

1 An overview of existing definitions and classifications

1.1 Introduction

'Physical disability' is commonly recognised as a disability group in the disability field, and in legislative and administrative contexts in Australia. People with physical disabilities represent a significant client group of disability services. However, the scope of this group is often not clearly defined. Consequently, existing estimates of physical disability prevalence vary. Consistent and usable estimates of disability prevalence are needed to facilitate service planning and inform the community.

The main objectives of this report are:

- to conduct a critical review of existing definitions, classifications, data collections and estimates of prevalence relating to disability generally and physical disability in particular;
- to discuss some central issues in defining, classifying and measuring disability;
- to estimate the prevalence and demographic pattern of physical disability in Australia; and
- to promote discussion and the development of improved national data on the main disability groups.

Much of the material reviewed and the estimates presented in this report relate to people of all ages. However, the experiences and needs of elderly people with disability may differ from those of younger people with disability. These differences are not specifically addressed in this paper. The focus of this paper reflects a disability services perspective.

Chapter 1 of this paper provides an overview of definitions and classifications of disability, focusing particularly on physical disability. Existing international and Australian estimates of prevalence are reviewed in Chapter 2. Chapter 3 summarises some important issues relating to operational definitions and approaches to estimating prevalence. Chapter 4 discusses in detail the methods of estimating prevalence used in this report. Newly derived estimates of the prevalence of physical disability in Australia, based on the 1993 ABS Survey of Disability, Ageing and Carers, are presented, and demographic patterns of prevalence are discussed.

This is the second publication in a series of reports on the definition and prevalence of different disability groups in Australia. The first report in the series, focusing on intellectual disability, was published in 1997 (Wen 1997).

'Physical disability' is sometimes used as a broad category for all disabilities that are not 'mental disabilities'. The terms 'physical impairment', 'physical disability', 'physical activity' and 'physical function' are in common use in the disability field in Australia, but are rarely clearly defined.

The International Classification of Impairments, Disabilities and Handicaps (ICIDH) and the International Statistical Classification of Diseases and Related Health Problems (ICD) are

two major international classifications used to define and classify disability and disease/disorder, respectively. The ICD has also been widely used as a coding system to classify health conditions underlying disability. In addition to these two classifications there is a variety of definitions of disability based on functional assessment. These definitions focus on measuring functional ability or activity limitation.

Depending on the purpose for which they are used, the application of these various definitions and classifications can result in different operational definitions and approaches to data collection, affecting the estimation of prevalence rates. These issues are discussed in this chapter, first in the international context (Sections 1.2 to 1.5), then in the Australian context (Section 1.6). Different approaches and methodologies for estimating prevalence will be reviewed in Chapter 2.

1.2 International Classification of Impairments, Disabilities and Handicaps (ICIDH)

The 1980 version of ICIDH

The International Classification of Impairments, Disabilities and Handicaps (ICIDH) was published in 1980. It has been widely accepted as a model for conceptualising disability and has been used in a range of applications. The ICIDH provides a framework for defining and classifying information about the 'long-term consequences of disease, injuries, or disorders' (WHO 1980). The framework views the consequences of disease in terms of three dimensions: impairment, disability and handicap.

Impairment is concerned with the functioning of individual parts of the body, and is defined as 'any loss or abnormality of psychological, physiological or anatomical structure or function'.

Disability relates to whole person functioning, and is defined as 'any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being'.

Handicap reflects the interaction between disability and environmental factors (i.e. the physical and social characteristics of a person's environment). It is defined as 'a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual' (WHO 1980).

According to the framework, an impairment may lead to a number of disabilities. These disabilities then may lead to handicaps in several areas. However, the actual interrelationship between the three dimensions is much more complex than a simple linear progression (WHO 1980; Badley 1995). In some cases, an impairment may not lead to any disability or handicap.

The 1980 ICIDH provides a classification system for each of the three dimensions. While each classification is independent of the others, there are overlaps between impairment and disability and between disability and handicap. The following table shows the broad categories within the three dimensions.

Table 1.1: ICIDH classification of impairments, disabilities and handicaps – broad categories

| Impairments | Disabilities | Handicaps |
|---|-----------------------------|---------------------------|
| Intellectual | Behaviour | Orientation |
| Other psychological | Communication | Physical independence |
| Language | Personal care | Mobility |
| Aural | Locomotor | Occupation |
| Ocular | Body disposition | Social integration |
| Visceral | Dexterity | Economic self-sufficiency |
| Skeletal | Situation | Other handicap |
| Disfiguring | Particular skill | |
| Generalised, sensory, and other impairments | Other activity restrictions | |

Source: WHO 1980.

The Draft ICIDH-2

The ICIDH is currently being revised to incorporate new developments and criticisms of the original ICIDH. In the revised framework, the term ‘disablement’ is used as an ‘umbrella’ term to encompass the universe of disability experience, including three basic dimensions: impairment, activity and participation. The terms ‘activity’ and ‘participation’ replace ‘disability’ and ‘handicap’, respectively.

The proposed definitions of impairment, activity, and participation are as follows:

In the context of health condition:

Impairment is a loss or abnormality in body structure or of a physiological or psychological function.

Activity is the nature and extent of functioning at the level of the person.

Activities may be limited in nature, duration and quality.

Participation is the nature and extent of a person’s involvement in life situations in relationship to impairments, activities, health conditions and contextual factors.

Participation may be restricted in nature, duration and quality. (WHO 1997)

A recent AIHW study found, after a critical review of nationally significant definitions and data collections in Australia, that the proposed draft ICIDH-2 framework is generally consistent with Australian disability service definitions (Madden & Hogan 1997). It also provides a useful framework for comparing, identifying gaps and moving towards consistency in Australia’s statistical and administrative definitions and data collections.

There are a number of new features of the draft ICIDH-2, which may improve our understanding and encourage the use of its conceptual framework, definitions and classifications in data collection and the estimation of disability prevalence:

- It emphasises that, in the context of health condition, the three dimensions are distinct but parallel classifications. They should not be seen as a ‘process’ or a series of events that happen to people. Rather, they should be seen as conceptual dimensions to be used for classifying specific aspects of the disability experience at one point in time (WHO 1997). The dimensions can be used alone or in an interrelated way to provide a more comprehensive picture. It is important to collect data independently on each dimension and then explore associations and causal links between dimensions.

- It further clarifies the role of environment in the experience of persons with a disability by including contextual factors (e.g. physical and social environmental factors) in the conceptual framework.
- The classification of impairment is divided into body functions and structures (the 1980 ICIDH classification of impairment does not separate the two aspects).

1.3 International application of the ICIDH

The 1980 ICIDH provided a general conceptual framework as a starting point for defining and describing disability. Based on the ICIDH, many countries have designed and conducted disability surveys according to their own priorities and social and economic circumstances. The United Nations has developed an international disability statistics database using the ICIDH framework. A number of US legislative and administrative documents have used concepts or definitions adapted from the ICIDH. These documents are major sources of reference for similar documents in Australia. This section reviews these applications of the ICIDH and begins to draw out their approach, if any, to physical disability.

American Medical Association (AMA) definitions and classifications

The AMA's Guides to the Evaluation of Permanent Impairment (the Guides) provide a widely used method for estimating the severity of permanent impairment of human organ systems, and the resultant impact on a person's physical and mental functioning and capabilities (AMA 1993:371).

The Guides define impairment as 'the loss, loss of use, or derangement of any body part, system, or function' (AMA 1993:315). The definition closely parallels that of the 1980 version of the ICIDH, which defines an impairment as 'any loss or abnormality of psychological, physiological, or anatomical structure or function' (WHO 1980:47).

Permanent impairment is defined as impairment 'that has become static or well stabilised with or without medical treatment and is not likely to remit despite medical treatment' (AMA 1993:315).

The AMA Guides do not specifically mention physical impairment. Rather, impairments are classified using chapter headings based chiefly on body systems, such as musculoskeletal, nervous, respiratory and cardiovascular. Mental and behavioural disorders are grouped as one category of impairment.

It is important to note that, although the Guides' main focus is the impairment dimension of the ICIDH framework, they also emphasise that impairments should be considered as conditions that interfere with a person's 'activities of daily living'. The evaluation process requires an assessment of the impact of a condition(s) on a person's activities of daily living. This includes whether the person is likely to suffer injury, harm or further impairment through participating in activities necessary to meet personal, social or occupational demands, and whether accommodations or assistive devices are needed to help the person carry out the activities. However, the Guides do not provide guidelines regarding procedures or instruments for measuring the impact of a condition on activities, though a list of daily activities is provided. Among other activities, such as eating and walking, 'occupation' is considered as one of a person's daily activities (AMA 1993).

The Guides also use the concept of 'whole person impairment'. An able-bodied human being is viewed as a whole organism and any impairment to the functioning of the whole organism is reflected in a proportionate reduction of the whole (AMA 1993:2, 8). If a person has more than one impairment or condition, the estimates for the separate conditions can be combined into an overall impairment estimate using the Combined Values Chart (AMA 1993:2-8).

The AMA Guides are one of the major references for Australian legislation on disability and disability services, such as Australia's Social Security Act 1991, Commonwealth Employees Rehabilitation and Compensation Act 1988 and the Veterans' Entitlements Act 1986. These Acts have adapted the impairment classification categories and the concept of 'whole person impairment', including the rating system for calculating overall impairment (see Section 1.6 for more discussion of Australia's legislative definitions). Each of the Acts stipulates a set of criteria for entitlement to services, including an assessment of impairment. The AMA Guides are also used as a reference in a number of Australian accident compensation schemes.

Americans with Disabilities Act of 1990

The purpose of the Americans with Disabilities Act (ADA) is to provide a clear and comprehensive national mandate to eliminate discrimination against people with a disability and to bring them into the mainstream of social and economic community life (Americans with Disabilities Act of 1990, 42 USCA § 12101(b) – (West 1995)).

The ADA defines disability, with respect to an individual, as 'a physical or mental impairment that substantially limits one or more of the major life activities of such individual; a record of such an impairment; or being regarded as having such an impairment' (42 USCA § 12102(2) (West 1995)).

Physical impairment is defined as 'any physiological disorder or condition, cosmetic disfigurement, or anatomic loss affecting one or more of the following body systems: neurological, musculoskeletal, special sense organs, respiratory (including speech organs), cardiovascular, reproductive, digestive, genitourinary, hemic and lymphatic, skin, and endocrine systems' (Table 1.2; Americans with Disabilities Act of 1990, Pub L No 101-485, 267 (legislative history)).

The scope of physical impairment in the definition of the ADA is very broad. It is basically a 'catch all' category, including all impairments other than mental or psychiatric disorders.

Mental impairment includes any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities (Pub L No 101-485, 267 (legislative history)).

The ADA definition of disability combines the impairment and activity limitation dimensions of the draft ICIDH-2 framework. The identification of impairment and disability does not necessarily depend on a medical evaluation, and the definition specifically includes people 'regarded as having impairment'.

Table 1.2: International definitions of physical impairments/disabilities

| Source | Definition |
|--|--|
| United Nations 1986 Development of Statistics of Disabled Persons: Case Studies. | Physical impairments include visceral, skeletal and disfiguring impairments—for example, amputations, paralysis, limping and lameness, deformity, and hunched back. |
| United Nations 1988a. UN Expert Group on Development of Statistics of Disabled Persons: suggestions on topics concerning disability for use in household surveys. | Physical impairments are divided into two groups: 'sensory' (aural, language and ocular), and 'other physical impairments' (visceral, skeletal and disfiguring). Physical disabilities are disabilities in the areas of locomotion (includes ambulation and confining disabilities), communication (speaking, listening, seeing, and other disabilities), personal care (includes excretion, personal hygiene, dressing and feeding), body disposition (includes domestic disabilities, such as preparing and serving food and care of dependants, and body movement disabilities such as fingering, gripping and holding) and dexterity (includes daily activity disabilities, such as use of doors, domestic appliances and windows, and manual activity disabilities, such as fingering, gripping and holding). |
| Americans with Disabilities Act of 1990. 42 USCA § 12102(2) (West 1995); Pub L No 101-485, 267 (legislative history). These definitions are based on concepts of EEOC Title 1 Regulations and Interpretive Appendix (29 CFR 1630). | 'Physical or mental impairment' means the following: (1) any physiological disorder or condition, cosmetic disfigurement, or anatomic loss affecting one or more of the body systems: neurological, musculoskeletal, special sense organs, respiratory (including speech organs), cardiovascular, reproductive, digestive, genitourinary, hemic and lymphatic, skin, and endocrine systems; or (2) any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities. 'Disability' means, with respect to an individual, (a) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (b) a record of such an impairment; or (c) being regarded as having such an impairment. |
| Wood & Badley 1988. | The three major classes of medical disorder giving rise to disablement: (a) emotional and intellectual impairments, due to mental retardation and mental illness; (b) sensory impairments including the special senses of vision and hearing—data specific to other functions of communication, notably speech, are not readily available; (c) physical impairments (cognitive, the result of trauma, or due to other conditions). |

Sources: United Nations 1986; United Nations 1988; Americans with Disabilities Act of 1990 PL101-338; Wood & Badley 1988.

International population surveys on disability

Prior to the publication of the 1980 ICIDH many efforts to define disability were made in the course of planning and conducting population disability surveys. These efforts provided useful experience leading to the development of concepts in the ICIDH (United Nations 1988a).

Examples relating to physical disability are the 1971-72 survey of 'physically handicapped persons' in the Netherlands, and the 1968-69 Survey of the Handicapped and Impaired in Britain. The Netherlands' survey focused on 'persons with a physical handicap in conjunction with a physical defect'. A physical defect was defined as 'a state of imperfection of the body which can be objectively defined by a physician' (United Nations 1988a:67).

The publication of the ICIDH has provided a coherent framework for survey design and has greatly improved data collection on disability. The United Nations has developed an international, unified database to facilitate the global monitoring of population censuses and surveys on disability and to maximise the use of information on disability and disability services (United Nations 1984, 1986, 1988b). The Disability Statistics Data Base (DISTAT) uses the ICIDH as a framework to integrate and compile data collected from 55 countries in population censuses, household surveys and registration systems. The database covers surveys conducted both before and after the publication of the 1980 ICIDH.

In the United Nations database the scope of 'physical impairments' covers three of the nine broad categories in the impairment classification of the 1980 ICIDH: visceral, skeletal and disfiguring impairments (United Nations 1986; Tables 1.1 and 1.2).

A United Nations expert report on the development of statistical concepts and methodology on disability for household surveys recommends a wider scope for 'physical impairments',

including a sensory sub-category (United Nations 1988a; Table 1.2). It also suggests that multiple dimensions of information be collected in household surveys. Surveys could cover impairment, disability (activity limitation), cause of impairment, social, economic and environmental characteristics, and the distribution and use of services and support. The report generally supports the 1980 ICIDH concepts of impairment and disability, but notes that the scope of handicap should include the measurement of important social, economic and environmental factors (United Nations 1988a).

The 1988 report suggests that using the general concept of disablement, that cuts across the three dimensions of the 1980 ICIDH, can maximise the usefulness of statistics collected in household surveys, both for health indicators and disability service planning. It recommends that, in household surveys, the specific term 'disability' should only refer to those consequences of diseases and injury that are reflected in restrictions on a person's daily living and social activities, as it is in the 1980 ICIDH (United Nations 1988a).

The recommended scope of 'physical disability' consists of five of the nine 1980 ICIDH broad categories of disabilities: locomotor, communication, personal care, body disposition and dexterity (United Nations 1988a; Tables 1.1 and 1.2).

1.4 Measures of functional assessment

Measures of functional assessment have been developed over several decades to assess degree of disability, to characterise health status, to project need for disability and health services and to measure outcomes of service provision (e.g. Fried et al. 1994; Katz & Akpom 1976; Katz et al. 1963; Lawton & Brody 1969; Mahoney & Barthel 1965; Manton et al. 1993).

Functional assessment is about measuring the performance of, or capacity to perform, a variety of activities normal for people in good health. Two basic measures of activity limitation, the Activities of Daily Living (ADL) scale and the Instrumental Activities of Daily Living (IADL) scale, have been widely used in clinical settings and population surveys to define disability and to assess need for services. The ADL scale focuses on assessing ability to perform basic self-care activities – e.g. bathing, dressing, toileting, getting in and out of bed, continence and feeding. The IADL scale assesses ability to carry out activities central to independent functioning in the community – e.g. light housework, laundry, meal preparation, grocery shopping, outside mobility, travel, money management, and telephoning (Fried et al. 1994; Katz & Akpom 1976; Katz et al. 1963; Lawton & Brody 1969; Manton et al. 1995).

Functional assessment corresponds to the activity dimension of the draft ICIDH-2 framework, and is not concerned with particular impairment or disease. However, the scope of the activity dimension of the draft ICIDH-2 is much broader than the ADL or IADL scales.

The two scales collect information either through self-report or professional assessment. 'ADL disability' has been defined as the inability to perform at least one of a number of basic self-care activities without equipment or personal assistance, and 'IADL disability' as the inability to perform one of the activities central to independent functioning in the community due to health conditions (Manton et al. 1995).

The ADL scale is considered to represent a more basic level of functioning than the IADL scale and, consequently, many people with an ADL limitation also have an IADL limitation. The ADL scale is suited therefore to the measurement of more severe limitations. The two scales can also provide information on the particular types of assistance people need and are useful in determining eligibility for services and benefits (Ficke 1992).

Many modified versions of the ADL and the IADL have been created by users of the scales to meet specific needs. Some versions are more complex than the original scales, and some items of different versions overlapped. For example, the Rosow-Breslau Functional Health Scale (Rosow & Breslau 1966) was developed to assess ability to perform more physically demanding activities (e.g. heavy housework, climbing stairs and walking half a mile).

Other scales, for instance the Functional Independence Measure (FIM), have been devised to incorporate communication and cognitive functional assessment (Kidd et al. 1995). The cognitive aspect of the FIM scale includes comprehension, expression, social interaction, problem solving and memory (Kidd et al. 1995).

The FIM is widely used to evaluate outcome in rehabilitation (McPherson et al. 1996; Kidd et al. 1995). An expanded version of the FIM, the Functional Assessment Measure (FIM+FAM), was developed to assess rehabilitation outcome for people with brain injuries. The FIM+FAM scale includes additional cognitive items and some psychosocial items, such as emotion, employability, orientation, attention and safety judgement (McPherson et al. 1996).

It has been found that items relating to 'physical activities', such as self-care and mobility, are generally easier to assess and more reliably scored than communication and cognitive behavioural items (McPherson et al. 1996).

As ADL scales tend to focus primarily on physical activities or physical functions they are sometimes used to assess physical disability (e.g. Bruce et al. 1994; Fried et al. 1994; Ward et al. 1995). However, there is no universally agreed definition of what 'physical activities' are. Most activities of daily living have a physical component, but many also have a cognitive component (Johnson & Wolinsky 1993; Stewart & Kamberg 1992). Thus, a limitation in performing an activity may be due to mental or psychiatric impairment, rather than physical impairment.

Johnson and Wolinsky have proposed a three-dimensional scale incorporating basic, household, and advanced ADLs and used the scale in the analysis of survey data on health status and service usage of older Americans. The basic ADL and household ADL roughly correspond to the conventional ADL and IADL, respectively. The advanced (or cognitive) ADL includes those activities in the conventional ADL and IADL that are more closely related to cognitive capacity, such as managing money and using a telephone (Johnson & Wolinsky 1993; Wolinsky & Johnson 1991).

Analysing different survey data, Fitzgerald et al. (1993) have replicated the proposed three-dimensional scales and confirmed that the underlying structure of ADLs consists of at least three separate dimensions, one of which is aligned with cognitive capacity.

1.5 International Statistical Classification of Diseases and Related Health Problems (ICD)

The primary purpose of the ICD is to provide standards for classifying diseases and causes of death (WHO 1993). It can also be used as a framework for classifying information about cause of disability and underlying disabling conditions. This is particularly useful for disability prevention, rehabilitation and monitoring programs.

The ICD is also the primary classification used for the study of morbidity. Morbidity is defined as the level and type of sickness within a population. Morbidity indicators are commonly expressed in terms of the incidence and/or prevalence of specific diseases and other health-related events (e.g. injuries). Morbidity is an important predictor for disability. In conjunction with other factors (such as socioeconomic status) it can help predict or

explain the prevalence and demographic pattern of disability in a community (Chamie 1995; Pol & Thomas 1992; United Nations 1988b).

Using the ICD-10 there are two broad approaches to including morbidity data in the study of disability (Chamie 1995). First, morbidity categories may be used to describe medical or pathological conditions underlying disability, regardless of 'what happened' to cause the condition. These underlying conditions are mostly classified using coding categories in Chapters I–XVIII of the ICD-10.

Second, morbidity categories can be used to describe an 'event' ('what happened') leading to impairment or disability (as defined in the 1980 ICIDH). The United Nations Statistical Division has proposed a short-list for classifying the external causes of disability (Chamie 1995; United Nations 1988a). The short-list was first derived from the ICD-9 classification of external causes of injury and poisoning, and then expanded to include three broad categories of diseases. The proposed short-list of external causes of disablement is as follows:

- Infectious and parasitic disease (Chapter I)
- Congenital anomalies and perinatal conditions (Chapters XVI, XVII)
- Other diseases and conditions (Chapter XIX)
- Injury:
 - Motor vehicle accidents
 - Other transport accidents
 - Accidental poisoning
 - Injury resulting from accidental falls, fire, and operations of war
- Other causes including natural and environmental factors.

In Australia, the ABS disability surveys have adopted the ICD as a coding system for disabling conditions. Some major administrative data collections, such as CentreLink (formerly Department of Social Security), have also applied the ICD coding system to their client characteristic data.

1.6 Australian administrative definitions and classifications

The draft ICIDH-2 framework can be used to compare definitions of disability used in administrative contexts. A review of definitions of disability in Australia, in which various administrative definitions were mapped to the draft ICIDH-2 conceptual framework, was presented in a recent AIHW study (Madden & Hogan 1997). This section highlights some of the main features of administrative and legislative definitions of disability, and raises some key conceptual and methodological issues relevant to defining and estimating the prevalence of physical disability.

Broad legislative definitions

Definitions of disability in anti-discrimination legislation tend to be broad. This is because the legislation generally aims to eliminate discrimination on the grounds of disability across all domains of social and economic community life, and to bring as many people as possible under its operation. Main features of such definitions are:

- Definitions encompass all three dimensions of the ICIDH framework, plus the contextual factors. Negative experience in one or more dimensions is considered to constitute disability.
- There is no requirement of minimum duration or severity.
- Particular impairment or disability groups (such as intellectual or physical) are not specifically mentioned.

For example, the definition of disability in the Commonwealth *Disability Discrimination Act 1992* is very broad and inclusive. Apart from the above features, it also includes people with a disability that ‘previously existed but no longer exists; or may exist in the future; or is imputed to a person’ (Commonwealth of Australia 1992). The impairment component of the Act’s definition includes an unstructured mix of impairment, disease and disorder.

State and Territory anti-discrimination and equal opportunity Acts have adopted similar definitions with minor variations (Australian Law Reform Commission 1996).

Legislative definitions—disability and disability services

Definitions of disability in disability services legislation tend to be more specific. This reflects the more specific purposes of the legislation in defining the target population groups for certain program areas. Main features of such definitions are:

- The presence of specific impairments is a gateway to eligibility.
- Particular impairment types, such as intellectual or physical, are specified (though rarely defined).
- A combination of impairment and activity limitation or participation restriction is often required.
- There are requirements regarding minimum duration and severity of impairment and/or activity limitation, and need for assistance.

For example, the 1998 Commonwealth/State Disability Agreement (CSDA) targets disability that:

- is attributable to an intellectual, psychiatric, sensory, physical or neurological impairment or acquired brain injury (or some combination of these);
- is likely to be permanent;
- results in a substantially reduced capacity in at least one of the specified activities relating to self-care/management, mobility and communication; and
- requires ongoing or episodic support.

The Commonwealth *Disability Services Act 1986* (which preceded the CSDA) and corresponding State legislation use similar wording.

Some legislation is more specific than the Disability Discrimination Act, imposing criteria concerning the duration and minimum severity of impairment.

For instance, the Commonwealth *Social Security Act 1991* provides tables for the assessment of impairment as part of the eligibility assessment for the Disability Support Pension. The Disability Support Pension assessment table has adapted the concepts, including the ‘whole person impairment’ concept, the structure of impairment categories and the rating system used in the AMA Guides (see Section 1.3) – people with multiple impairments are assessed by weighting the scores for each individual impairment and calculating a total impairment score (Department of Social Security 1993). The Act specifies an impairment score of 20% or

more as one of the eligibility criteria for the Disability Support Pension. In addition to the minimum score requirement, the impairment must be permanent or expected to last for more than two years, and must prevent the person from working for at least 30 hours per week at award wages.

In summary, Australian legislative definitions of disability range from very broad to more specific, reflecting the different purposes of individual Acts. Requirements regarding minimum duration and severity of impairment, activity limitation and participation restriction vary. The terms 'physical impairment' and 'physical disability' may be used but are not defined. Consequently, administrative data collections (and any estimates of disability prevalence based on them) can differ greatly.

Definitions used in national data collections on disability support services and open employment services for people with a disability

The Commonwealth/State Disability Agreement (CSDA) Minimum Data Set (MDS) provides data items and definitions which are used to compile nationally consistent data on disability support services provided or funded under the CSDA (Black & Maples 1998). Data are collected annually across the country.

In Australia, disabilities are often categorised into 'disability groups'. Existing 'groups' in Australia (e.g. intellectual, physical and acquired brain injury) tend to include people with a disability who are considered – by themselves, society, or service providers – to have similar characteristics and related needs, often arising from a similar cause, impairment or disabling condition (unpublished agenda paper of MDS annual network meeting 1998).

The 'disability group' concept reflects common usage in the disability field. For example, 'a disability attributable to a physical impairment' tends to be condensed to 'physical disability' (Madden & Hogan 1997).

The concept of 'disability group' was first formally introduced in the CSDA MDS data guide for the 1997 collection (AIHW 1998). 'Disability group', one of the data items of the consumer profile in the MDS, is a broad categorisation defined on the basis of underlying impairment, condition or cause. The groups reflect the impairments identified in the CSDA, which refers to its target group as people with a disability 'that is attributable to an intellectual, psychiatric, sensory, physical or neurological impairment or acquired brain injury (or some combination of these)' (Commonwealth of Australia 1998).

The CSDA MDS data guide provides a non-exhaustive list of examples of associated conditions or impairments for the physical disability group: paraplegia, quadriplegia, muscular dystrophy, motor neurone disease, neuromuscular disorders, cerebral palsy, absence or deformities of limbs, spina bifida, arthritis, and back disorders (AIHW 1998).

The CSDA MDS data guide further classifies disability groups as 'primary' and 'other significant' disability groups. A person's primary disability group is 'that disability, impairment or condition causing most difficulty to the person'. 'Other significant' disability group(s) are 'disability group(s) (other than indicated as being 'primary') causing difficulty to the person' (AIHW 1998). Another major data collection – the National Information Management System for open employment services for people with disabilities – has adopted the CSDA MDS definitions of disability groups (Anderson & Golley 1998).