraduate and postgraduate programmes be used versus no IPE?

Balance of consequences	Undesirable consequences <i>clearly outweigh</i> desirable consequences in most settings	Undesirable consequences <i>probably outweigh</i> desirable consequences in most settings	The balance between desirable and undesirable consequences <i>is uncertain</i>	Desirable consequences <i>probably outweigh</i> undesirable consequences in most settings	Desirable consequences <i>clearly outweigh</i> undesirable consequences in most settings
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recommendation	<i>We recommend against the option</i>	<i>We recommend the option only in the context of rigorous research</i>	<i>We recommend the option in the context of close monitoring and evaluation</i>	<i>We recommend the option</i>	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><input checked="" type="checkbox"/> Before supporting this recommendation fully, we would recommend work to obtain much better evidence, in institutions with programmes and resources available to support the necessary research.</p> <p>We find a disconnect between the question (“Should inter-professional education [IPE] in both undergraduate and postgraduate programmes be used?”) and the related problem statement (“Low number, quality and relevance of health professionals”); and the statement “the evidence suggests that these professions do not effectively work well together”. The evidence for the latter statement should be included.</p> <p>IPE may also be relevant to <u>quantity</u> as well as <u>quality</u> and <u>relevance</u> questions. IPE may be resource-efficient in a way that allows more health workers to be educated.</p> <p>We are taking the question as relating primarily to undergraduate (pre-qualification) education.</p>					
Justification					
Implementation considerations	Students in the 'non-clinical' professional categories (such as biomedical sciences) were less appreciative of IPE. They needed more explicit learning objectives				
Key uncertainties	<ul style="list-style-type: none"> - Impact of IPE on the outcome of interest - Cost effectiveness 				
Monitoring and evaluation	Given the uncertainties noted above, careful monitoring of the rollout of this intervention will be needed, particularly on resource use (human, material, financial, time)				
Research priorities	<ul style="list-style-type: none"> - Better quality studies looking at quality of health professionals and relevancy to the communities being served. - Other priorities: <ol style="list-style-type: none"> 1. Approaches for training educators involved in IPE 2. Studies of cost effective models for IPE and sustaining IPE 3. Evaluation of impact of IPE on health professional practice in developing countries. 				

Accreditation

PICO C2: Should accreditation of health professional education be introduced to improve the quality of health professional education versus no accreditation?

Problem: Great variability in the quality of health professions education within countries.
Option: To improve the quality of health professional education (through credible, consistent, transparent and transformative accreditation systems).
Comparison: Not accreditation of health professional education.
Setting: Global, with focus on low- and middle-income countries.

CRITERIA		JUDGEMENT						EVIDENCE	QUERIES TO PANEL
PROBLEM	Is the problem serious?	No <input type="checkbox"/>	Probably no <input type="checkbox"/>	Uncertain <input type="checkbox"/>	Probably yes <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	Varies <input type="checkbox"/>	Health professions education is resource intensive and attracts some of the most promising students in all countries. Less than 50% of countries have a credible, transparent and comprehensive accreditation system.	
	Are a large number of people affected?	No <input type="checkbox"/>	Probably no <input type="checkbox"/>	Uncertain <input type="checkbox"/>	Probably yes <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	Varies <input type="checkbox"/>		
BENEFITS & HARMS OF THE OPTIONS	Are the anticipated desirable effects large?	No <input type="checkbox"/>	Probably no <input type="checkbox"/>	Uncertain <input type="checkbox"/>	Probably yes <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	Varies <input type="checkbox"/>	<p><i>Quantity Quality Relevance Unintended effects</i></p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/></p> <p>Historical experience in the UK (Medical Act of 1858 establishing the General Medical Council) and the USA (Flexner Report, 1910) indicates substantial closing of sub-standard schools as a result of the introduction of quality standards.</p> <p>Two systematic reviews identified for medical education and two studies for nursing education. The reviews found very limited evidence of the effectiveness of accreditation on educational and service outcomes.</p> <p>Quantity</p> <ul style="list-style-type: none"> - Could negatively affect quantity as a result of school closures but no evidence identified <p>Quality</p> <ul style="list-style-type: none"> - Strongly believed to improve quantity but evidence weak. Historically, there is evidence of schools being closed on the introduction of accreditation or re-accreditation <p>Relevance</p> <ul style="list-style-type: none"> - Positive – provided accreditation standards reflect population needs <p>Other</p> <ul style="list-style-type: none"> - Education and training in non-accredited institutions could lead to non-recognition of qualifications post graduation - Risk of abuse with private accrediting bodies - Poor accreditation may produce a false sense of security 	
	Are the anticipated undesirable effects small?	No <input type="checkbox"/>	Probably no <input type="checkbox"/>	Uncertain <input checked="" type="checkbox"/>	Probably yes <input type="checkbox"/>	Yes <input type="checkbox"/>	Varies <input type="checkbox"/>		
	What is the certainty of the anticipated effects?	Very low <input type="checkbox"/>	Low <input type="checkbox"/>	Moderate <input checked="" type="checkbox"/>	High <input type="checkbox"/>	No evidence <input type="checkbox"/>	Varies <input type="checkbox"/>		
	Are the anticipated desirable effects large relative to the undesirable effects?	No <input type="checkbox"/>	Probably no <input type="checkbox"/>	Uncertain <input type="checkbox"/>	Probably yes <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	Varies <input type="checkbox"/>		

	CRITERIA	JUDGEMENT	EVIDENCE	QUERIES TO PANEL																				
RESOURCE USE	Are the resources required small?	<table border="0"> <tr> <td>No</td> <td>Probably no</td> <td>Uncertain</td> <td>Probably yes</td> <td>Yes</td> <td>Varies</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	No	Probably no	Uncertain	Probably yes	Yes	Varies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Main resource requirements</p> <table border="0"> <tr> <td>Resource</td> <td>Costs</td> </tr> <tr> <td colspan="2">Two items of importance in literature:</td> </tr> <tr> <td colspan="2">- Resources for implementing the accreditation process</td> </tr> <tr> <td colspan="2">- Resources for improving institutions to allow them to reach accreditation standards</td> </tr> </table>	Resource	Costs	Two items of importance in literature:		- Resources for implementing the accreditation process		- Resources for improving institutions to allow them to reach accreditation standards		
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No	Probably no	Uncertain	Probably yes	Yes	Varies																			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																			
EQUITY	What would be the impact on health equity?	<table border="0"> <tr> <td>Reduced</td> <td>Probably reduced</td> <td>Uncertain</td> <td>Probably increased</td> <td>Increased</td> <td>Varies</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Reduced	Probably reduced	Uncertain	Probably increased	Increased	Varies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Depends on whether accreditation standards are attuned to population health, as set by country									
Reduced	Probably reduced	Uncertain	Probably increased	Increased	Varies																			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																			
ACCEPTABILITY	Is the option acceptable to most stakeholders?	<table border="0"> <tr> <td>No</td> <td>Probably no</td> <td>Uncertain</td> <td>Probably yes</td> <td>Yes</td> <td>Varies</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	No	Probably no	Uncertain	Probably yes	Yes	Varies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Based on the stakeholders survey, on scale 1-9: Mean (sd) = 7.6 (1.7)</p> <p>Qualitative comments drawn from feasibility and acceptability survey.</p>									
No	Probably no	Uncertain	Probably yes	Yes	Varies																			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>																			
FEASIBILITY	Is the option feasible to implement?	<table border="0"> <tr> <td>No</td> <td>Probably no</td> <td>Uncertain</td> <td>Probably yes</td> <td>Yes</td> <td>Varies</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	No	Probably no	Uncertain	Probably yes	Yes	Varies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Based on the stakeholders survey, on scale 1-9: Mean (sd) = 6.7 (2.1)</p> <p>Qualitative comments drawn from feasibility and acceptability survey</p>									
No	Probably no	Uncertain	Probably yes	Yes	Varies																			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																			

PICO C2 RECOMMENDATION: Should accreditation of health professional education be introduced to improve the quality of health professional education versus no accreditation?

Balance of consequences	Undesirable consequences <i>clearly outweigh</i> desirable consequences in most settings	Undesirable consequences <i>probably outweigh</i> desirable consequences in most settings	The balance between desirable and undesirable consequences <i>is uncertain</i>	Desirable consequences <i>probably outweigh</i> undesirable consequences in most settings	Desirable consequences <i>clearly outweigh</i> undesirable consequences in most settings
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recommendation	<i>We recommend against the option</i>	<i>We recommend the option only in the context of rigorous research</i>	<i>We recommend the option in the context of close monitoring and evaluation</i>	<i>We recommend the option</i>	<i>We recommend the option</i>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><input checked="" type="checkbox"/> If a country has a health professions educational institutions accreditation system(s), the system(s) should be reviewed relative to established professional guidelines for accreditation</p> <p>If a country does not have a health professions educational institutions accreditation system(s), an accreditation system(s) should be developed with reference established professional guidelines for accreditation</p> <p>In both instances, it will be important that accreditation includes attention to:</p> <ul style="list-style-type: none"> - addressing population needs - providing holistic health professional education - concern with health workforce needs. 					
Justification	Strong historical and limited current evidence suggests that accreditation is an important quality improvement and assurance mechanism for health professions schools. Moreover, accreditation can be a strong building block in effecting the relevance of a country's health workforce in meeting population health needs. Lastly, accreditation can promote social responsibility in terms of institutions addressing population needs.				
Implementation considerations	Sets of accreditation process standards have been developed. International professional groups such as ICN, ICM, WFME should discuss these so that a set of global standards can be developed. Such standards should include inter alia:				
	<ul style="list-style-type: none"> - accreditation must be based on standards - it must be supported by legislation - it should be done independently - the process should be transparent - the system and process should be periodically evaluated - for additional considerations see page 18 of accreditation policy brief. 				
Key uncertainties	<ul style="list-style-type: none"> - Effect on quantity, quality, relevance - Cost - Ability/willingness to address population health issues in accreditation process 				
Monitoring and evaluation	<ul style="list-style-type: none"> - Given the uncertainties noted above, careful monitoring and evaluation of effectiveness of this intervention will be needed, particularly on transparency and expertise requirements (human, financial, time) - Monitoring of appropriate implementation 				
Research priorities	<ul style="list-style-type: none"> - Impact on quantity, quality, relevance - Success in addressing population health issues in accreditation process - Impact on educational institutions and the graduates they prepare - Comparative studies on the process of accreditation, using criteria such as purpose, cost, transparency and social accountability 				

Regulation

PICO C3: Should regulation (licensure and registration) be used to ensure the quality and relevance of health professional practice versus no regulation?

Problem: Low number, quality and relevance of health professionals.

Option: Implement regulation (licensure and registration) to ensure the quality and relevance of health professional practice.

Comparison: No regulation (licensure or registration).

Setting: Global with focus on low- and middle-income countries.

CRITERIA		JUDGEMENT						EVIDENCE				QUERIES TO PANEL				
PROBLEM	Is the problem serious?	No	Probably no	Uncertain	Probably yes	Yes	Varies	Within the context of health professions, education regulation should ensure that the public have access to competent health-care providers. Many countries are regulating health providers under outdated or expired acts and some do not regulate at all. This is not reflective of current regulatory or educational best practices and does not address public/private education adequately.								
	Are a large number of people affected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						No	Probably no	Uncertain	Probably yes
BENEFITS & HARMS OF THE OPTIONS	Are the anticipated desirable effects large?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Quantity	Quality	Relevance	Unintended effects	<p>We did not identify studies assessing the impact of licensure or registration</p> <p>Quantity Not relevant</p> <p>Quality No evidence identified</p> <p>Relevance No evidence identified</p> <p>Other Regulatory requirements at national levels for CPD reported to provide a strong incentive for health providers to access training programmes</p>				
	Are the anticipated undesirable effects small?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
	What is the certainty of the anticipated effects?	Very low	Low	Moderate	High	No evidence	Varies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>
	Are the anticipated desirable effects large relative to the undesirable effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

	CRITERIA	JUDGEMENT	EVIDENCE	QUERIES TO PANEL										
RESOURCE USE	Are the resources required small?	<i>No</i> <input checked="" type="checkbox"/> <i>Probably no</i> <input type="checkbox"/> <i>Uncertain</i> <input type="checkbox"/> <i>Probably yes</i> <input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>Varies</i> <input type="checkbox"/>	Main resource requirements <table border="1"> <thead> <tr> <th>Resource</th> <th>Costs</th> </tr> </thead> <tbody> <tr> <td>Setting up mechanisms</td> <td></td> </tr> <tr> <td>Reinforcement of regulation (monitoring and evaluation mechanisms)</td> <td></td> </tr> <tr> <td>Technical capacity building</td> <td></td> </tr> <tr> <td>Interdisciplinary and regional networking</td> <td></td> </tr> </tbody> </table>	Resource	Costs	Setting up mechanisms		Reinforcement of regulation (monitoring and evaluation mechanisms)		Technical capacity building		Interdisciplinary and regional networking		
	Resource	Costs												
Setting up mechanisms														
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Is the incremental cost small relative to the benefits?	<i>No</i> <input type="checkbox"/> <i>Probably no</i> <input type="checkbox"/> <i>Uncertain</i> <input checked="" type="checkbox"/> <i>Probably yes</i> <input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>Varies</i> <input type="checkbox"/>													
EQUITY	What would be the impact on health equity?	<i>Reduced</i> <input type="checkbox"/> <i>Probably reduced</i> <input type="checkbox"/> <i>Uncertain</i> <input type="checkbox"/> <i>Probably increased</i> <input checked="" type="checkbox"/> <i>Increased</i> <input type="checkbox"/> <i>Varies</i> <input type="checkbox"/>	Focused on competency of all providers and should improve quality of health services across settings											
ACCEPTABILITY	Is the option acceptable to most stakeholders?	<i>No</i> <input type="checkbox"/> <i>Probably no</i> <input type="checkbox"/> <i>Uncertain</i> <input type="checkbox"/> <i>Probably yes</i> <input checked="" type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>Varies</i> <input type="checkbox"/>	Based on stakeholders survey, score on a scale from 1–9: Mean; 6.9 SD: 1.9 Refer to feasibility and acceptability study.											
FEASIBILITY	Is the option feasible to implement?	<i>No</i> <input type="checkbox"/> <i>Probably no</i> <input type="checkbox"/> <i>Uncertain</i> <input type="checkbox"/> <i>Probably yes</i> <input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>Varies</i> <input checked="" type="checkbox"/>	Based on stakeholders survey, score on a scale from 1–9: Mean; 6.0; SD: 2.1 Refer to feasibility and acceptability study on qualitative comments May be challenging to implement in under-resourced countries											

PICO C3 RECOMMENDATION: Should regulation (licensure and registration) be used to ensure the quality and relevance of health professional practice versus no regulation?

Balance of consequences	Undesirable consequences <i>clearly outweigh</i> desirable consequences in most settings <input type="checkbox"/>	Undesirable consequences <i>probably outweigh</i> desirable consequences in most settings <input type="checkbox"/>	The balance between desirable and undesirable consequences <i>is uncertain</i> <input type="checkbox"/>	Desirable consequences <i>probably outweigh</i> undesirable consequences in most settings <input checked="" type="checkbox"/>	Desirable consequences <i>clearly outweigh</i> undesirable consequences in most settings <input type="checkbox"/>
Recommendation	<i>We recommend against the option</i> <input type="checkbox"/>	<i>We recommend the option only in the context of rigorous research</i> <input type="checkbox"/>	<i>We recommend the option in the context of close monitoring and evaluation</i> <input type="checkbox"/>	<i>We recommend the option</i> <input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/> Regulation is in place to ensure the quality and relevance of care provided by health professionals					
Justification	- We unanimously agreed based on the need for patient safety and the high-risk nature of health-care delivery that this should be a recommendation even though there is limited research carried out in this area.				
Implementation considerations	<ul style="list-style-type: none"> - Need to build and implement technical capacity (use policy options . Resources (finaical and human required) - Need to address both private and public education and care delivery - Challenges and importance of reaching consensus about regulatory approaches at the national, regional and international level - Enforcement issues - Take into account experiences with international and regional educational standards 				
Key uncertainties	<ul style="list-style-type: none"> - Impact of regulation on practice at national, regional or international levels - Cost and effectiveness of regulatory measures in use 				
Monitoring and evaluation	<ul style="list-style-type: none"> - Given the uncertainties noted above, careful monitoring of the rollout of interventions used will be needed, particularly on resource use (human, material, financial), as there is little research - Introduction of regulation where it is minimal or does not exist may be an opportune time to address important research questions 				
Research priorities	<p>Priorities</p> <ol style="list-style-type: none"> 1. Establishing measurable indicators of regulatory success 2. Measuring the impact of health-care professional regulation on ensuring quality and relevance of health-care practice 3. Determining best practices in regulation 				

Continuous professional development (CPD)

PICO C5. Should continuous professional development and in-service training of health professionals implemented be implemented which reflects reforms in education to address evolving population health needs, increase the coverage of services, and actively engage education and training institutions in its design and execution versus no such training and development of health professionals?

Problem: Lack of CPD has negative effects on 'quality and relevance' of health workers (clinical practice, knowledge, skills and attitudes).

Option: Implement CPD and in-service training programmes using multiple interactive techniques.

Comparison: No exposure to CPD or involvement.

Setting: Global with focus on low- and middle-income countries.

CRITERIA		JUDGEMENT						EVIDENCE	QUERIES TO PANEL
PROBLEM	Is the problem serious?	No	Probably no	Uncertain	Probably yes	Yes	Varies	Given the exponential progress seen today in technology, diagnostics tools and treatment methods, updating and maintaining the knowledge and skills of health workers throughout their professional life becomes more important than ever. Problems is serious	
	Are a large number of people affected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
BENEFITS & HARMS OF THE OPTIONS	Are the anticipated desirable effects large?	No	Probably no	Uncertain	Probably yes	Yes	Varies	<p>Quantity Quality Relevance Unintended effects</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/></p> <p>Undesireable effects:</p> <ul style="list-style-type: none"> - absenteeism (time out of the clinics while sitting on CPD programmes). - <i>Essential newborn care practices – Sri Lanka</i> (Senarath 2007): The intervention group received a comprehensive 4-day training programme based on WHO Training Modules on Essential Newborn Care and Breastfeeding, aiming at increasing knowledge of essential newborn care (ENC), and developing the corresponding skills among midwives, nurses and doctors in obstetric units. Teaching strategies included lecture discussions, demonstrations, hands-on training, practical assignments, and small group discussions. <i>Sample size:</i> 27 midwives, 19 nurses and 13 doctors in the study group, and 26 midwives, 19 nurses, and 16 doctors in the control group. <i>Results:</i> Practices of cleanliness, thermal protection and neonatal assessment improved significantly in the intervention group relative to the control group (p<0.05). - <i>Sexually transmitted diseases (STD) – Peru:</i> The course design used a learning theory approach, was based on participants' needs assessment, had an interactive format, used case-based learning with performance feedback, was tailored to local STD problems and included reinforcement components (e.g. mail consultation and learning materials). <i>Sample size:</i> 10 intervention cities, with 642 health workers participating in training, and 527 who did not participate in intervention. <i>Results:</i> knowledge scores among physicians improved from 64.2% to 77.9% at 4-month follow-up (p<0.001). Self-reported STD management practices did not change. Covered 60% of health workers of 10 Peruvian cities. - <i>Diarrhoea and cholera case management – Guatemala</i> (Flores et al. 2002): an in-service distance education programme in diarrhoea and cholera case management for physicians and nurses (which was simultaneously introduced in El Salvador, Guatemala, Honduras and Nicaragua in 1994). <i>Sample size:</i> intervention group: 66 health workers, control group: 66 health workers. The programme was conducted for three weeks and follow up was made after one month to see the health workers' performance. <i>Results:</i> percentage of diarrhoea cases assessed correctly and dehydration cases classified correctly increased by 25% more in the programme group than in the control group (p<0.05), but post-course performance was still only 55–60% in the programme group. Rehydration treatment did not improve. Counselling improved insignificantly. Completion rates were high. 	
	Are the anticipated undesirable effects small?	No	Probably no	Uncertain	Probably yes	Yes	Varies		
	What is the certainty of the anticipated effects?	Very low	Low	Moderate	High	No evidence	Varies		
	Are the anticipated desirable effects large relative to the undesirable effects?	No	Probably no	Uncertain	Probably yes	Yes	Varies		

PICO C5 RECOMMENDATION: Should continuous professional development and in-service training of health professionals be implemented which reflects reforms in education to address evolving population health needs, increase the coverage of services, and actively engage education and training institutions in its design and and execution?

Balance of consequences	Undesirable consequences <i>clearly outweigh</i> desirable consequences in most settings	Undesirable consequences <i>probably outweigh</i> desirable consequences in most settings	The balance between desirable and undesirable consequences <i>is uncertain</i>	Desirable consequences <i>probably outweigh</i> undesirable consequences in most settings	Desirable consequences <i>clearly outweigh</i> undesirable consequences in most settings
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recommendation	<i>We recommend against the option</i>	<i>We recommend the option only in the context of rigorous research</i>	<i>We recommend the option in the context of close monitoring and evaluation</i>	<i>We recommend the option</i>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> CPD programmes, delivered through comprehensive multiple and interactive techniques, are likely to improve quality of health workers, measured as improved clinical practice, knowledge, skills and attitudes					
Justification	<ul style="list-style-type: none"> - CPD is important for everyone given the rapid progress seen today in technology, diagnostics tools and treatment methods, updating and maintaining the knowledge and skills of health workers throughout their professional life - Programmes that are responsive to the needs of health service and population in all areas 				
Implementation considerations	<ul style="list-style-type: none"> - - CPD would be transformative education if they are focused especially in areas where there are resource shortages 				
Key uncertainties	<ul style="list-style-type: none"> - Amount, relevance, impact on service quality, and costs of CPD - Impact of pharmaceutical industry 				
Monitoring and evaluation	<ul style="list-style-type: none"> - Course evaluation survey at the end of every course is not enough - Assess durability of skills after the programme ends - It is important to monitor and to plan future sessions 				
Research priorities	<ul style="list-style-type: none"> - There is a need for more standardized approaches in research on CPD effectiveness, particularly with regards to clearly defining the interventions, control groups and the methods and tools used to measure the effects of CPD - Explore in more depth the advantages and disadvantages of more innovative methods to deliver CPD, such as Internet-based or use of mobile phones 				

Annex 5. List of policy briefs (will be incorporated into the references)

Dal Poz M. *Policy brief on monitoring and evaluating: the education of health professionals.*

Sousa A, Flores G. *Policy brief on financing education of health professionals.*

Uys L, Coetzee L. *Policy brief on accreditation of institutions for health professional education.*

Johnson P. *Policy brief on the regulation of health professions education.*

Couper I et al. *Policy brief on faculty development.*

Annex 6. Glossary of intervention terms

Acceptability	The perception among implementation stakeholders that a given service, practice, or innovation is agreeable, palatable, or satisfactory. Acceptability should be assessed based on the stakeholder's knowledge of or direct experience with various dimensions of the intervention to be implemented, such as its content, complexity, or comfort. We refer here particularly to social acceptability, which addresses the acceptability of the intervention in the context of the culture of the society in which the users operate.
Accreditation	A particular form of quality assurance which leads to the formal approval of an institution or programme that has been found by a legitimate body to meet predetermined and agreed upon standards, eventually resulting in an accredited status granted to that provider or programme by responsible authorities. Accreditation can be awarded by an external quality assurance agency, such as in the United States, or both can be separated, as in the Dutch-Flemish accreditation system. As in the Australian system, accreditation can also be given by the institution itself, which is then "self-accrediting".
Active participation	Defines a high level of engagement in planning and proactive contribution with regard to governance and policy formation.
Active recruitment	The process of generating a pool of potential applicants (students) rather than merely tapping one, or of undertaking to favourably influence a potential student's decision to enter a programme of health professional education.
Adjunct faculty	Faculty hired on a part-time or temporary basis. (i.e., Any instructor teaching courses whose compensation in salary and/or fringe benefits is not equal to the compensation received by full-time contractual faculty.)
Certification	The process whereby a profession or occupation voluntarily establishes competency standards for itself. Certification plays a helpful role in protecting the public, especially in cases where the state legislatures have not opted to regulate the profession or occupation through licensure. However, there are broad variations in this voluntary process.
Competencies	A combination of the essential knowledge, abilities, skills and values necessary for the practice of health promotion.
Compulsory service	A country's law or policy that governs the mandatory deployment of health workers in remote or rural areas for a certain period of time, with the aim to ensure availability of services in these areas. It can be either imposed by the government (for positions that are under government employment), or linked to various other policies.
Continuing professional development (CPD)	Training which is beyond clinical update and includes wide-ranging competencies like research and scientific writing; multidisciplinary context of patient care; professionalism and ethical practice; communication, leadership, management and behavioural skills; team building; information technology; auditing; and appropriate attitudinal change to ensure improved patient service and research outcomes and attainment of the highest degree of satisfaction by stakeholders. CPD includes education methods beyond the didactic, embodies concepts of self-directed learning and personal development, and considers organizational and systemic factors.
Core	The minimum set of competencies that constitute a common baseline for all health promotion roles (i.e. what all health promotion practitioners are expected to be