Chapter 3

General health care
“My doctor is great. He is my friend and not just my doctor. He used to be my father’s doctor too. When I want to see the doctor he always has time for me. He always talks to me about this, about that, before he says, “What is wrong?” I used to be on 60 mg of blood pressure medicine for my high blood pressure. But then my doctor told me that I had to get more life to help my pressure. He did not want me to twiddle my thumbs and watch soap operas seven days a week. He wanted me to move around and be active. It was a good idea. So I went and got some volunteer work. Now I have friends and I always talk to people. And I only need 20 mg of medicine!”

Jean-Claude

“You can not have a baby”, those were the words of the first gynecologist I visited few months after I got married. I was so confused. Why wouldn’t I be able to have a baby? I am physically disabled, but I have no medical reason not to. I faced a lot of challenges either because of bad attitude of nurses or doctors questioning my eligibility to be a mother or the inaccessible medical facilities, whether it is the entrances, bathrooms, examinations beds etc. I am now a mother of a 5 year old boy which is one of the best things that ever happened to me, but I keep thinking why did it end up to be a luxury thing while it is a right? Why was I only able to do it when I had the money to go to a better medical care system?”

Rania

“Even though during my appointments to the medical centre, doctors haven’t discussed health promotion with me and they don’t even have a scale to measure my body weight, I still try to engage in activities that would enhance my health and wellbeing. It’s not easy as most fitness facilities and equipment are not accessible. I’m yet to find dietary advice for people with spinal cord injury or identify a dentist near my place of residence with accessible facility and equipment.”

Robert
Health can be defined as “a state of physical, mental, and social well-being and not merely the absence of disease or infirmity” (1). Good health is a prerequisite for participation in a wide range of activities including education and employment. Article 25 of the United Nations Convention on the Rights of Persons with Disabilities (CRPD) reinforces the right of persons with disabilities to attain the highest standard of health care, without discrimination (2).

A wide range of factors determine health status, including individual factors, living and working conditions, general socioeconomic, cultural and environmental conditions, and access to health care services (3, 4). This Report shows that many people with disabilities experience worse socioeconomic outcomes than people without disabilities: they experience higher rates of poverty, lower employment rates, and have less education. They also have unequal access to health care services and therefore have unmet health care needs compared with the general population (5–8).

This chapter focuses on how health systems can address the health inequalities experienced by people with disabilities. It provides a broad overview of their health status, explores the main barriers to using health care, and suggests ways to overcome them.

**Understanding the health of people with disabilities**

This section provides a general overview of the health status of people with disabilities by looking at the different types of health conditions they may experience and several factors that may contribute to the health disparities for this population (see Box 3.1). Increasing evidence suggests that, as a group, people with disabilities experience poorer levels of health than the general population (18). They are often described as having a narrower or thinner margin of health (9, 17).

**Primary health conditions**

Disability is associated with a diverse range of primary health conditions: some may result in poor health and high health care needs; others do not
keep people with disabilities from achieving good health (19). For example:

- A child born blind may not specifically require ongoing health care for a primary health condition and associated impairment (20).
- An adolescent with a traumatic spinal cord injury may have considerable health care needs during the acute phase of the primary condition but thereafter may require only services to maintain health – for example, to prevent secondary conditions (20).
- Adults with chronic conditions such as multiple sclerosis, cystic fibrosis, severe arthritis, or schizophrenia may have complex and continuing health care needs related to their primary health condition or associated impairments (20).

**Risk of developing secondary conditions**

Depression is a common secondary condition in people with disabilities (21–23). Pain has been
reported in children and adults with cerebral palsy (24, 25), children with spina bifida (26), and adults with post-polio paralysis (27), neuromuscular disease (28), and traumatic brain injury (29). Osteoporosis is common in people with a spinal cord injury (30), spina bifida (31), or cerebral palsy (32, 33).

**Risk of developing co-morbid conditions**

People with disabilities develop the same health problems that affect the general population, such as influenza and pneumonia. Some may be more susceptible to developing chronic conditions because of the influence of behavioural risk factors such as increased physical inactivity (18). They also may experience earlier onset of these conditions (17). One study indicated that adults with developmental disabilities had a similar or greater rate of chronic health conditions such as high blood pressure, cardiovascular disease, and diabetes than people without disabilities (34). The prevalence of diabetes in people with schizophrenia is around 15%, compared with the general population rate of 2–3% (21).

**Greater vulnerability to age-related conditions**

The ageing process for some groups of people with disabilities begins earlier than usual. Some people with developmental disabilities show signs of premature ageing in their 40s and 50s (35) and they may experience age-related health conditions more frequently. For example, people with Down syndrome have a higher incidence of Alzheimer disease than the general population, while people with intellectual impairments (unrelated to Down syndrome) have higher rates of dementia (35). The ageing process and associated changes (presbycusis, deconditioning, loss of strength and balance, osteoporosis) may have a greater impact on people with disabilities. For example, those with existing mobility impairments may increasingly experience functional loss as they age (9).

**Increased rates of health risk behaviours**

The health behaviours practiced by some adults with disabilities can differ in degree from those of the general population (12). In Australia, people with disabilities aged between 15–64 were more likely to be overweight or obese than other people (48% compared with 39%) and to smoke daily (3). Data cited from the 2001 and 2003 Behavioural Risk Factor Surveillance System in the United States of America reported similar findings. People with disabilities have higher rates of smoking (30.5% compared with 21.7%), are more likely to be physically inactive (22.4% compared with 11.9%), and are more likely to be obese (31.2% compared with 19.6%) (18). A Canadian study using a national sample showed that people with hearing impairments were more likely than the general population to report low levels of physical activity (36). A study in Rwanda reported that adults with lower limb amputations engaged in poor health-related behaviours such as smoking, alcohol consumption, recreational drug use, and a lack of exercise (37).

**Greater risk of being exposed to violence**

Violence is linked to health outcomes both immediate and long term, including injuries, physical and mental health problems, substance abuse, and death (38). People with disabilities are at greater risk of violence than those without disabilities. In the United States violence against people with disabilities has been reported to be 4–10 times greater than that against people without disabilities (39). The prevalence of sexual abuse against people with disabilities has been shown to be higher (40, 41), especially for institutionalized men and women with intellectual disabilities (42–44), intimate partners (40, 45), and adolescents (46).
Higher risk of unintentional injury

People with disabilities are at higher risk of nonfatal unintentional injury from road traffic crashes, burns, falls, and accidents related to assistive devices (47–51). One study found that children with developmental disabilities – including autism, attention deficit disorder, and attention deficit hyperactivity disorder – were two to three times more at risk of an injury than those without (50). Other studies conclude that children with disabilities have a significantly higher risk of falls (52), burn-related injuries (53), and injuries from crashes involving motor vehicles or bicycles (54).

Higher risk of premature death

Mortality rates for people with disabilities vary depending on the health condition. People with schizophrenia and depression have an increased risk of premature death (2.6 and 1.7 times greater, respectively) (21). An investigation in the United Kingdom of Great Britain and Northern Ireland regarding health inequalities among people with learning impairments and people with mental health disorders found that they had a lower life expectancy (see Box 3.2) (15).

In some instances mortality rates for people with disabilities have fallen in developed countries. For example, adults with cerebral palsy have lifespans close to those of people with no disability (55). Over the past few decades people with a spinal cord injury in the United Kingdom and the United States have improved survival rates during the first one to two years following injury (56, 57), but beyond this period there is no evidence of improvement (57). The data are limited on mortality rates for people with disabilities in low-income countries. A study in Bangladesh suggests that people with cerebral palsy may have higher rates of premature death (58).

Needs and unmet needs

Disabled respondents from 51 countries reported seeking more inpatient and outpatient care than people without disabilities in the WHO 2002–2004 World Health Survey (see Table 3.1). Women seek care more often than men, and so do respondents with disabilities in high-income countries compared with respondents in low-income countries across gender and age groups. The proportion of respondents seeking care in high-income countries increases with age; the results varied for low-income countries.

Disabled respondents reported not receiving care more than people without disabilities, across both sex and age grouping. Respondents with disabilities in low-income countries show higher rates of not receiving care (6.1–6.6) than respondents in high-income countries (3.3–4.6). Age-standardized analysis across all countries suggests that older respondents with disabilities have less unmet care needs than younger (≤ 59) respondents.

Need and unmet needs exist across the spectrum of health services – promotion, prevention, and treatment.

Health promotion and prevention

Misconceptions about the health of people with disabilities have led to assumptions that people with disabilities do not require access to health promotion and disease prevention (60). Evidence shows that health promotion interventions such as physical activities are beneficial for people with disabilities (61–65). But health promotion activities seldom target people with disabilities, and many experience multiple barriers to participation. For example, limited access to health promotion has been documented for people with multiple sclerosis (66), stroke (67), poliomyelitis (67), intellectual impairment (15), and mental health problems (15).

While some research indicates minimal differences in immunization rates (68–70), people with disabilities are generally less likely to receive screening and preventive services. Several studies found that women with disabilities receive less screening for breast and cervical cancer compared with women without disabilities (15, 68, 69, 71–75), and men with disabilities are less likely to receive
screening for prostate cancer (68, 76). A United Kingdom investigation found that people with intellectual impairment and diabetes are less likely than others with just diabetes to have their weight checked, and people with schizophrenia and a high risk of coronary heart disease are less likely to receive cholesterol screening (15).

**Sexual and reproductive health services**

Sexual and reproductive health services include family planning, maternal health care, preventing and managing gender-based violence, and preventing and treating sexually transmitted infections including HIV/AIDS. While little information is available, it is widely thought that people with disabilities have significant unmet needs (77). Adolescents and adults with disabilities are more likely to be excluded from sex education programmes (78, 79). A national study in the United States showed that women with functional limitations were less likely to be asked about contraceptive use during visits to general practitioners (71).

**Dental care**

The oral health of many people with disabilities is poor, and access to dental care limited (80–86). An Australian study investigating dental treatment of children with disabilities found that the simple treatment needs of 41% of the sample were not met (81). A study of the use of oral health care services by children in Lagos, Nigeria, found that children with disabilities and children from lower socioeconomic status did not adequately use dental facilities (84).
World report on disability

Table 3.1. Individual’s seeking health care and not receiving needed care.

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<td>6.3</td>
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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 (59).

Mental health services

Many people with mental health conditions do not receive mental health care despite the fact that effective interventions exist, including medication. A large multicountry survey supported by WHO showed that between 35% and 50% of people with serious mental disorders in developed countries, and between 76% and 85% in developing countries, received no treatment in the year before the study (87). A meta-analysis of 37 epidemiological studies across 32 developed and developing countries uncovered a median treatment gap between 32% and 78% for a range of mental health conditions including schizophrenia, mood disorders, anxiety disorders, and alcohol abuse or dependence (88).

Addressing barriers to health care

People with disabilities encounter a range of barriers when they attempt to access health care services (7, 89, 90). Analysis of the World Health Survey data showed a significant difference between men and women with disabilities and people without disabilities in terms of the
Chapter 3  General health care

attitudinal, physical, and system level barriers faced in accessing care (see Table 3.2).
Research in Uttar Pradesh and Tamil Nadu states of India found that cost (70.5%), lack of services in the area (52.3%), and transportation (20.5%) were the top three barriers to using health facilities (91). These findings are supported by studies in Southern Africa that identified cost, distance, and lack of transport as reasons for not using services, along with services no longer being helpful or the individual not being satisfied by the services (92–95).

Table 3.2. Reasons for lack of care

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<tr>
<td>Male</td>
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18–49

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63
### World report on disability

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</tr>
</thead>
<tbody>
<tr>
<td>Could not afford the visit</td>
<td>36.8</td>
<td>47.7</td>
<td>14.4</td>
<td>21.1</td>
<td>30.6</td>
<td>38.7</td>
</tr>
<tr>
<td>No transport</td>
<td>25.1</td>
<td>24.3</td>
<td>9.5</td>
<td>30.3*</td>
<td>20.6</td>
<td>22.0</td>
</tr>
<tr>
<td>Could not afford transport</td>
<td>23.6</td>
<td>27.5</td>
<td>1.9</td>
<td>28.5*</td>
<td>18.0</td>
<td>24.7</td>
</tr>
<tr>
<td>Health-care provider’s equipment or are inadequate</td>
<td>9.1</td>
<td>17.1</td>
<td>3.2</td>
<td>20.6</td>
<td>7.7</td>
<td>16.5</td>
</tr>
<tr>
<td>Health-care provider’s skills inadequate</td>
<td>4.1</td>
<td>11.8</td>
<td>6.6</td>
<td>18.5</td>
<td>4.8</td>
<td>14.8</td>
</tr>
<tr>
<td>Were previously treated badly</td>
<td>1.7</td>
<td>6.7*</td>
<td>8.7</td>
<td>36.7*</td>
<td>3.7</td>
<td>14.1</td>
</tr>
<tr>
<td>Could not take time off</td>
<td>5.4</td>
<td>4.1</td>
<td>2.7</td>
<td>1.2</td>
<td>5.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Did not know where to go</td>
<td>4.5</td>
<td>13.8</td>
<td>9.0</td>
<td>37.6*</td>
<td>6.1</td>
<td>16.5</td>
</tr>
<tr>
<td>The person did not think he/she/his/her child was sick enough</td>
<td>31.8</td>
<td>32.7</td>
<td>56.2</td>
<td>21.6*</td>
<td>38.9</td>
<td>31.2</td>
</tr>
<tr>
<td>Tried but was denied care</td>
<td>2.6</td>
<td>7.8</td>
<td>4.5</td>
<td>62.1*</td>
<td>3.2</td>
<td>25.8*</td>
</tr>
<tr>
<td>Other</td>
<td>27.7</td>
<td>25.2</td>
<td>12.2</td>
<td>35.5*</td>
<td>23.7</td>
<td>22.6</td>
</tr>
</tbody>
</table>

**Note:** Results are significant in every case according to Pearson’s Chi-Square test, corrected for survey design. 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 (59).
Governments can improve health outcomes for people with disabilities by improving access to quality, affordable health care services, which make the best use of available resources. Usually several factors interact to inhibit access to health care (96), so reforms in all the interacting components of the health care system are required:

■ reforming policy and legislation
■ addressing barriers to financing and affordability
■ addressing barriers to service delivery
■ addressing human resource barriers
■ filling gaps in data and research (97).

Reforming policy and legislation

International, regional, and national policy and legislation can help meet the health care needs of people with disabilities where political will, funding, and technical support accompany implementation. Policy formulated at the international level can affect national health care policies (98). International agreements such as the CRPD (2) and the Millennium Development Goals can provide countries with rationale and support to improve availability of health care for people with disabilities. The CRPD indicates the following areas for action:

■ **Accessibility** – stop discrimination against people with disabilities when accessing health care, health services, food or fluid, health insurance, and life insurance. This includes making the environment accessible.

■ **Affordability** – ensure that people with disabilities get the same variety, quality, and standard of free and affordable health care as other people.

■ **Availability** – put early intervention and treatment services as close as possible to where people live in their communities.

■ **Quality** – ensure that health workers give the same quality care to people with disabilities as to others.

Formal acknowledgement, within national health care policies, that some groups of persons with disabilities experience health inequalities is needed to remove health disparities (11). Countries such as Australia, Canada, the United Kingdom and the United States have published national agendas or position papers that specifically address the health problems of people with intellectual impairment (14). In the United States Healthy People 2010 – a framework for preventing health conditions in the entire population – makes reference to people with disabilities (60).

In addition to the health sector, many other sectors can enact “disability-friendly” policies to prevent access barriers and enable those with disabilities to promote their health and actively participate in community life (99). Legislation and policies within the education, transport, housing, labour, and social welfare sectors can all influence the health of people with disabilities (see Chapters 5–8 for further information).

People with disabilities are most intimately familiar with and most affected by barriers to health care access, and eliminating these barriers requires input from these people (89). Research has shown the benefits of involving users in the design and operation of health care systems (100). People with diverse disabilities can contribute, including people with intellectual impairment (101), people with mental health conditions (102–104), children with disabilities (105), and families and caregivers (106, 107).

Commitment to collaboration is necessary, and input is required from health-care providers familiar with the structural, institutional, and professional challenges of providing access to quality care. The time, technical, and resource challenges of involving users must be acknowledged (100, 106), but the benefits are also significant. People with disabilities are frequent users of the health care system, and tend to use a wide range of services across the continuum of care, so their experiences can also help measure overall performance of the health system (17, 89).
Addressing barriers to financing and affordability

A review of the 2002–2004 World Health Survey reveals that affordability was the primary reason why people with disabilities, across gender and age groups, did not receive needed health care in low-income countries. For 51 countries 32–33% of nondisabled men and women cannot afford health care, compared with 51–53% of people with disabilities (see Table 3.2). Transport costs also rank high as a barrier to health care access in low-income and high-income countries, and across gender and age groups.

Health services are funded through a variety of sources including government budgets, social insurance, private health insurance, external donor funding, and private sources including nongovernmental arrangements and out-of-pocket expenses. The World Health Survey showed that the rate at which people with disabilities pay with current income, savings, or insurance is roughly the same as for people without disabilities, but paying with personal means varies between groups: paying with insurance is more common in high-income countries, while selling items and relying on friends and family is more common in low-income countries, and people with disabilities are more likely to sell items, borrow money, or rely on a family member (see Table 3.3).

Public health systems theoretically provide universal coverage, but this is rare (108, 109): no country has ensured that everybody has immediate access to all health care services (110). In the poorest countries only the most basic services may be available (110). Restrictions in public health sector expenditure are resulting in an inadequate supply of services and a
significant increase in the proportion of out-of-pocket expenditure by households (109, 111). In many low-income countries less than 1% of health budgets are spent on mental health care, with countries relying on out-of-pocket payments as the primary financing mechanism (112). Some middle-income countries are moving towards private sector provision for treatments such as mental health services (113).

People with disabilities experience lower rates of employment, are more likely to be economically disadvantaged, and are therefore less likely to afford private health insurance (114). Employed people with disabilities may be excluded from private health insurance because of pre-existing conditions or be “underinsured” (114) because they have been denied coverage for a long period (11), or are excluded from claiming for treatment related to a pre-existing condition, or must pay higher premiums and out-of-pocket expenses. This has been a problem in the United States for example, but the new Affordable Care Act enacted in March 2010 will prohibit the denial of insurance to those with pre-existing conditions starting in 2014 (115).

Analysis from the 2002–2004 World Health Survey across 51 countries showed that men and women with disabilities, in high-income and low-income countries, had more difficulties than adults without disabilities in obtaining, from private health care organizations or the government, payment exemptions or the right to special rates for health care. Furthermore people with disabilities experienced more difficulties in finding out which benefits they were entitled to from health insurance and obtaining reimbursements from health insurance. This finding was most evident in the age group 18–49 with some variability in the older age groups across income settings (see Table 3.4).

Social health insurance systems are generally characterized by mandatory payroll contributions from individuals and employers (109). These employer-based systems may be inaccessible for many adults with disabilities because they have lower employment rates than people without disabilities. Even employed people with disabilities may not be able to afford insurance premiums associated with employer-based health insurance plans (114), while disabled people working in the informal sector or for small businesses are unlikely to be offered insurance (114).

The World Health Survey found that disabled respondents in 31 low-income and low middle-income countries spend 15% of total household expenditure on out-of-pocket health care costs compared with 11% for nondisabled respondents. People with disabilities were also found to be more vulnerable to catastrophic health expenditure (see Table 3.5) across gender and age groups, and for both low-income and high-income countries as defined by the World Bank. For all countries, 28–29% of all people with disabilities suffer catastrophic expenditures compared with 17–18% of nondisabled people, but low-income countries show significantly higher rates than high-income countries across sex and age groups.

Financing options
Health system financing options determine whether health services – a mix of promotion, prevention, treatment, and rehabilitation – are available and whether people are protected from financial risks associated with using them (110, 116). Contributions such as social insurance and copayment for health services must be affordable and fair, and take into account the individual’s ability to pay. Full access will be achieved only when governments cover the cost of the available health services for disabled people who cannot afford to pay (110).

A range of health financing options can increase the availability of health care services to the general population, and improve access for individuals with disabilities. The World Health Report 2010 outlines an action agenda for paying for health that does not deter people from using services including (110):

- raise sufficient resources for health by increasing the efficiency of revenue collection, reprioritizing government spending,
### Table 3.4. Difficulties in access to health care financing

<table>
<thead>
<tr>
<th></th>
<th>Low-income countries</th>
<th></th>
<th>High-income countries</th>
<th></th>
<th>All countries</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not disabled</td>
<td>Disabled</td>
<td>Not disabled</td>
<td>Disabled</td>
<td>Not disabled</td>
<td>Disabled</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
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<td></td>
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<tr>
<td>Difficulties in:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>obtaining exemptions or special rates</td>
<td>17.7</td>
<td>24.1*</td>
<td>7.5</td>
<td>14.1*</td>
<td>15.0</td>
<td>22.0*</td>
</tr>
<tr>
<td>completing insurance applications</td>
<td>3.6</td>
<td>6.6</td>
<td>4.7</td>
<td>12.4*</td>
<td>4.3</td>
<td>10.1*</td>
</tr>
<tr>
<td>finding out insurance benefits/entitlements</td>
<td>4.0</td>
<td>9.0*</td>
<td>8.6</td>
<td>17.2*</td>
<td>6.4</td>
<td>13.2*</td>
</tr>
<tr>
<td>getting reimbursed from health insurance</td>
<td>3.3</td>
<td>7.4*</td>
<td>3.5</td>
<td>11.8*</td>
<td>3.4</td>
<td>8.6*</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
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<tr>
<td>Difficulties in:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>obtaining exemptions or special rates</td>
<td>15.7</td>
<td>23.5*</td>
<td>5.9</td>
<td>16.5*</td>
<td>12.3</td>
<td>21.1*</td>
</tr>
<tr>
<td>completing insurance applications</td>
<td>3.3</td>
<td>5.2</td>
<td>5.1</td>
<td>9.3*</td>
<td>4.5</td>
<td>7.0*</td>
</tr>
<tr>
<td>finding out insurance benefits/entitlements</td>
<td>3.3</td>
<td>6.0*</td>
<td>8.4</td>
<td>15.9*</td>
<td>6.2</td>
<td>10.7*</td>
</tr>
<tr>
<td>getting reimbursed from health insurance</td>
<td>3.2</td>
<td>5.4*</td>
<td>3.2</td>
<td>5.8*</td>
<td>3.1</td>
<td>5.6*</td>
</tr>
<tr>
<td><strong>18–49</strong></td>
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<tr>
<td>Difficulties in:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>obtaining exemptions or special rates</td>
<td>15.7</td>
<td>22.5*</td>
<td>6.3</td>
<td>15.8*</td>
<td>13.7</td>
<td>21.6*</td>
</tr>
<tr>
<td>completing insurance applications</td>
<td>4.2</td>
<td>6.7*</td>
<td>4.2</td>
<td>10.7*</td>
<td>4.1</td>
<td>8.3*</td>
</tr>
<tr>
<td>finding out insurance benefits/entitlements</td>
<td>4.6</td>
<td>8.0*</td>
<td>9.9</td>
<td>17.7*</td>
<td>7.3</td>
<td>12.1*</td>
</tr>
<tr>
<td>getting reimbursed from health insurance</td>
<td>4.2</td>
<td>7.1*</td>
<td>4.1</td>
<td>10.6*</td>
<td>4.1</td>
<td>8.0*</td>
</tr>
<tr>
<td><strong>50–59</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Difficulties in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>obtaining exemptions or special rates</td>
<td>17.5</td>
<td>24.2*</td>
<td>7.9</td>
<td>18.5*</td>
<td>14.9</td>
<td>23.1*</td>
</tr>
<tr>
<td>completing insurance applications</td>
<td>3.8</td>
<td>5.8</td>
<td>5.9</td>
<td>14.6*</td>
<td>5.0</td>
<td>10.4*</td>
</tr>
<tr>
<td>finding out insurance benefits/entitlements</td>
<td>5.0</td>
<td>7.9</td>
<td>9.1</td>
<td>19.9*</td>
<td>7.4</td>
<td>13.8*</td>
</tr>
<tr>
<td>getting reimbursed from health insurance</td>
<td>4.4</td>
<td>7.1</td>
<td>5.0</td>
<td>8.0</td>
<td>4.7</td>
<td>7.4</td>
</tr>
<tr>
<td><strong>≥ 60</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Difficulties in:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>obtaining exemptions or special rates</td>
<td>18.6</td>
<td>25.5*</td>
<td>6.9</td>
<td>14.0*</td>
<td>13.6</td>
<td>20.1*</td>
</tr>
<tr>
<td>completing insurance applications</td>
<td>2.1</td>
<td>4.4</td>
<td>6.0</td>
<td>7.8</td>
<td>4.7</td>
<td>6.7</td>
</tr>
<tr>
<td>finding out insurance benefits/entitlements</td>
<td>1.6</td>
<td>6.1*</td>
<td>5.8</td>
<td>11.7*</td>
<td>4.2</td>
<td>9.6*</td>
</tr>
<tr>
<td>getting reimbursed from health insurance</td>
<td>1.3</td>
<td>4.7</td>
<td>1.5</td>
<td>4.8*</td>
<td>1.5</td>
<td>4.7*</td>
</tr>
</tbody>
</table>

**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 (59).
using innovative financing, and providing development assistance;
- remove financial risks and barriers to access;
- promote efficiency and eliminate waste.

While improving access to affordable, quality health care pertains to everyone, the evidence presented above suggests that people with disabilities have more health care needs and more unmet needs. This section therefore focuses specifically on financing strategies that may improve access to health services for persons with disabilities.

**Provide affordable health insurance**

Having insurance (public, private, or mixed) can increase disabled people’s access to, and use of, health care services. Having insurance improves a variety of outcomes including an increase in the likelihood of receiving primary care, a decrease in unmet needs (including for speciality care), and a reduction in delays or in foregoing care (117–119). Insurance for a wide range of basic medical services can improve clinical outcomes (120), and can reduce the financial problems and the burden of out-of-pocket payments for families (118). Subsidizing health insurance can also extend coverage to persons with disabilities. In Taiwan, China the health insurance scheme pays for part of the insurance premium for people with intellectual disabilities according to their level of disability (121). In Colombia subsidized health insurance increased coverage for the poorest quintile of the population (122), which may benefit people with disabilities because they are disproportionately represented in the bottom quintile.

**Target people with disabilities who have the greatest health care needs**

Some governments have targeted funding to primary care doctors and organizations to support health care of people with the greatest need. Care Plus – a primary health care initiative in New Zealand – provides an additional approximately 10% capitation funding to primary health organizations to include services such as comprehensive assessments, individual care plan development, patient education, and regular follow-ups, as well as better-coordinated and lower cost services (123, 124). Medicare, a United States government social insurance scheme, provides additional payment to primary care physicians for physician-patient-family-nurse conferences to facilitate communication, support lifestyle changes, and improve treatment compliance (125). The programme improved functioning of elderly people with heart conditions and has the potential to lower total health care expenditures (125). Many governments also extend financial assistance to disabled people’s organizations and nongovernmental organizations for health

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**Table 3.5. Overview of catastrophic health expenditures, proportion of disabled and not disabled respondents**

<table>
<thead>
<tr>
<th></th>
<th>Low-income countries</th>
<th></th>
<th>High-income countries</th>
<th></th>
<th>All countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not disabled</td>
<td>Disabled</td>
<td>Not disabled</td>
<td>Disabled</td>
<td>Not disabled</td>
</tr>
<tr>
<td>Male</td>
<td>20.2</td>
<td>31.2</td>
<td>14.5</td>
<td>18.5</td>
<td>18.4</td>
</tr>
<tr>
<td>Female</td>
<td>20.0</td>
<td>32.6</td>
<td>12.7</td>
<td>18.7</td>
<td>17.4</td>
</tr>
<tr>
<td>18–49</td>
<td>19.9</td>
<td>33.4</td>
<td>13.2</td>
<td>16.1</td>
<td>17.9</td>
</tr>
<tr>
<td>50–59</td>
<td>18.2</td>
<td>32.6</td>
<td>13.0</td>
<td>24.7</td>
<td>16.4</td>
</tr>
<tr>
<td>60 and over</td>
<td>21.2</td>
<td>29.5</td>
<td>14.2</td>
<td>21.5</td>
<td>18.3</td>
</tr>
</tbody>
</table>

Note: All results are significant according to Pearson’s Chi-Square test, corrected for survey design. Estimates are weighted using WHS post-stratified weights, when available (probability weights otherwise) and age-standardized.

Source (59).
programmes targeting people with disabilities (91, 126, 127).

**Link income support to use of health care**
Reviews of health financing mechanisms for the poor in Latin America indicate that conditional cash transfers can increase the use of preventative health services and encourage informed and active health care consumers, where effective primary health care and a mechanism to disburse payments are in place (111, 128–131). Conditional cash transfers, targeted at those groups of people with disabilities who typically receive fewer preventative services, may increase access to these services (114).

**Provide general income support**
Unconditional cash transfers for people with disabilities recognize the additional barriers they face in accessing health care and rehabilitation, transport, education, and working, among other things. Many countries provide income support through these transfers to poor households, including poor households with a disabled member, and directly to individuals with disabilities. Some, such as Bangladesh, Brazil, India, and South Africa, have unconditional cash transfer programmes targeted at poor people and households with a disabled member. The programmes aim at increasing the disposable income of poor households, which they spend according to their priorities – for example by buying food, enrolling children in education, or paying for health care. No best practice formula is available to guide policy, but cash transfers can exist along with other social policies and social protection programmes.

**Reduce or remove out-of-pocket payments to improve access**
Reduction or elimination of out-of-pocket payments for fees – whether formal or informal – can increase poor people’s use of health care services, and reduce financial hardship and catastrophic health expenditure (110, 111). This is particularly important for people with disabilities who spend more on health than people without disabilities (see Table 3.3). Removing fees does not guarantee access, however, as even “free” health services may not get used. People with mental health conditions, for example, might not access services because of barriers such as stigma, or people with mobility impairments may face physical barriers to health care access (72, 113).

**Provide incentives for health providers to promote access**
Some people with disabilities require prolonged care and accommodations requiring additional resources to ensure effective coordination (114). In the United States tax credits to small practices help make up for the cost of patient accommodations (132). In Wales new disability access criteria for primary care doctors create incentives for general medical practices to make services more accessible to disabled people (15).

**Addressing barriers to service delivery**
Ensuring the availability of services and disabled peoples’ awareness of the services, including those in rural and remote communities, is essential to improving access (see Box 3.3). Where services do exist people with disabilities may encounter a range of physical, communication, information, and coordination barriers when they attempt to access health care services.

Physical barriers may be related to the architectural design of health facilities, or to medical equipment, or transportation (11, 69, 72, 96). Barriers to facilities include inaccessible parking areas, uneven access to buildings, poor signage, narrow doorways, internal steps, and inadequate bathroom facilities. A study of 41 Brazilian cities examining the architectural barriers in basic health care units found that about 60% did not allow adequate access for people with functional difficulties (137). Similarly, a survey carried out in Essen, Germany found that 80% of orthopaedic surgeries and 90% of neurological surgeries did not meet access

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70
Chapter 3  General health care

standards, which limited wheelchair users from accessing their doctor of choice (138).

Medical equipment is often not accessible for people with disabilities, particularly those with mobility impairments. In the World Health Survey men with disabilities report health service provider’s equipment (including medication) to be inadequate across income settings (22.4% compared with 7.7% for men without disabilities); women with disabilities in high-income countries report similar difficulties (see Table 3.2). For example, many women with mobility impairments are unable to access breast and cervical cancer screening because examination tables are not height-adjustable and mammography equipment only accommodates women who are able to stand (11, 132).

People with disabilities frequently cite transport as a barrier to accessing health care, particularly when they are located at a distance from health care facilities. In low-income and middle-income countries, transport is often provided by public transport systems that are not accessible to people with disabilities, particularly women with mobility impairments. In high-income countries, public transport systems may provide accessible transportation, but costs may be prohibitive for people with disabilities.

Box 3.3. Access to mental health services

The 2001 World Health Report called for adequate access to effective and humane treatment for people with mental health conditions (133). Access to appropriate care is problematic for many people with mental health conditions, and certain groups – such as rural populations – typically have less access to services than other groups (134).

In ensuring access to mental health services, one of the most important factors to consider is the extent to which services are community-based (135). But in most countries, care is still predominantly provided in institutions. In low-income and middle-income countries there is less than one outpatient contact or visit (0.7) per day spent in inpatient care (136). The move from institutional to community care is slow and uneven. A recent study of mental health systems in 42 low-income and middle-income countries (136) showed that resources for mental health are overwhelmingly concentrated in urban settings. A considerable number of people with mental health conditions are being hospitalized in mental hospitals in large cities. Controlling for population density, there were nearly three times as many psychiatric beds in the largest city of a country, than in the rest of the country (see figure below). In low-income countries, the imbalance was even greater with more than six times as many beds based in the largest city. A similar pattern was found for human resources: across the participating countries, the ratio per population of psychiatrists and nurses working in the largest city was more than twice that of psychiatrists and nurses working in the entire country.

Ratio of psychiatric beds located in or near the largest city to beds in the entire country

Note: Low-income countries (LICs), lower middle-income countries (LMICs), and upper middle-income countries (UMICs) to increase access to services for people with mental health conditions, community care systems need to be strengthened. This will include greater integration into primary health care, as well as discouraging hospitalization, especially in large mental hospitals, and strengthening outpatient mental health care through follow-up care and mobile teams (161). Wherever delivered, mental health services need to respect the human rights of people with mental health conditions, in line with the CRPD (162).
from health care facilities (see Table 3.2) (91–95). Transport for people with disabilities is often limited, unaffordable, or inaccessible (139). The majority of disabled participants in a United States study said that transportation problems were a major barrier to accessing health care (89). A study in the Republic of Korea suggested that transportation barriers were a likely factor in keeping people with severe physical and communication impairments from participating in population screenings for chronic diseases (140).

Communication difficulties between people with disabilities and service providers are regularly cited as an area of concern (79, 141, 142). Difficulties can arise when people with disabilities attempt to make appointments with service providers, provide a medical history and description of their symptoms, or try to understand explanations about diagnosis and management of health conditions. Inaccurate case histories may be provided to health-care practitioners when information is supplied by caregivers, family members, or others (143).

Service providers may feel uncomfortable communicating with people with disabilities. For example, many health-care providers have not been trained to interact with people with serious mental illness, and feel uncomfortable or ineffective in communicating with them (144). An investigation into Deaf women’s access to health care in the United States found that health-care workers often turn their heads down when talking, preventing deaf women from lip-reading (141).

Failure to communicate in appropriate formats can lead to problems with compliance and attendance (145). A survey commissioned by the Zimbabwe Parents of Handicapped Children’s Association found that people with disabilities were excluded from general HIV/AIDS services because counselling and testing were not offered in sign language for people with hearing impairments, and education and communication materials were not offered in Braille for people with visual impairments (146).

Some people with disabilities may have multiple or complex health needs, including rehabilitation, which require input from different service providers. These needs may extend across services in different sectors such as the education and social sectors. People with disabilities who require multiple services often receive fragmented or duplicative services (147). They may also encounter transitional difficulties when care is transferred from one service provider to another (148), such as when transitioning from child to adult services (149–151), and from adult services to elderly services (152, 153).

Lack of communication between service providers can hamper coordinated service delivery (154). Primary health-care professionals’ referrals to specialists often lack sufficient information, for example. Conversely primary health-care professionals frequently receive inadequate consultation reports from specialists, and discharge summaries following hospital admission may never reach the primary care doctor (155).

Primary care consultations can take longer for people with disabilities than for people without disabilities (156). Adults with intellectual impairment often require extra time for examinations, screening, clinical procedures, and health promotion (99). Health-care practitioners are often not reimbursed for the additional consultation time they spend with people with disabilities (132, 156), and the disparities between actual cost and reimbursement can be a disincentive for service providers to provide comprehensive health care (156). Short consultations may leave little time for service providers to understand and address the sometimes complex health care needs of people with disabilities (154, 157).

Perceptions of health status may influence health behaviours, including attendance at health care services, and how health needs are communicated. A study on people with epilepsy in rural Ghana, for example, found that spiritual beliefs surrounding epilepsy influenced health and seeking of treatment (158). A study in rural areas of the Gambia reported that only 16% of 380 people with epilepsy knew that...
preventive treatment was possible; of the 48% of people with epilepsy who had never used treatment, 70% did not know that clinics offered treatment for seizures (158). People with intellectual impairment in minority ethnic communities have also been found to be less likely to use health care services (14, 159). An Australian study on women with mental health conditions and physical, sensory, and intellectual impairment found that self-perceptions regarding sexuality, painful past experiences associated with reproductive screening, and memories of themselves before disability were all barriers to seeking health care (72). In another example, people who experience disability as they age may “normalize” their symptoms as “just part of ageing” rather than seeking appropriate treatment (160).

**Include people with disabilities in general health care services**

All groups in society should have access to comprehensive, inclusive health care (122, 163). An international survey of health research priorities indicated that addressing the specific impairments of people with disabilities is secondary to integrating their health needs into primary health care systems (164). Primary care services are generally the most accessible, affordable, and acceptable for communities (161). For example, a systematic review of studies from six developing countries in Africa, Asia, and Latin America confirmed that local, affordable primary health care programmes were more effective than other programmes for people with mental health conditions (165).

Providers may have to cater to the range of needs stemming from hearing, vision, speech, mobility, and cognitive impairments to include people with disabilities in primary health care services. Table 3.6 lists examples of accommodations. While evidence on the efficacy of such accommodations is limited, they represent practical approaches, widely recommended throughout the literature and within the disability community.

Within low-income and lower middle-income settings, community-based rehabilitation (CBR) programmes can promote and facilitate access to health care services for people with disabilities and their families. As outlined in the health component of the CBR guidelines (166), programmes can assist people with disabilities to overcome access barriers, train primary health care workers in disability awareness, and initiate referrals to health services.

**Target interventions to complement inclusive health care**

Targeted interventions can help reduce inequities in health and meet the specific needs of individuals with disabilities (4, 17). Groups that are difficult to reach through broad-based programmes – people with intellectual impairment, mental health conditions, or Deaf people, for example – may warrant targeted interventions. Targeted interventions may also be useful for people with disabilities with a higher risk of secondary conditions or co-morbidities, or where there are specific health needs requiring ongoing care (see Box 3.4).

Health promotion efforts targeted at people with disabilities can have a substantial impact on improving lifestyle behaviours, increasing the quality of life, and reducing medical costs (18, 168). Several small health promotion programmes for weight loss and fitness developed specifically for people with intellectual impairment have demonstrated some success (169). An intervention in the United States for adults with Down syndrome included a 12-week fitness and health education programme, which led to significantly improved fitness, strength, and endurance, and slight but significant reductions in body weight (65).

**Improve access to specialist health services**

Primary care teams require support from specialized services, organizations, and institutions (170) to provide comprehensive health care to people with disabilities. A survey of general
Table 3.6. Examples of reasonable accommodations

<table>
<thead>
<tr>
<th>Accommodations</th>
<th>Suggested approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural modifications to facilities</td>
<td>Ensuring an accessible path of travel from the street or transit to the clinic; allocating adequate parking bays for people with disabilities; configuring the layout of examination rooms and other clinic spaces to provide access for mobility equipment or support people; installing ramps and grab rails; widening doorways; clearing hallways of equipment obstructing the path of travel; installing lifts; high contrast, large print and Braille signage; providing modified toilets and hand washing facilities; providing seating for those who cannot stand or sit on the floor to wait.</td>
</tr>
<tr>
<td>Using equipment with universal design features</td>
<td>Height-adjustable examination tables or availability of a lower cot or bed for examination; seated or platform scales; wheelchair accessible diagnostic equipment: for example, mammography equipment.</td>
</tr>
<tr>
<td>Communicating information in appropriate formats</td>
<td>Presenting health information in alternative formats such as large print, Braille, audio and picture format; speaking clearly and directly to the individual; providing information slowly to ensure comprehension; demonstrating activities rather than just describing them; sign language interpreting services; providing readers, scribes, or interpreters to assist with forms.</td>
</tr>
<tr>
<td>Making adjustments to appointment systems</td>
<td>Provisions for making appointments via e-mail or fax; sending text or phone appointments reminders; scheduling additional time for appointments; offering first or last appointments; clustering appointments for general health and disability needs.</td>
</tr>
<tr>
<td>Using alternative models of service delivery</td>
<td>Telemedicine; mobile clinic services, and house calls; involving family members and caregivers in medical consultations when appropriate and desired by the patient; assistance with transportation to health services.</td>
</tr>
</tbody>
</table>

Box 3.4. Preventing HIV/AIDS among young people with disabilities in Africa

In 1999 the international network Rehabilitation International began an HIV/AIDS project in Mozambique and the United Republic of Tanzania to promote the African Decade of Persons with Disabilities, and to provide HIV/AIDS leadership and human rights training. The nongovernmental organizations Miracles in Mozambique, the Disabled Organization for Legal Affairs, and Social Economic Development in the United Republic of Tanzania were local partners in the project, with support by the Swedish International Development Agency.

A baseline survey carried out with 175 disabled people aged 12–30 revealed that knowledge about HIV/AIDS was low, there was a lack of health information available in accessible formats and health facilities were also often inaccessible.

The project developed educational materials on HIV/AIDS issues and rights for youths and young adults with disabilities, as well as for outreach workers and peer educators working with this group. The materials included manuals in accessible formats such as Braille and a DVD with sign language. Project materials were widely disseminated to HIV/AIDS and disability organizations. Four training workshops, delivered in Kiswahili and Portuguese to 287 participants, were later expanded to include people with disabilities in rural areas of Mozambique. Some participants trained to serve locally as HIV/AIDS educators. At the same time, a wide-ranging campaign used mass media, the Internet, and seminars involving representatives of governments and nongovernmental organizations to educate the public.

At the conclusion of the project, it was recommended that disability issues should be mainstreamed within HIV/AIDS educational programmes. The participatory and inclusive approach proved effective in training young people with disabilities as well as peer educators and outreach workers.

Source (167).
practitioners in the Netherlands found that while they agreed that people with intellectual impairment should receive services in primary care settings, they rated access to specialist support as “important to very important” for health issues such as behavioural and psychiatric problems and epilepsy (171). Comprehensive health reviews in primary care settings have also been recommended for people with intellectual impairment with specialist multidisciplinary backup where required (169).

Good practices in mental health highlight the importance of specialists (161). In Uganda mental health specialists travel to primary care clinics to provide supervision and support; in Brazil visiting mental health specialists see patients together with primary care practitioners; and in Australia general practitioners are able to contact psychogeriatric nurses, psychologists, or psychiatrists as required (161).

Dedicated community-based services meet specialist health needs in some countries. In the United Kingdom, learning disability teams are widely available for people with intellectual impairment. These teams provide specialist treatment where general services are unable to meet needs, support primary care services to identify and meet health needs, facilitate access to general services, and provide education and advice to individuals, families, and other professionals (172). Outreach teams in Brazil and India follow-up on patients with spinal cord injuries to address issues such as skin care, bowel and bladder management, joint and muscle problems, and pain management (173).

**Provide people-centred health services**

Many disabled people seek more collaborative relationships with primary care providers in managing primary, secondary, and co-morbid conditions (7). A comprehensive health assessment programme in Australia designed to enhance interactions between adults with intellectual impairment and caregivers showed that the assessment increased general practitioners’ attention to the health needs of adults with intellectual impairment, and improved health promotion and disease prevention (174).

People-centred approaches should:

- Educate and support people with disabilities to manage their health. Self-management approaches have been effective in improving health outcomes and quality of life for a range of chronic conditions, and in some instances have lowered costs for the health care system (125, 175, 176). With appropriate training and support, and opportunities for collaborative decision-making, people with disabilities can actively improve their health (see Box 3.5). People with disabilities with more knowledge can communicate better, negotiate the health system more effectively, and are generally more satisfied with their care (179, 180).

- Provide time-limited, self-management courses, involving peer support to enable persons with disabilities to better manage their health (176). In Nicaragua, where the health system is overburdened with increasing patients with chronic disease, “chronic clubs” have been established in health centres to teach people with diabetes about risk factors, disease management, signs of complications, and healthy lifestyles (181). In Rwanda a study regarding the health promotion needs of individuals with lower limb amputation recommended workshops to enable people with disabilities to share experiences and motivate each other to improve health behaviours (37).

- Involve family members and caregivers in service delivery where appropriate. Family members and caregivers may have limited knowledge and skills. They may not understand the importance of a healthy lifestyle, or they may not be able to identify changes in a person with a disability that would be indicative of a health problem (182). Family members and caregivers can support the health-seeking behaviours of people with
disabilities by identifying health needs, helping obtain health care, including scheduling appointments, accompanying individuals to their appointments, and communicating information and helping to promote and maintain healthy activities (14). One study in the United States suggested that spouses, partners and paid caregivers were more likely than other types of caregivers to ensure the participation of people with disabilities in preventive health care services (183). Care coordination promotes a collaborative, interdisciplinary team approach to health care service delivery, linking people with disabilities to appropriate services and resources, and ensuring a more efficient and equitable distribution of resources (147, 154, 184). While perhaps increasing service delivery costs in the short-term, coordination has the potential to improve quality, efficiency, and cost-effectiveness of health care service delivery in the longer term (184–188). Targeting those who can benefit will help improve outcomes and reduce unnecessary coordination costs (189). Studies have confirmed that integrated and coordinated approaches across service organizations – including those involved in housing and education – can reduce the use of hospitals and nursing homes for people with disabilities and improve their general health and participation in the community (190, 191).

Effective and efficient ways to coordinate the seamless transition of health care services for people with disabilities are still under development. But some general strategies thought to be effective include the following elements (148, 152, 192):

- **Identify a care coordinator.** A range of health personnel can assume the role of care coordinator. Primary care structures are probably the most efficient for coordinating care throughout the health care system (155, 185), and many people with disabilities see general practitioners as having the overall responsibility for their health care and being “gatekeepers” for the wide range of community-based services (193). Sometimes, dedicated care coordination services and health facilitators can assist people to access primary health care services (120), as in the United Kingdom where clinical nurse specialists coordinate health care for people with intellectual impairment (169).
■ **Develop an individual care plan.** A customized care plan is important to bridge current and past care and for arranging future needs. A plan should be flexible enough to accommodate changes in people's needs and circumstances (194). Enhanced Primary Care in Australia encourages general practitioners to carry out comprehensive health assessments, multidisciplinary care plans, and case conferences with older people, people with chronic illness, and people with intellectual impairment (169).

■ **Provide appropriate referral and effective information transfer to other services.** Timely referral can facilitate access and decrease stress, frustration, and the development of secondary conditions (154, 195, 196). Good communication between service providers is critical (197). Electronic records or client passbooks – which include information on a person's abilities, challenges, and methods of learning or communicating – can support transition between child and adult services and between multiple health care practitioners (154). Inventories of relevant services and community resources also may be useful.

**Use information and communication technologies**

Information and communication technologies can increase the capacity of health care services, improve the delivery of services and enable people to better manage their own health (198). Evidence on the efficacy of some technologies is limited, or shows limited effect, while other technologies promise benefits for the health care system and for improvement in individual health outcomes (199).

■ **Electronic medical records** – shared electronic medical records can overcome common problems in care continuity (200).

■ **Telemedicine services** – people receiving psychiatric telemedicine services, such as psychiatric evaluations and medication management, have reported high satisfaction with their care (201), and video conferencing also has successfully delivered self-management programmes (202).

■ Consumer health informatics – internet-based, self-management programmes have helped people with chronic disease (175, 203). A study compared internet-based hearing screening with conventional screening to demonstrate that the former could be accomplished successfully (204), and internet portals can offer “e-coaching” to prepare individuals for visits to primary care physicians and to discuss chronic conditions (180).

**Addressing human resource barriers**

Common barriers include health-service providers’ attitudes, knowledge and skills, and ensuring that health practices do not conflict with the rights of persons with disabilities.

People with disabilities may be reluctant to seek health care because of stigmatization and discrimination (205). People with disabilities may have experienced institutionalization or other involuntary treatment, abuse, neglect and persistent devaluation. Negative experiences in the health system, including instances of insensitivity or disrespect, may result in distrust of health providers, failure to seek care, and reliance upon self diagnosis and treatment (89, 206). Therefore, respectful, knowledgeable and supportive responses to people with disabilities from health-care providers are vital.

However, attitudes and misconceptions among health-care providers remain barriers to health care for people with disabilities (90, 207). Some health-care providers may feel uncomfortable about treating people with disabilities (157), and clinical decision-making may be influenced by negative attitudes and assumptions. The common misconception that people with disabilities are not sexually active often leads health professionals to fail to offer...
sexual and reproductive health services, for example (11, 79, 89, 208).

Health-care workers often lack adequate knowledge and skills on primary and secondary and co-morbid conditions associated with disability and how to effectively manage the health care needs of people with disabilities (89, 154, 209). Service providers may be unsure how to address health needs directly related to a disability and how to distinguish between health problems related and unrelated to a disability, and may not understand the need for comprehensive health care services (96).

Undergraduate training programmes for health-care workers rarely address the health needs of people with disabilities, for example (11, 145), and general practitioners frequently indicate that a lack of training influences their ability to provide health care for people with disabilities (143).

Limited knowledge and understanding of disability among health-care providers often prevents timely and effective coordination of health care services (96, 154), sometimes leading to inadequate examinations and uncomfortable and unsafe experiences for people with disabilities (210). Variations in treatment can be wide where health-care providers are unsupported by research and clinical guidelines related to people with disabilities. One study found that the main reason people with spinal cord injury were not prescribed medication for osteoporosis was because general practitioners lacked evidence-based guidelines (30).

The presence of a particular health condition is not sufficient to determine capacity (211). The assumption that people with certain conditions lack capacity is unacceptable, according to Article 12 of the CRPD. Denying people with disabilities the right to exercise their legal capacity may prevent them from taking an active role in their own health care. The way forward is supported decision-making, rather than guardianship or other forms of substitute decision-making (see Box 3.6).

Education and training for health care workers about disability is an important priority to increase awareness about the health care needs of people with disabilities and improve access to services (89, 127, 142, 143, 209, 217). Health-care workers should be taught the causes, consequences, and treatment of disabling conditions, and of the incorrect assumptions about disabilities that result from stigmatized views about people with disabilities (145, 150, 154).

Box 3.6. Sexual and reproductive rights of persons with disabilities

The United Nations Convention on the Rights of Persons with Disabilities (CRPD) specifies that persons with disabilities enjoy legal capacity on an equal basis with others (Article 12), have the right to marry and found a family and retain their fertility (Article 23), and have access to sexual and reproductive health care (Article 25). The prejudice that people with disabilities are asexual or else that they should have their sexuality and fertility controlled is widespread (77). There is evidence that people with disabilities are sexually active (212), so access to sex education is important to promote sexual health and positive experiences of sex and relationships for all people with disabilities.

Despite legal prohibitions, there are many cases of involuntary sterilization being used to restrict the fertility of some people with a disability, particularly those with an intellectual disability, almost always women (213–216). Involuntary sterilization may also be used as a technique for menstrual management.

Involuntary sterilization of persons with disabilities is contrary to international human rights standards. Persons with disabilities should have access to voluntary sterilization on an equal basis with others. Furthermore, sterilization is almost never the only option for menstrual management or fertility control (214). Nor does it offer any protection against sexual abuse or sexually transmitted diseases. Legal frameworks and reporting and enforcement mechanisms need to be put in place to ensure that, whenever sterilization is requested, the rights of persons with disabilities are always respected above other competing interests.
A survey of general practitioners in France recommends the introduction of disability courses into medical school curriculums, relevant continuing education, and provision of adequate resources (157). In one innovative approach to education and training, people with disabilities educate students and health care providers on a wide range of disability issues, including discriminatory attitudes and practices, communication skills, physical accessibility, the need for preventive care, and the consequences of poor care coordination (145, 154). Training delivered by people with physical, sensory, and mental health impairments may improve knowledge of issues experienced by people with disabilities (142).

**Integrate disability education into undergraduate training**

Educators are increasingly teaching students about communicating with patients, including people with disabilities (144), and many studies have reported successful outcomes across a range of health professionals:

- A study of Australian fourth-year undergraduate medical students indicated a significant change in attitudes towards people with developmental disabilities following a three-hour communication skills workshop (218).
- In a United States study, third-year medical students reported that they felt less “awkward” and “sorry for” people with disabilities after attending a 90-minute education session (219).
- A study found that medical students educated by individuals with disabilities helped students to learn how disability affects treatment plans, and helped students reflect on, and recognize, attitudes about disability (220).
- A study of fourth-year medical students used panel presentations led by individuals with disabilities. Students reported that they valued hearing about the personal experiences of people with disabilities, and about what worked and what did not in the medical setting and in patient-provider relationships (221).

- Introductory courses for students enrolled in the first occupational therapy and post-diploma management courses in the Russian Federation, developed and taught by the All-Russian Society of the Disabled, successfully developed positive attitudes in the students (222).
- A study to determine whether a change in curriculum affected nursing student’s attitudes towards people with disabilities showed that their attitudes were more positive at the completion of their senior year (223).

**Provide health-care workers with continuing education**

Many health-care workers acknowledge a need for continuing education about disability (143). In one study service providers described specific educational needs, including information about how to access disability resources, coordinate care, make reasonable accommodations for people with disabilities, address sexuality and reproductive health needs, and complete forms for disability status (209). Evidence from the United Kingdom found that while practice nurses in primary health care generally had positive attitudes towards working with people with intellectual impairment, they regarded training in this area as a priority (224).

The Rehabilitation Council of India implemented a national programme (1999–2004) to educate medical officers working in primary health care centres about disability issues. Objectives included disseminating knowledge about prevention, health promotion, early identification, treatment, and rehabilitation; raising awareness about services for people with disabilities; and sensitizing officers about general disability issues such as legislation and human rights. On conclusion of the programme 18 657 medical officers from a baseline figure of 25 506 had received training (225).
Support health care workers with adequate resources

Evidence-based clinical practice guidelines can support health professionals in providing appropriate health care to people with disabilities. For example, the *Clinical guidelines and integrated care pathways for the oral health care of people with learning disabilities* (226) helps health professionals to improve the oral health of people with learning impairments. The manual *Table manners and beyond* describes and provides pictures of alternative examination positions to assist clinicians in gynaecological examinations for women with disabilities (132). Resource directories can also assist health workers to refer patients to specialists, and link people with disabilities to community-based services including exercise programmes, self-help groups, and home-care agencies. Disseminated to a wide audience including health care workers, the *Directory of disability services in Malawi* details all disability-focused organizations, groups, and services in Malawi (227).

Filling gaps in data and research

Evidence leads to better decisions and better health outcomes (228, 229). Reliable information is essential for increasing public awareness of health issues, informing planning and policy, and allocating resources to reduce disparities (230). Therefore, data and research are critical for providing information to help understand the factors that determine health status, to develop policy, to guide implementation, and to monitor health care services for people with disabilities – and in doing these things to strengthen health care systems (231). A lack of data and research evidence can create a significant barrier for policy-makers and decision-makers, which in turn can influence the ability of people with disabilities to access mainstream health services.

The availability of data related to people with disabilities varies greatly between countries (232). Few sources of national data are available, and information to determine the extent of health disparities experienced by people with disabilities is limited (233). Surveillance systems do not often disaggregate data based on disability, and people with disabilities are also often excluded from trials that seek scientific evidence for the outcomes of a health intervention (234, 235). Often, eligibility criteria prevent the participation of people with disabilities (11) as their primary conditions may be seen as “confounders” to research questions. Certain barriers – transport, for example – may also sometimes limit opportunities for people with disabilities to participate in research (236).

A recent exercise on research priorities determined that the identification of barriers in mainstream health care, and strategies for overcoming barriers, were the highest priorities (164). Other priorities included prevention of secondary conditions and early detection and referral of health problems through primary health care. Some of the relevant areas for health research and data collection are outlined below.

Health services research

Data needed to strengthen health care systems include:

- number of people with disabilities
- health status of people with disabilities (11)
- social and environmental factors influencing the health of people with disabilities
- responsiveness of health care systems to people with disabilities
- use of health care services by people with disabilities
- need, both met and unmet, for care (237).

People with disabilities should be included in all general health care surveillance (233), and data on people with disabilities should be disaggregated. A good example at the state level is the Centers for Disease Control and Prevention Behavioural Risk Factor Surveillance System (BRFSS), which includes two general disability identifier questions to ensure provision of state-specific disability data (233). Research should also focus on...
the quality and structure of health care systems, examining, for example, reasonable accommodations needed for people with disabilities.

**Research related to health conditions associated with disability**

Preventing secondary conditions related to existing disabilities is an important priority. Preliminary results from a systematic review of health promotion interventions for people with disabilities indicates that research in this area is a growing field and that there is evidence of effective interventions (238). But stronger research designs require precise dosing for intervention, and research and multicentre trials will increase recruitment and the ability to generalize findings (237).

Ensuring the relevance and applicability of general clinical research to people with disabilities, given evidence of high co-morbidity rates, is also important. For example, the increased risk of people with schizophrenia for diabetes and cardiovascular disease requires monitoring and management (239), but genetic research to understand metabolic mechanisms is also recommended (240).

Relevant strategies for inclusive health research as well as improving comparability, quality, and disability research capacity include:

- Organizations funding research could routinely require researchers to include people with disabilities in their population samples. Despite challenges, randomized controlled trials with people with intellectual impairment are possible (172). Researchers should be required to justify restricted eligibility criteria on scientific grounds (11). People with intellectual disabilities, people who face communication barriers, and others with low levels of literacy may need support completing survey instruments or participating in interviews (17, 235).

- People with disabilities can actively participate in research, as researchers themselves, as participants in consultations or advisory groups, or playing a central role in commissioning and monitoring research (99, 235, 241). In the United Kingdom the Quality Research in Dementia Network involves 180 patients and caregivers prioritizing research, allocating funds to medical research, monitoring projects, and assessing outcomes (242). Patient and public involvement can improve the quality and impact of research, but barriers to access must be removed so people with disabilities can attend health consultations or research meetings (235).

- The *International Classification of Functioning, Disability and Health* (ICF) – which uses accepted and understood terminology, language, and concepts – can ensure consistency across studies and settings, thus removing these as barriers to progress in disability and health research and public policy (9).

- A range of research methods are needed including clinical trials, observational and epidemiological studies, health services research, surveys, and social and behavioural studies. Well designed, qualitative research can be used to investigate the full range of barriers and document good practices (243).

- Capacity building, research tools, and research training on disability are needed. Good instruments are particularly important for disability outcome research given evidence that people with disabilities often perceive health status and quality of life differently than people without disabilities (243).

**Conclusion and recommendations**

People with disabilities experience health disparities and greater unmet needs in comparison to the general population. All countries need to work towards removing barriers and making existing health care systems more inclusive and accessible to people with disabilities.
This chapter has identified several strategies to ensure that persons with disabilities can achieve their highest attainable standard of health including: financial measures to improve coverage and affordability; measures to improve service delivery, including training of health-care personnel; measures to empower people with disabilities to improve their own health; and measures to improve research and data to monitor, evaluate, and strengthen health systems. A range of strategies are needed to close the gap in access to health care between people with and without disabilities. Given the limited evidence available on the efficacy of some of these strategies across different contexts and groups, costs and health outcomes must be carefully evaluated.

In realizing the recommendations summarized below, a broad range of stakeholders have roles to play. Governments should develop, implement, and monitor policies, regulatory mechanisms, and standards for health care provision to ensure that they include people with disabilities. Service providers should provide the highest quality of health services. Service users, disabled people’s organizations, and professional organizations should increase awareness, participate in policy development, and monitor implementation of policies and services. Through international cooperation, good and promising practices can be shared and technical assistance provided to countries to strengthen existing policies, system, and services.

**Policy and legislation**

- Assess existing policies, systems, and services, including an analysis of the needs, experiences, and views of people with disabilities, identify gaps and priorities to reduce health inequalities and plan improvements for access and inclusion.
- Make required changes in policies, systems, and services to comply with the CRPD.
- Establish health care standards related to care of persons with disabilities and frameworks and enforcement mechanisms to ensure standards are met.
- Involve people with disabilities in audits and related development and implementation of policies and services.

**Financing and affordability**

- Ensure that people with disabilities benefit equally from public health care programmes.
- In countries where private health insurance dominates health care financing, ensure that people with disabilities are not denied insurance and consider measures to make the premiums affordable for people with disabilities.
- Use financial incentives to encourage health-care providers to make services accessible and provide comprehensive assessments, evidence-based treatment, and follow-ups.
- In low-income and middle-income countries, where effective primary care and mechanisms of disbursement exist, consider targeted conditional cash transfer schemes linked to the use of health care to improve affordability and the use of services.
- Consider options for reducing or removing out-of-pocket payments for people with disabilities who do not have other means of financing health care services.
- Consider providing support to meet the indirect costs associated with accessing health care, such as transport.

**Service delivery**

- Empower people with disabilities to maximize their health by providing information, training, and peer support. Where appropriate, include family members.
- Provide a broad range of reasonable accommodations.
Chapter 3  General health care

- Support primary health-care workers with specialists, who may be located elsewhere.
- Explore the options for use of communication and information technologies for improving services, health care capacity, and information access to persons with disabilities.
- Identify groups who require alternative service delivery models, for example, targeted services, care coordination to improve access to health care.
- In high-income countries incorporate disability access and quality standards into contracts with public, private, and voluntary service providers.
- Promote community-based rehabilitation, specifically in less-resourced settings, to facilitate access for disabled people to existing services.

**Human resources**

- Integrate disability education into undergraduate and continuing education for all health care professionals.
- Involve people with disabilities as providers of education and training wherever possible.
- Provide evidence-based guidelines for assessment and treatment emphasizing patient-centred care.
- Train community workers so that they can play a role in screening and preventive health care services.

**Data and research**

- In health and disability related research use the ICF, to provide a consistent framework.
- Conduct more research on the needs, barriers to general health care, and health outcomes for people with specific disabilities.
- Establish monitoring and evaluation systems to assess interventions and long-term health outcomes for people with disabilities.
- Include people with disabilities in research on general health care services.
- Include people with disabilities in health care surveillance by using disability identifiers - see Chapter 2 for more information.

**References**

World report on disability

Chapter 3  General health care

47. Secondary injuries among individuals with disabilities. Research summary brief. Columbus, Centre for Injury Research and Policy, Nationwide Children’s Hospital, 2009.
64. Mead GE et al. Exercise for depression. Cochrane Database of Systematic Reviews, 2009,3CD004366-
World report on disability


Chapter 3  General health care


104. Lagarde M, Palmer N. The impact of health financing strategies on access to health service in low and middle income countries (protocol). *Cochrane Database of Systematic Reviews*, 2006,3:CD006092


World report on disability


128. Lagarde M, Haines A, Palmer N. The impact of conditional cash transfers on health outcomes and use of health services in low and middle income countries. Cochrane Database of Systematic Reviews (Online), 2009,4CD001837- PMID:19821444


137. Träskén T, Geraedts M. Accessibility of doctors’ surgeries in Essen, Germany] Gesundheitswesen (Bundesverband der Ärzte des Öffentlichen Gesundheitsdienstes (Germany)), 2005,67:613-619. PMID:16217715

138. Shelby A, Schady R. The impact of conditional cash transfers on health outcomes and use of health services in low and middle income countries. Cochrane Database of Systematic Reviews (Online), 2009,4CD001837- PMID:19821444


Chapter 3  General health care

World report on disability


186. Boling PA. Care transitions and home health care.


90
Chapter 3  General health care

199. Gagnon MP et al. Interventions for promoting information and communication technologies adoption in healthcare professionals. [review] Cochrane Database of Systematic Reviews (Online), 2009,1CD006093. PMID:19160265


203. Murray E et al. Interactive health and communication applications for people with chronic disease. Cochrane Database of Systematic Reviews, 2005,4CD004274.


209. Morrison EH, George V, Mosqueda L. Primary care for adults with physical disabilities: perceptions from consumer and provider focus groups. Family Medicine, 2008,40:645-651. PMID:18830840


211. Wong JG, Scully P. A practical guide to capacity assessment and patient consent in Hong Kong. Hong Kong Medical Journal = Xianggang yi xue za zhi/Hong Kong Academy of Medicine, 2003,9:284-289. PMID:12904617


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