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1990-2015: Celebrating 25 years of research on preventing work injury and disability

WHO Guidelines on Rehabilitation in Health Systems

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IWH Plenary

April 18, 2017

Outline

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2006


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Convention on the Rights of Persons with Disabilities (CRPD)
Convention
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(* Signatories include countries or regional integration organizations that have signed the Convention and its Optional Protocol)
10th Anniversary of the adoption of CRPD: 2006 to 2016
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Convention Timeline

Adoption by the United Nations General Assembly - 13 December 2006

Opened for signature - 30 March 2007

Entry into force – 3 May 2008

First Conference of States Parties – 31 October & 3 November 2008

Second Conference of States Parties – 2 – 4 September 2009

First session of the Committee on the Rights of Persons with Disabilities – 23-27 February 2008

Purpose of Convention (Article 1)

To promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity

What is unique about the Convention?

Both a development and a human rights instrument

A policy instrument which is cross-disability and cross-sectoral

Legally binding

What is Disability?

*Disability results from an **interaction** between a non-inclusive society and individuals:*

- Person using a wheelchair might have difficulties gaining employment not because of the wheelchair, but because there are environmental barriers such as inaccessible buses or staircases which impede access
- Person with extreme near-sightedness who does not have access to corrective lenses may not be able to perform daily tasks. This same person with prescription eyeglasses would be able to perform all tasks without problems.

Convention on the Rights of Persons with Disabilities

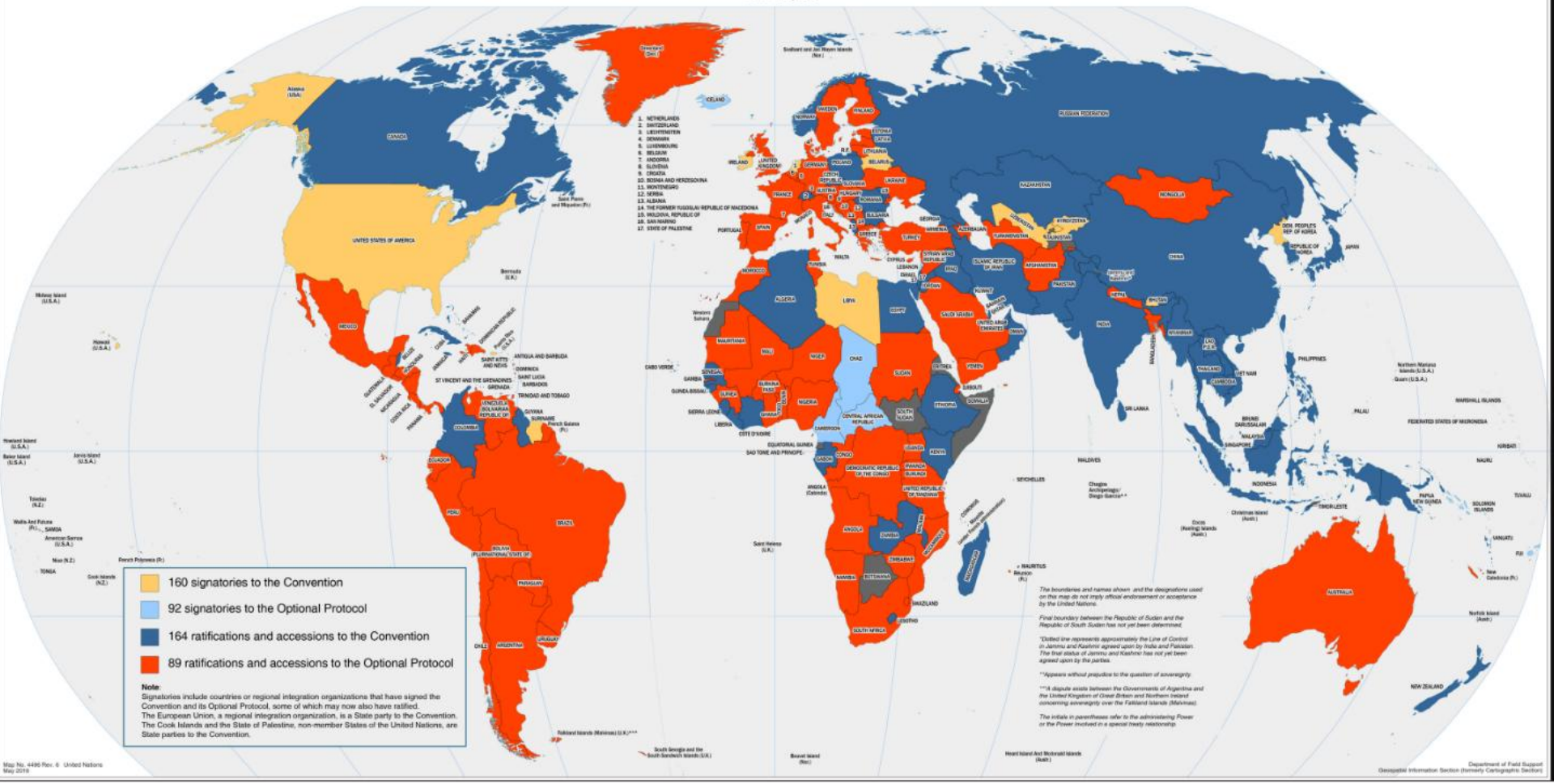
In Article 27 “recognizes the right of persons with disabilities to work, on an equal basis with others; this includes the opportunity to gain a living by work freely chosen or accepted in a labour market and work environment that is open, inclusive and accessible to persons with disabilities”

“prohibits all forms of employment discrimination, promotes access to vocational training, promotes opportunities for self-employment, and calls for reasonable accommodation in the workplace, among other provisions”

CRPD and Optional Protocol Signatures and Ratifications

Not Signed | Signed Convention | Signed Convention & Protocol | Ratified Convention | Ratified Convention & Protocol

As of 11 May 2016



2011

The first ever *World report on disability*, produced jointly by WHO and the World Bank, suggests that more than a billion people in the world today experience disability.

Better health for people with disabilities

1 Over **BILLION** people globally experience disability

1 in **7** people

People with disabilities have the same health care needs as others

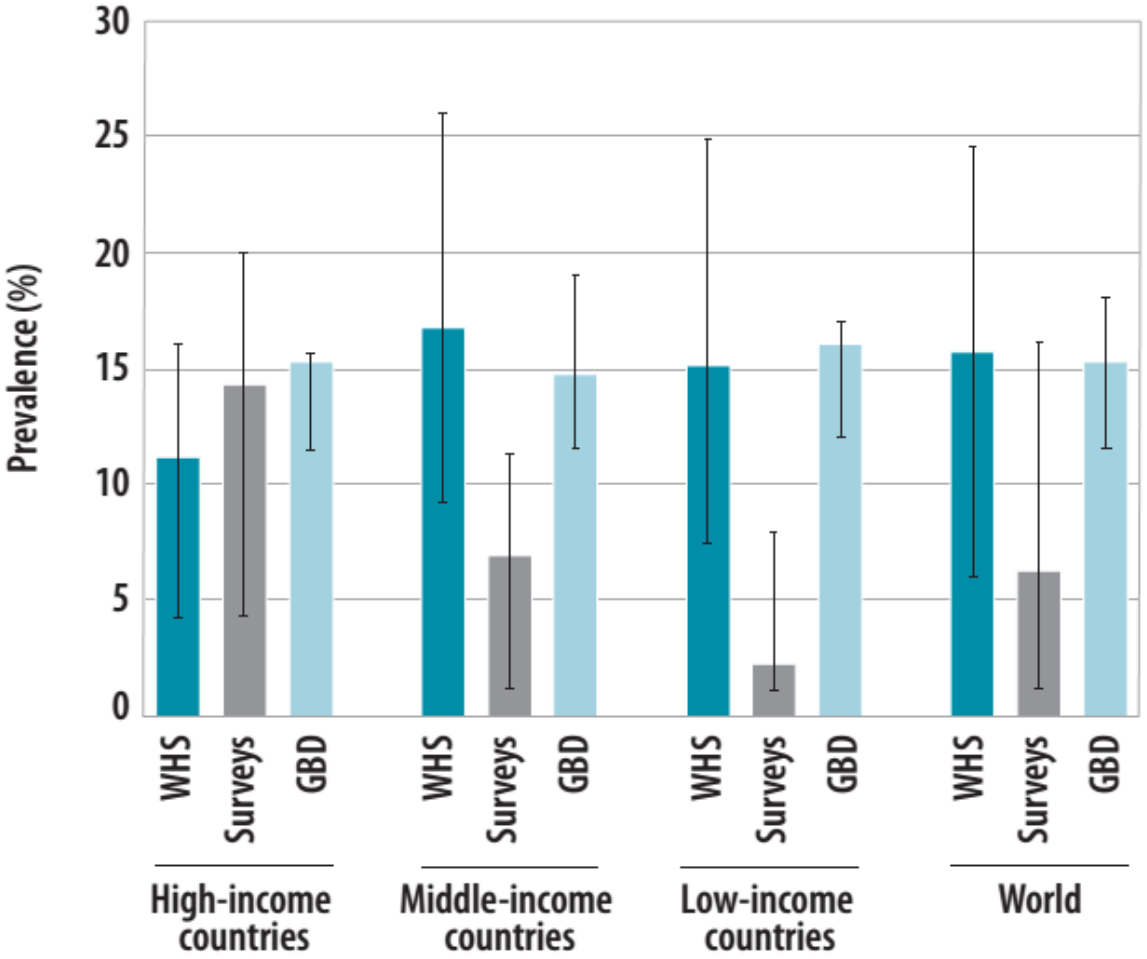
But they are:

2x more likely to find inadequate health care providers' skills and facilities

3x more likely to be denied health care

4x more likely to be treated badly in the health care system

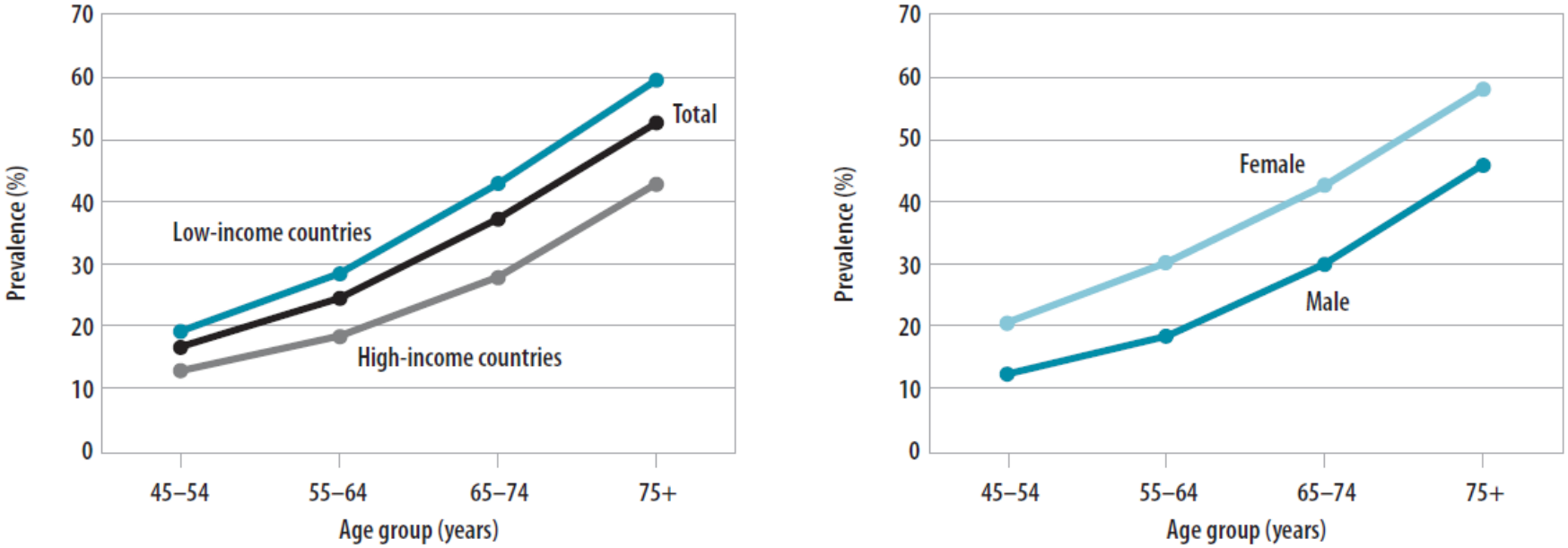
Fig. 2.1. Global disability prevalence estimates from different sources



WHS = World Health Survey

GBD = the Global Burden of Disease

Fig. 2.2. **Age-specific disability prevalence, derived from multidomain functioning levels in 59 countries, by country income level and sex**



Source (*37*).

Table 7.1. Education outcomes for disabled and not disabled respondents

Individuals	Low-income countries		High-income countries		All countries	
	Not disabled	Disabled	Not disabled	Disabled	Not disabled	Disabled
Male						
Primary school completion	55.6%	45.6%*	72.3%	61.7%*	61.3%	50.6%*
Mean years of education	6.43	5.63*	8.04	6.60*	7.03	5.96*
Female						
Primary school completion	42.0%	32.9%*	72.0%	59.3%*	52.9%	41.7%*
Mean years of education	5.14	4.17*	7.82	6.39*	6.26	4.98*
18–49						
Primary school completion	60.3%	47.8%*	83.1%	69.0%*	67.4%	53.2%*
Mean years of education	7.05	5.67*	9.37	7.59*	7.86	6.23*
50–59						
Primary school completion	44.3%	30.8%*	68.1%	52.0%*	52.7%	37.6%*
Mean years of education	5.53	4.22*	7.79	5.96*	6.46	4.91*
60 and over						
Primary school completion	30.7%	21.2%*	53.6%	46.5%*	40.6%	32.3%*
Mean years of education	3.76	3.21	5.36	4.60*	4.58	3.89*

Note: Estimates are weighted using WHS post-stratified weights, when available (probability weights otherwise) and age-standardized.

* *t*-test suggests significant difference from "Not disabled" at 5%.

Source (*12*).

2011 – World Report on Disability

Chapter 8

Work and employment

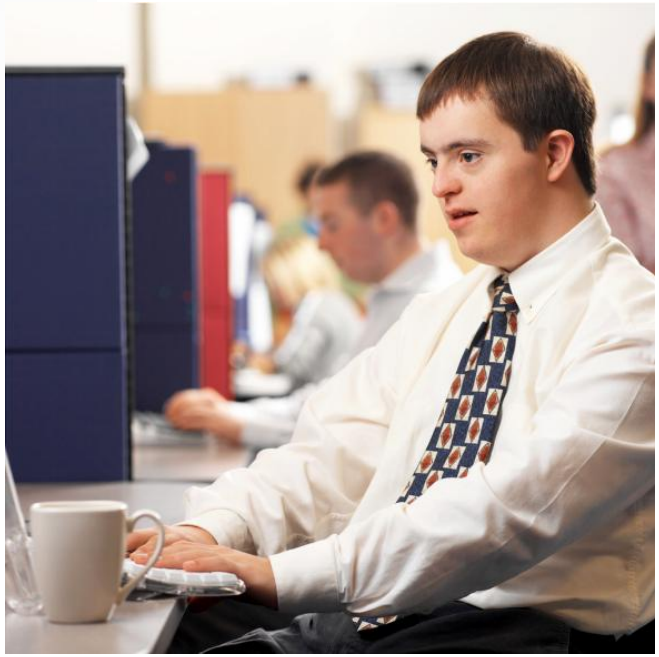


Table 8.1. Employment rates and ratios in selected countries

Country	Year	Employment rate of people with disabilities (%)	Employment rate of overall population (%)	Employment ratio
Australia[a]	2003			
Austria[a]	2003			
Canada[a]	2003	56.3	74.9	0.75
Germany[a]	2003			
India[b]	2002			
Japan[a]	2003			
Malawi[f]	2003			
Mexico[a]	2003			
Netherlands[a]	2003			
Norway[a]	2003			
Peru[c]	2003			
Poland[a]	2003			
South Africa[d]	2006			
Spain[a]	2003			
Switzerland[a]	2003			
United Kingdom[a]	2003			
USA[e]	2005			
Zambia[g]	2005			

Note: The employment rate is the proportion of the working age population (with or without disabilities) in employment. Definitions of working age differ across countries.
Sources: a (*38*); b (*8*); c (*39*); d (*7*); e (*40*); f (*41*); g (*42*).

Table 8.2. Employment rates, proportion of disabled and not disabled respondents

Individuals	Percent					
	Low-income countries		High-income countries		All countries	
	Not disabled	Disabled	Not disabled	Disabled	Not disabled	Disabled
Male			53.7			
Female			28.4			
18–49			54.7			
50–59			57.0			
60 and over			11.2			

Note: Estimates are weighted using WHS post-stratified weights, when available (probability weights otherwise), and age-standardized. * *t*-test suggests significant difference from "Not disabled" at 5%.
Source (*43*).

Work, Employment and Disability

Lower rates of labour market participation are one of the important pathways through which disability may lead to **poverty**.

Disability management refers to interventions applied to individuals in employment who develop a health condition or disability. The main elements of disability management are generally effective case management, education of supervisors, workplace accommodation, and an early return to work with appropriate supports.

Disability should be recognized as a health condition, interacting with contextual factors, and should be distinct from eligibility for and receipt of benefits, just as it should not automatically be treated as an **obstacle to work**.

World Health Organization

WHO, along with WHO Collaborating Centres and other partners, actively supports Member States in implementing objective 2 of the WHO global disability action plan 2014-2021: to strengthen and extend rehabilitation, habilitation, assistive technology, assistance and support services and community-based rehabilitation.

- develops guidelines, providing evidence-based recommendations on how to develop and expand rehabilitation as a health strategy;
- provides technical assistance and support to countries that are introducing and expanding rehabilitation services;
- develops tools and training packages to strengthen rehabilitation services;
- develops approaches to guide Member States in how to integrate rehabilitation into universal health coverage.

Methods

WORLD HEALTH ORGANIZATION

CALL FOR RESEARCH PROPOSALS

GUIDELINES ON HEALTH-RELATED REHABILITATION

Deadline for submission of Proposals: 31 January 2013

The Disability and Rehabilitation team is pleased to announce a call for research proposals to support the development of the World Health Organization *Guidelines on health-related rehabilitation*.

The guidelines will support the implementation of the rehabilitation aspects of the *Convention on the Rights of Persons with Disabilities* (UN 2006). They will provide guidance to governments and other relevant actors on how to develop, expand and improve the quality of rehabilitation services in less resourced settings in line with the recommendations in the *World report on disability* (WHO/World Bank 2011), notably the integration and decentralization of rehabilitation services within the health system.

The guidelines will position rehabilitation within the context of the WHO "Framework for Action" for strengthening health systems, which consists of six clearly defined building blocks: leadership and governance; service delivery; human resources; medical products and technologies; financing; and information systems.

Rationale

Global trends in health and ageing require a major scaling up of rehabilitation services in countries around the world and in low- and middle-income countries in particular.

Strengthening service delivery and ensuring it is adequately financed is fundamental to ensuring that rehabilitation is available and affordable for those who need it.

There is a need for evidence-based guidelines to develop and strengthen rehabilitation services in these countries.

Objective

The objective of these recommendations is to provide evidence-based, expert-informed recommendations to guide governments and other stakeholders in developing and extending rehabilitation services and delivering them equitably at all levels of health systems and on all service delivery platforms.

Their aim is to strengthen the quality of rehabilitation service delivery by advocating a multi-disciplinary workforce and the establishment of sustainable funding mechanisms to support and maintain service delivery and development.

Target audience

The recommendations are intended for:

- government leaders
- health policy-makers
- sectors such as workforce and training

The recommendations and good practice statements for people involved in:

- rehabilitation research
- service delivery
- financing and assistive products
- professional organizations
- academic institutions
- civil society and nongovernmental and international organizations

Overarching Questions

Work Packages:

1. Background
2. Leadership and governance
3. Service Delivery
4. Rehabilitation Workforce
5. Assistive Technology
6. Financing
7. Information systems

PICO Question 3.1: What service provision models work for different health conditions/resource settings/phases to ensure the provision of rehabilitation services?

PICO Question 3.2: What types of assessment tools can be used to ensure individual's rehabilitation needs are adequately identified

Low, Middle and High Income Countries

Team

Review team:

Andrea Furlan (Lead),Emma Irvin, Claire Munhall (Coordinator)

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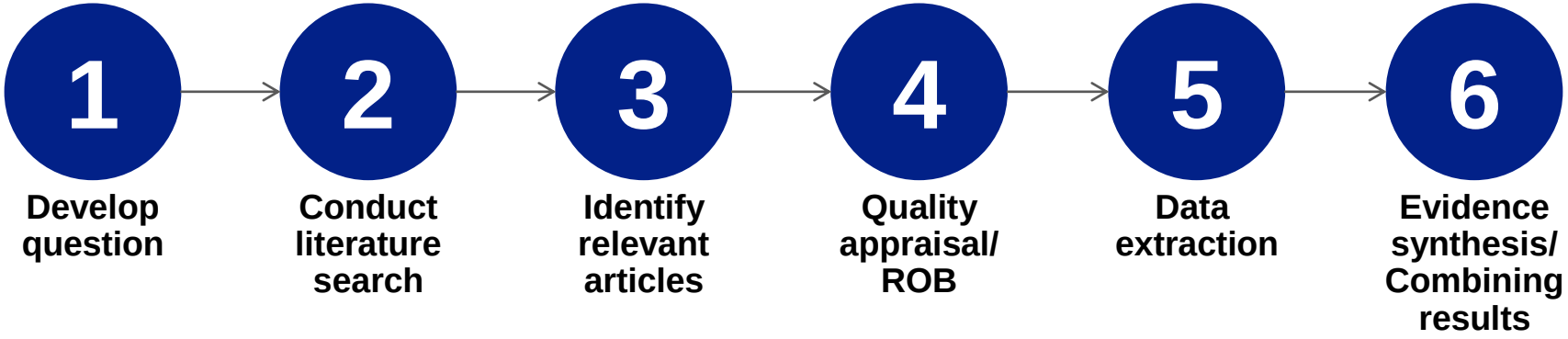
Advisory Group:

Mark Bayley, Dorcas Beaton, Cory Borkhoff, Judy David, John Flannery, Carol Kennedy, Charissa Levy, Gaetan Tardif

Institute for Work & Health Systematic Review Steps



(Irvin, Van Eerd et al. 2010)

Steps of a the systematic review

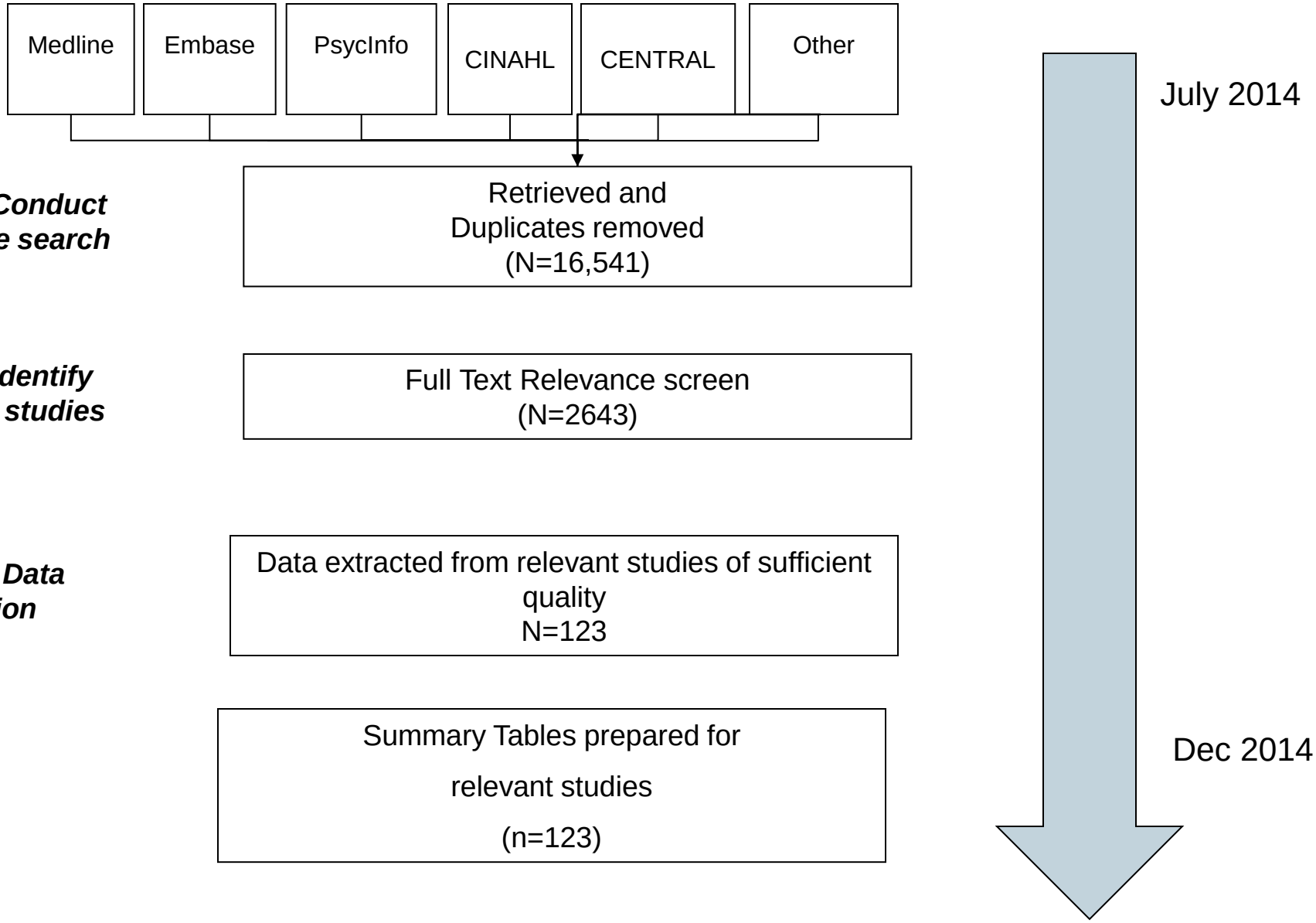
1. Develop question
2. Conduct literature search
3. Identify relevant publications
4. Quality appraisal
5. Data extraction
6. Evidence synthesis

(Irvin, Van Eerd et.al. 2010)

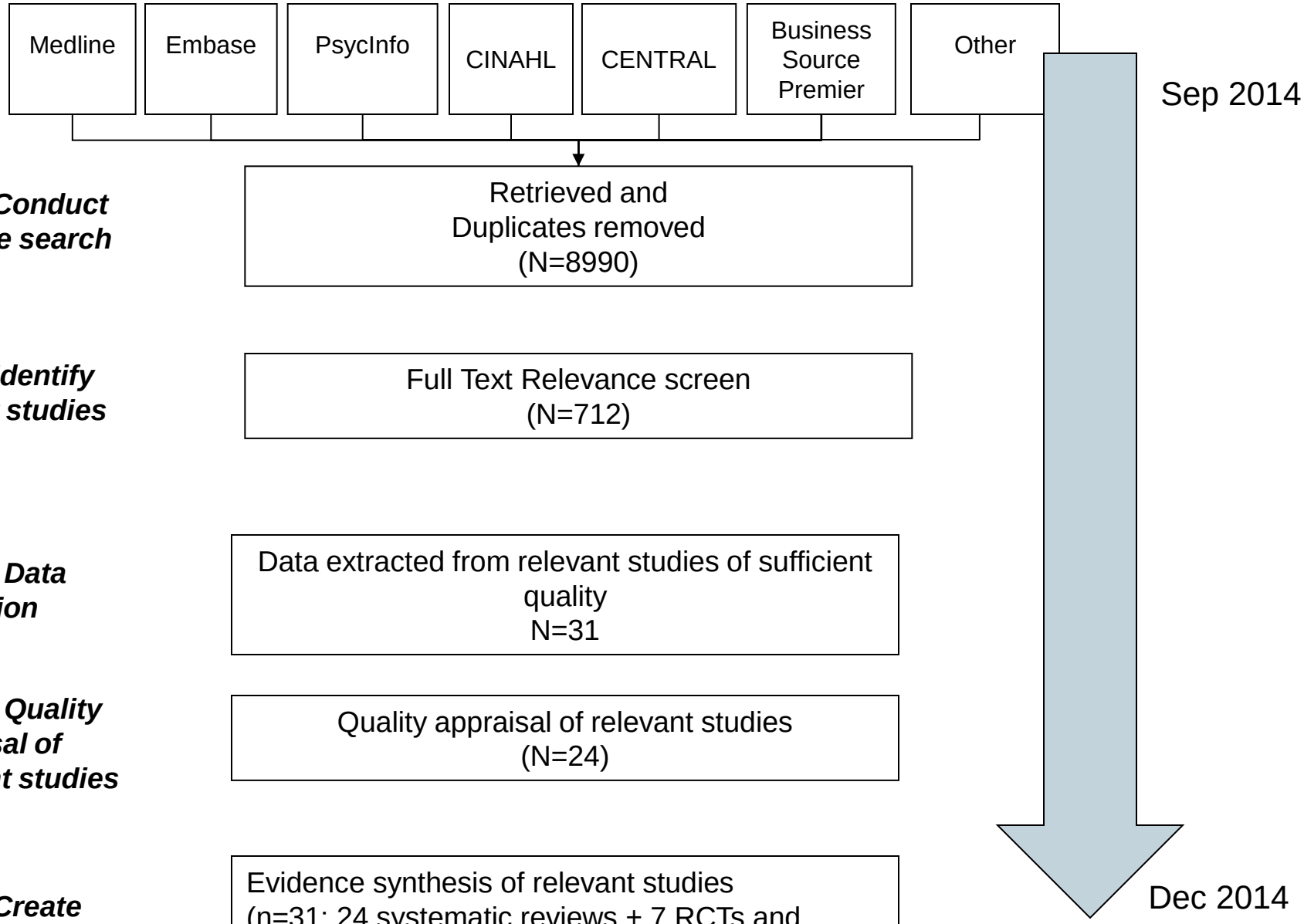
2014

PICO 3.1 "Services"	PICO 3.2 "Tools"
January	January
September	July
October November	August September
November	November
December	December

PICO 3.2 “Tools” - Review Flowchart



PICO 3.1 “Health Services” - Review Flowchart



Recommendations

Recommendations for strengthening

REHABILITATION in health systems

Integrate rehabilitation into the health system

Rehabilitation is currently not effectively integrated into the health system in many parts of the world and this has been attributed in part to how and by whom rehabilitation is administered. For rehabilitation to be effectively integrated into the health system, it needs clearly designated and strong governance. In most situations, the ministry of health will be the most appropriate agency for governing rehabilitation, with strong links to other relevant sectors, such as social welfare, education and labour.

Ensure hospitals include specialized rehabilitation units for inpatients with complex needs

Specialized rehabilitation wards provide intensive, highly specialized interventions for restoring functioning to patients with complex rehabilitation needs. In a number of instances, the results are superior to those of rehabilitation provided in general wards, such as in the context of lower-limb amputation, spinal cord injury and stroke and in the care of older people. Establishment or extension of specialized rehabilitation units should be based on the context of the health system, specifically the availability of rehabilitation workforce and funding.

Ensure adequate training is offered to users to whom assistive products are provided

It is important to train users in effective, safe use and maintenance of assistive products over time, when necessary. Especially in the context of complex needs, rehabilitation providers can ensure that the products that people receive are suitable for them and their environment and are adapted as the needs of the users evolve.

Integrate rehabilitation services into and between primary, secondary and tertiary levels of health systems

The underdevelopment of rehabilitation in many countries has often resulted in services being offered only at selected levels of health systems. Rehabilitation is, however, required at all levels, for identification of needs and for an effective continuum of care throughout a person's recovery. Standardized referral pathways and other coordination mechanisms between levels help to ensure good transition of care for optimal outcomes.

Ensure both community and hospital rehabilitation services are available

Rehabilitation in both hospital and community settings is necessary to ensure timely intervention and access to services. Rehabilitation in hospital settings enables early intervention, which can speed recovery, optimize outcomes and facilitate smooth, timely discharge. Many people require rehabilitation well beyond discharge from hospital, while other users may require services solely in the community. People with developmental, sensory or cognitive impairment, for example, may benefit from long-term interventions that are often best delivered at home, school or in the workplace.

Ensure financial resources are allocated to rehabilitation services

How health systems allocate financial resources significantly affects service delivery, yet many countries do not allocate specific budgets for rehabilitation services. Allocation of resources for rehabilitation can increase both the availability and the quality of rehabilitation services and minimize out-of-pocket expenses, which is a significant barrier to service utilization.

Ensure the availability of a multi-disciplinary rehabilitation workforce

A multi-disciplinary workforce in health systems ensures that the range of rehabilitation needs within the population can be met. Multi-disciplinary rehabilitation interventions have been shown to be effective in the management of many chronic, complex or severe conditions that may significantly impact multiple domains of functioning (vision, communication, mobility and cognition). As different rehabilitation disciplines require specific skills, a multi-disciplinary workforce can significantly improve quality of care and improve health outcomes. Long-term investment in the education, development and retention of a multi-disciplinary rehabilitation workforce should thus be factored in health sector planning and budgets.

Implement financing and procurement policies that ensure assistive products are available to everyone who needs them

Assistive products, such as mobility devices, hearing aids and white canes, play an important role in improving functioning and increasing independence and participation; however, accessing such products can be difficult, particularly in some low- and middle-income countries where as little as 5–15% of the population have access to the products they need.

Where health insurance exists or is to become available, ensure rehabilitation services are covered

Health insurance is a common mechanism for decreasing financial barriers to health services, yet inclusion of rehabilitation in insurance coverage is variable. When health insurance includes rehabilitation, access to and use of rehabilitation services is increased. Because health insurance protects only a minority of the population in many parts of the world, this mechanism of financial protection should be part of broader initiatives to improve the affordability of rehabilitation services.

Ministry of Health

Integrate rehabilitation into the health system

Rehabilitation services should be integrated in health systems

Strength: Conditional

Quality of evidence: Very low

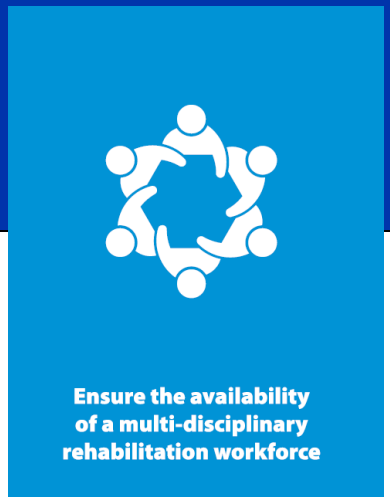
While rehabilitation for a health condition is usually provided in conjunction with other health services, it is currently not effectively integrated into health systems in many parts of the world. This has been attributed partly to how and by whom rehabilitation is governed. Clear designation of responsibility for rehabilitation is necessary for its effective integration into health systems. In most situations, the ministry of health will be the most appropriate agency for governing rehabilitation, with strong links to other relevant sectors, such as social welfare, education and labour.

Rehabilitation services should be integrated into and between primary, secondary and tertiary levels of health systems

Strength: Strong

Quality of evidence: Very low

The underdevelopment of rehabilitation in many countries and pervasive misconceptions of rehabilitation as a luxury adjunct to essential care or only for people with significant disability have often resulted in services only at selected levels of health systems. Rehabilitation is, however, required at all levels, for identification of needs and for an effective continuum of care throughout a person's recovery. Standardized referral pathways and other coordination mechanisms between levels help to ensure good transition of care for optimal outcomes.



A multi-disciplinary rehabilitation workforce should be available

Strength: Strong

Quality of evidence: High

A multi-disciplinary workforce in a health system ensures that the range of rehabilitation needs for different domains of functioning can be met.

While multi-disciplinary rehabilitation is not always necessary, it has been shown to be effective in the management of many conditions, especially those that are chronic, complex or severe.

As different rehabilitation disciplines require specific skills, a multi-disciplinary workforce can significantly improve the quality of care.

Both community and hospital rehabilitation services should be available

Strength: Strong

Quality of evidence: Moderate

Rehabilitation in both hospital and community settings is necessary to ensure timely intervention and access to services. Rehabilitation in hospital settings enables early intervention, which can speed recovery, optimize outcomes and facilitate smooth, timely discharge.

Many people require rehabilitation well beyond discharge from hospital, while other users may require services solely in the community.

People with developmental, sensory or cognitive impairment, for example, may benefit from long-term interventions that are often best delivered at home, school or in the workplace.

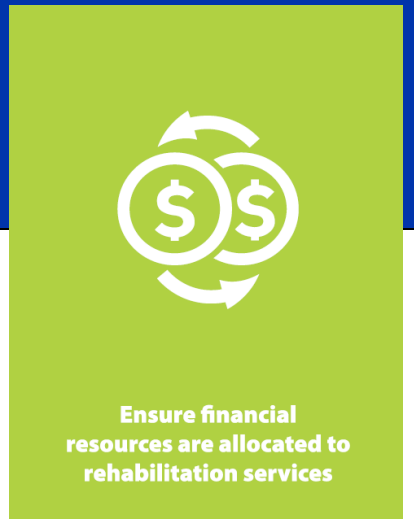
Hospitals should include specialized rehabilitation units for inpatients with complex needs

Strength: Strong

Quality of evidence: Very high

Specialized rehabilitation wards provide intensive, highly specialized interventions for restoring functioning to people with complex rehabilitation needs.

In a number of instances, the results are superior to those of rehabilitation provided in general wards, such as in the context of lower-limb amputation, spinal cord injury and stroke and in the care of older people.



Financial resources should be allocated to rehabilitation services to implement and sustain the recommendations on service delivery

Strength: Strong

Quality of evidence: Very low

How health systems allocate financial resources significantly affects service delivery, yet many countries do not allocate specific budgets for rehabilitation services.

Allocation of resources for rehabilitation can increase both the availability and the quality of rehabilitation services and minimize out-of-pocket expenses, which is a significant barrier to service utilization.

Where health insurance exists or is to become available, it should cover rehabilitation services

Strength: Conditional

Quality of evidence: Very low

Health insurance is a common mechanism for decreasing financial barriers to health services, yet inclusion of rehabilitation in insurance coverage is variable, and, in many parts of the world, health insurance protects only a minority of the population.

When health insurance includes rehabilitation, access to and use of rehabilitation services is increased.

This mechanism should therefore be part of broader initiatives to improve the affordability of rehabilitation services.

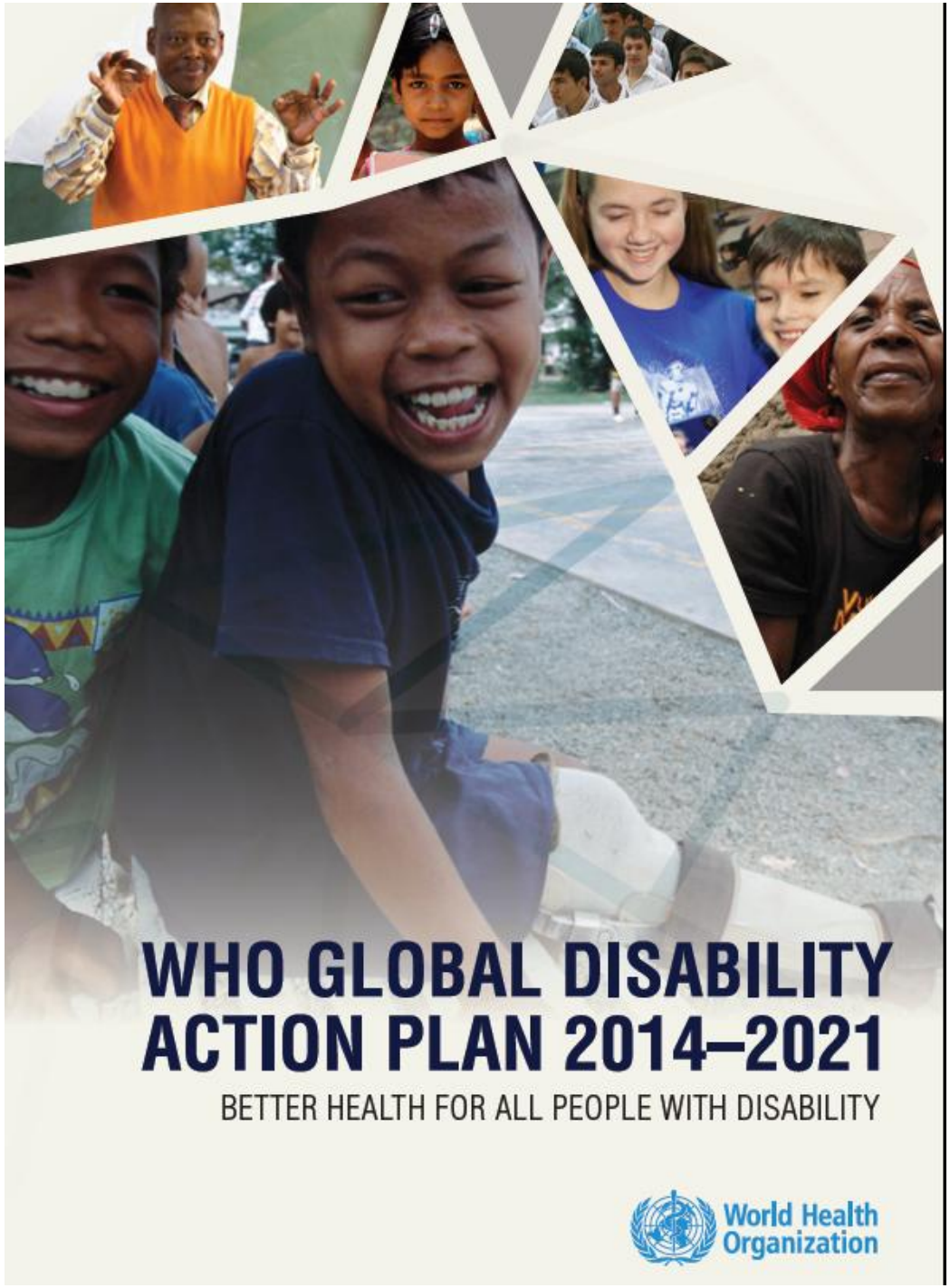
Good practice statements on assistive products

Financing and procurement policies should ensure that assistive products are available to everyone who needs them

Adequate training should be offered to users to whom assistive products are provided.

Assistive products play an important role in improving functioning and increasing independence and participation; however, accessing such products can be difficult, particularly in some low- and middle income countries. It is important not only to increase access to and the affordability of assistive products but also to train users in effective, safe use and maintenance of the products over time, when necessary. Rehabilitation professionals can ensure that the assistive products that people receive are suitable for them and their environment and are adapted as the needs of the users evolve.

Impact



Objectives:

1. To remove barriers and improve access to health services and programmes
2. To strengthen and extend rehabilitation, habilitation, assistive technology, assistance and support services, and community-based rehabilitation
3. To strengthen collection of relevant and internationally comparable data on disability and support research on disability and related services

REHABILITATION 2030
a call for action

6-7 February 2017, WHO headquarters, Geneva, Switzerland

#Rehab2030

The meeting was attended by a broad range of stakeholders: government officials, WHO and other UN agencies, organizations representing rehabilitation service user groups and rehabilitation providers, funding bodies, major professional organizations, research institutions, and relevant international and nongovernmental organizations

Objectives of the meeting

1. To draw attention to the increasing needs for rehabilitation.
2. To highlight the role of rehabilitation in achieving the SDGs.
3. To call for coordinated and concerted global action towards strengthening rehabilitation in health systems.

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