



MANUAL FOR DOCUMENTING DIAGNOSIS IN PER-PD 301

Health Informatics Centre
Planning Division
Ministry of Health Malaysia

MANUAL FOR DOCUMENTING DIAGNOSIS IN PER-PD 301

Health Informatics Centre
Planning Division
Ministry of Health Malaysia



All rights reserved. No part of this document may be reproduced or transmitted, in any form or by any means, electronic, photocopying or otherwise without prior written permission from the Ministry of Health, Malaysia

Health Informatics Centre
Planning Division
Ministry of Health Malaysia

ISBN : 978 - 967 - 0399 - 70 - 6

Date created: October 2012
First Edition: January 2013
Second Edition: November 2013

Copyright © Ministry of Health Malaysia 2013

Printed by:

D'FA PRINT SDN BERHAD

No16, Jalan P10/21, Selaman Light Industrial Park,

43650, Bandar Baru Bangi, Selangor

T : 03-8926 3808 F : 03-8926 3830

www.dfaprint.com

CONTENT

1. INTRODUCTION	5
2. OBJECTIVES	5
3. AREAS TO BE FILLED IN PER-PD 301 (WITH DEFINITION)	5
4. GENERAL INFORMATIONS TO CONSIDER IN DOCUMENTING DIAGNOSIS	7
5. SPECIFIC INFORMATIONS TO CONSIDER IN DOCUMENTING DIAGNOSIS	8
A. CERTAIN INFECTIOUS AND PARASITIC DISEASES	8
B. NEOPLASMS	11
C. ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES	13
D. MENTAL AND BEHAVIOURAL DISORDERS	17
E. PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	19
F. CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	23
G. SYMPTOMS, SIGNS AND ABNORMAL CLINICAL AND LABORATORY FINDINGS NOT ELSEWHERE CLASSIFIED	25
H. INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES	26
I. FACTORS INFLUENCING HEALTH STATUS AND CONTACT WITH HEALTH SERVICES	31
6. WORKING COMMITTEE ON MANUAL FOR DOCUMENTING DIAGNOSIS IN PER-PD 301	33



INTRODUCTION

The aim of this manual is to guide housemen in documenting proper diagnosis. With the availability of this manual as a reference, it is hoped that the error in documenting diagnosis in PER-PD 301 form can be reduced.

OBJECTIVES

- To introduce admission/discharge form (PER-PD 301)
- To facilitate doctors on proper documentation of diagnosis

AREAS TO BE FILLED IN PER-PD 301 (WITH DEFINITION)

MAIN DIAGNOSIS	<i>The condition, diagnosed at the end of the episode of health care, primarily responsible for the patient's need for treatment or investigation</i>
CAUSE OF DEATH	<i>All those diseases, morbid conditions or injuries which either resulted in or contributed to death and the circumstances of the accident or violence which produced any such injuries</i>
UNDERLYING CAUSE	<i>The disease or injury which initiated the train of morbid events leading directly to death</i>

**OTHER DIAGNOSIS
(CO-MORBIDITY)**

*A disease that **accompanies** the **main diagnosis** and requires treatment and additional care, in addition to the treatment provided for the condition for which the patient was admitted*

COMPLICATION DIAGNOSIS

*A disease that **appears during the episode of care**, due to a pre-existing condition or arising as a result of the care received by the patient*

**EXTERNAL CAUSES OF
INJURY AND POISONING**

The circumstances of the accident or violence which produced the fatal injury

**FACTORS INFLUENCING
HEALTH STATUS AND
CONTACT WITH HEALTH
SERVICES**

Episode of health care or contact with health services are not restricted to the treatment or investigation of current illness or injury. Episodes may also occur when someone who may not currently be sick requires or receives limited care of services.

THE DO'S AND DON'TS IN DOCUMENTING DIAGNOSIS

DO's

- Proper documentation of Main Diagnosis
- Legible handwriting
- To document all other conditions under relevant heading of Other Diagnosis
- Document procedures in the Procedure column

DONT'S

- Do not use abbreviations
- Do not write procedures as Main Diagnosis

GENERAL INFORMATIONS TO CONSIDER IN DOCUMENTING DIAGNOSIS

- To identify the underlying causative agent (i.e: organism, drugs, chemical, allergens, idiopathic, autoimmune)
- To specify site (anatomical localisation) of involvement and side (i.e: Left or/and right)
- To indicate if the condition is acute/sub-acute/chronic, recurrent/persistent or mild/moderate/severe
- To mention if the condition is congenital/acquired, primary/secondary or infantile/juvenile
- To mention laboratory findings i.e: Haematological, biopsy, histological (i.e: Sputum positive/negative pulmonary tuberculosis)
- To specify the diagnosis failing which to specify symptoms and signs or reason for encounter/admission (i.e: Admitted for blood transfusion due to anaemia with underlying Thalassaemia, admitted for chemotherapy with underlying breast carcinoma, infant of diabetic mother admitted for observation, baby born before arrival for observation)

SPECIFIC INFORMATIONS TO CONSIDER IN DOCUMENTING DIAGNOSIS

A. CERTAIN INFECTIOUS AND PARASITIC DISEASES

Main diagnosis/underlying cause shall include:

1) General infection

- To specify the causative agent
- To mention condition (i.e: Meningitis, acute gastroenteritis) or site (pulmonary tuberculosis)
- To include complication where necessary (i.e: Cerebral malaria, rupture spleen, etc)

Other diagnosis

- To mention antibiotic resistance if present (i.e: MRSA, vancomycin resistant, etc)

Example:

Morbidity case

Main diagnosis	Example 1 Group A streptococcal (<i>causative agent</i>) septicaemia (<i>condition</i>) Example 2 HIV (<i>causative agent</i>) disease with Candidiasis (<i>complication</i>) and Karposi's sarcoma (<i>complication</i>)
Underlying cause	N/A
Other diagnosis (co-morbid)	Hypertension
Other diagnosis	Penicillin resistant
Complication	N/A
Main procedure/surgery	Blood culture & sensitivity

2) Tuberculosis

- To specify site involved (i.e: Lung, spine, intestine, etc)
- To mention method of confirmation (i.e: Smear, culture or histology)

Example:

Morbidity case

Main diagnosis	Smear positive (<i>method of confirmation</i>) pulmonary (<i>site</i>) tuberculosis
Underlying cause	N/A
Other diagnosis (co-morbid)	Non-insulin dependent diabetes mellitus without complication
Other diagnosis	N/A
Complication	N/A
Main procedure/surgery	Sputum for Acid Fast Bacilli (AFB)
Other procedure	Chest X-ray

A

3) Viral hepatitis

- To specify acute or chronic
- To specify type of virus (i.e: Hepatitis A virus, hepatitis B virus, hepatitis C virus or hepatitis E virus)
- To mention complication with or without hepatic coma.
- If hepatitis B to mention with or without delta agent (co-infection)

Example:

Morbidity case:

Main diagnosis	Acute hepatitis B (<i>type of virus</i>) with delta agent (<i>co-infection</i>) with hepatic coma (<i>complication</i>)
Underlying cause	N/A
Other diagnosis (co-morbid)	Hypertension
Other diagnosis	N/A
Complication	N/A
Main procedure/surgery	Abdominal ultrasound

B. NEOPLASMS

Main diagnosis/underlying cause shall

- Specify primary or secondary site
- Specify site of organ involved (i.e: Middle lobe of the right lung, right upper quadrant of right breast)
- Specify behaviour (i.e: Malignant primary, in-situ, benign, malignant secondary)
- Specify morphology (i.e: Squamous cell carcinoma)
- Specify metastasis

Example:

Morbidity case

Main diagnosis	Adenocarcinoma (<i>morphology/behaviour</i>) of head of pancreas (<i>site</i>) metastasis to the liver (<i>metastasis</i>)
Underlying cause	Chronic pancreatitis
Other Diagnosis (co-morbid)	Type II diabetes mellitus
Other diagnosis	N/A
Complication	Cholecystitis
Main procedure/surgery	N/A

B

Mortality case

Cause of death	Bronchopneumonia
Underlying cause	Adenocarcinoma (<i>morphology/behaviour</i>) of lower lobe of left lung (<i>site</i>) with metastasis to the para-aortic lymph nodes (<i>metastasis</i>)
Other Diagnosis (co-morbid)	Chronic obstructive pulmonary disease
Other diagnosis	N/A
Complication	Anaemia of chronic disease
Main procedure/surgery	N/A

C. ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES

Main diagnosis/underlying cause shall include:

1) Endocrine

Disorder of gland:

- To specify congenital or acquired.
- To specify condition (i.e: Thyrotoxicosis, hypopituitarism)
- If thyroid gland involved, to specify with (diffuse, multinodular or single nodular) or without goiter.
- If condition is due to drug-induced, to specify the name of drug.

If diabetes mellitus:

- To specify the type i.e: Insulin dependant (Type I, juvenile-onset, etc) or non-insulin dependant (Type II, adult onset, etc)
- To specify complication (i.e: Hyperosmolar Hyperglycaemic State (HHS) with coma, diabetic ketoacidosis, renal complication, etc)
- *Uncontrolled/unstable diabetes mellitus is referring to Type I

Example:

C

Morbidity case:

Main diagnosis	Type II (<i>type</i>) diabetes mellitus with nephropathy (<i>complication</i>)
Underlying cause	N/A
Other diagnosis (co-morbid)	Ischaemic heart disease
Other diagnosis	Smear negative pulmonary tuberculosis
Complication	N/A
Main procedure/surgery	N/A

Mortality case

Cause of death	<i>Streptococcus pneumoniae</i> septicaemia
Underlying cause	Type II diabetes mellitus with nephropathy
Other diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	N/A
Main procedure/surgery	Blood culture & sensitivity

2) Malnutrition and nutritional deficiency

- To specify condition (i.e: Kwashiorkor, nutritional marasmus, protein-energy malnutrition, etc)
- In the event of malnutrition to specify severity of the condition (i.e: Mild, moderate or severe)
- To specify type of vitamin or mineral deficiency
- To mention complication related to nutritional deficiency

Example:

Morbidity case

Main diagnosis	Example 1: Severe (<i>severity</i>) malnutrition with marasmus (<i>condition</i>) Example 2: Thiamine (<i>type</i>) deficiency with Wernicke's encephalopathy (<i>complication related to deficiency</i>)
Underlying cause	N/A
Other diagnosis (co-morbid)	N/A
Other diagnosis	Severe dehydration
Complication	N/A

C

Mortality

Cause of death	Severe protein energy malnutrition
Underlying cause	N/A
Other diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	N/A
Main procedure/surgery	N/A

D. MENTAL AND BEHAVIOURAL DISORDERS

***There is no issue in documenting diagnosis related to mental and behavioural disorder other than psychoactive substance used/abused**

Main diagnosis/underlying cause shall

- Indicate the psychoactive substances used/abused (i.e: Alcohol, opioids, cannabinoids, sedative or hypnotics, cocaine, tobacco, volatile solvents, hallucinogens, other stimulants)
- Mention the mental and behavioural disorders due to the psychoactive substance used/abused (i.e: Acute intoxication, harmful use, dependence syndrome, withdrawal state, withdrawal state with delirium, psychotic disorder, amnesic syndrome, residual and late-onset psychotic disorder)
- Specify the severity of mental retardation (i.e: Mild, moderate, severe, profound)
- Indicate the extent of behavioural impairment (i.e: No impairment, minimal impairment, significant impairment)

D

Example:

Morbidity Case

Main diagnosis	Alcoholic (<i>psychoactive substances used</i>) withdrawal with delirium (<i>mental and behavioural disorder due to the psychoactive substance used/abused</i>)
Underlying cause	Alcohol abuse
Other Diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	Delirium tremens
Main procedure/surgery	N/A
Main diagnosis	Profound (<i>severity</i>) mental retardation with significant impairment of behaviour requiring attention (<i>extent of behavioural impairment</i>)
Underlying cause	Down's syndrome
Other Diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	N/A
Main procedure/surgery	N/A

E. PREGNANCY, CHILDBIRTH AND THE PUERPERIUM

Main diagnosis/underlying cause shall include:

1) Pregnancy

- Specify types of abortion/miscarriage (i.e: incomplete, complete, inevitable, etc)
- Specify the site of ectopic pregnancy (i.e: Tubal, ovarian, abdominal, etc)
- Specify site of infection (i.e: Vaginal candidiasis in pregnancy, etc)
- Specify pregnancy-related conditions and complications (i.e: Pregnancy-induced hypertension, gestational diabetes mellitus, deep vein thrombosis complicating pregnancy, etc)

Example

Morbidity case

Main diagnosis	Vaginal candidiasis (<i>site of infection specified</i>) in pregnancy
Underlying cause	Insulin dependent gestational diabetes mellitus (<i>pregnancy related condition</i>)
Other Diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	N/A
Main procedure/surgery	N/A

E

Main diagnosis	Ruptured cornual ectopic pregnancy (<i>site of ectopic pregnancy</i>)
Underlying cause	N/A
Other Diagnosis (co-morbid)	N/A
Complication	Hypovolaemic shock
Main procedure/surgery	N/A

Mortality case

Cause of death	Hypovolaemic shock
Underlying cause	Ruptured uterus due to criminal abortion (<i>types of abortion</i>)
Other Diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	N/A
Main procedure/surgery	N/A

2) Delivery and Childbirth

- Specify method of delivery (i.e: Spontaneous vertex delivery, assisted vacuum delivery, elective lower segment caesarean section)
- Specify number of fetus (i.e: Single, twin, etc)
- Relevant complications during delivery

Example:

Morbidity case

Main diagnosis	Spontaneous vertex delivery (<i>method of delivery and number of fetus</i>) with 3rd degree perineal laceration (<i>complication during delivery</i>)
Underlying cause	N/A
Other Diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	N/A
Main procedure/surgery	Examination under anaesthesia and repair

3) Puerperium

- Specify complications related to post partum period (i.e: Post partum haemorrhage due to puerperal sepsis)

Example:

Morbidity case

E

Main diagnosis	Puerperal sepsis (<i>complications related to post partum period</i>)
Underlying cause	Retained products of conception
Other Diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	N/A
Main procedure/surgery	Evacuation and removal of products of conception

F. CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD

Main diagnosis/underlying cause shall include:

- If neonatal jaundice, must specify the cause of jaundice (i.e: Neonatal jaundice due to ABO incompatibility)
- If baby is premature, to mention the gestational age and weight
- If injury, to indicate the site and either due to birth trauma or other causes (please specify) (i.e: Subarachnoid hemorrhage due to birth injury or subarachnoid hemorrhage due to fall from bed)
- If birth asphyxia, to mention the APGAR score at 1 minute and 5 minute
- If baby admitted for observation indicate the condition/suspected condition
- To associate mother's condition during pregnancy that affect the baby with the reason for admission, treatment or observation

Example:

Morbidity case

Main diagnosis	Transitory hypoglycemia (<i>baby's condition</i>)
Underlying cause	Infant of diabetic mother (<i>Diabetic mother - mother's condition</i>)
Other diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	N/A
Main procedure/surgery	N/A
Other procedure/surgery	N/A

F

Mortality case

Cause of death	Sepsis due to <i>Staphylococcus aureus</i> infection
Underlying cause	Premature at 30 weeks, 1800 grams (<i>baby's gestational age and weight</i>)
Other diagnosis (co-morbid)	N/A
Other diagnosis	Neonatal jaundice due to preterm delivery (<i>cause of jaundice</i>)
Other diagnosis	Respiratory distress syndrome
Complication diagnosis	N/A
Main procedure/surgery	N/A
Other procedure/surgery	N/A

F

G. SYMPTOMS, SIGNS AND ABNORMAL CLINICAL AND LABORATORY FINDINGS NOT ELSEWHERE CLASSIFIED

Should ONLY be used as main diagnosis if:

- Cases for which no specific diagnosis can be made even after all the facts bearing on the case have been investigated or for any other reason (i.e: Facility not available, patient refuse for investigation, etc)
- Signs or symptoms existing at the time of initial encounter that proved to be transient and which causes could not be determined
- Cases referred elsewhere for investigation or treatment before the diagnosis was made.

Example:

Morbidity case

Main diagnosis	Pyrexia of unknown origin
Underlying cause	N/A
Other diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	N/A
External cause	N/A
Main procedure/surgery	N/A

H. INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES

- **The diagnosis pertaining to this topic must specify the external cause**

1) Injury:

Main Diagnosis/underlying cause shall include:

- Specify type of injury (i.e: Fracture, dislocation, wound, internal organ injury)
- Specify site of injury
- If fracture, to mention if open or close
- If internal injury occurs, to specify blunt or penetrating injury

External cause of injury shall include:

- Patient's mode of transport (i.e: Pedestrian, motorcycle, car, etc)
- Patient's role (i.e: Rider/driver or passenger)
- Mechanism of injury (i.e: Collision with car, non-collision (skidded, roll-over, etc.), fall, assault, etc)
- Place of occurrence (i.e: School, home, road, highway, field, etc)
- Activity (i.e: Sports, work, etc)
- Intention of the event (i.e: Accidental, self-harm, assault)

Example:

Morbidity case

Main diagnosis	Open fracture (<i>type of injury</i>) mid shaft of right humerus (<i>site of injury</i>)
Other diagnosis	Right ulna nerve cut
Other diagnosis	Laceration wound at scalp
Other diagnosis (co-morbid)	Hypertension
Complication diagnosis	N/A
External cause	Motorcycle rider (<i>patient's role and mode of transport</i>) in collision with car (<i>mechanism of injury</i>) on highway (<i>place of occurrence</i>) on the way to work (<i>activity</i>)
Main procedure/surgery	Open reduction and internal fixation of right humerus
Other procedure/surgery	X-ray of right upper limb

Mortality case:

Cause of death	Hypovolemic shock due to uncontrolled bleeding
Underlying cause	Blunt splenic rupture (<i>type and site of injury</i>)
Other diagnosis	Laceration wound at scalp
Other diagnosis	Hypertension
Other diagnosis (co-morbid)	Diabetes mellitus type II with cataract
External cause	Pedestrian (<i>patient's role and mode of transport</i>) hit by car (<i>mechanism of injury</i>) while crossing road (<i>activity</i>) in front of traffic light (<i>place of occurrence</i>)
Main procedure/surgery	Emergency laparotomy

2) Burn/corrosion:

Main diagnosis shall include

- The degree of burn
- Specific site of burn
- Percentage of body surface area

External cause of injury shall include:

- Mechanism of burn (i.e: Thermal or chemical)
- Place of occurrence (i.e: Home, workplace, etc)
- Activity (i.e: Cooking, working, etc)
- Intention of the event (i.e: Accidental, self-harm, assault, etc)

Example:

Morbidity case

Main diagnosis	20% (<i>% body surface area</i>) second degree burn (<i>degree of burn</i>) of chest wall and bilateral upper limb (<i>specific site of burn</i>)
Other diagnosis(co-morbid)	Hypertension
Other diagnosis (co-morbid)	Type II diabetes mellitus without complication
Complication diagnosis	<i>Pseudomonas aeruginosa</i> burn wound infection
External cause	Accidental (<i>intention of the event</i>) gas tank explosion (<i>mechanism of burn</i>) at home (<i>place of occurence</i>) during cooking (<i>activity</i>)
Main procedure/surgery	Wound debridement under general anaesthesia

3) Poisoning

Main diagnosis shall

- Specify type of poison (i.e: Drug, chemical, medicament)

External cause of poisoning shall include:

- The intention of event (i.e: Accidental, suicide, homicide, adverse effect in therapeutic use)
- Place of occurrence (i.e: Home, workplace, etc)

Example:

Morbidity cases

Main diagnosis	Pesticide (<i>type of poison</i>) poisoning
Other diagnosis (co-morbid)	Acute exacerbation of asthma
Other diagnosis	N/A
Complication	N/A
External cause	Accidental (<i>intention of event</i>) ingestion of pesticide at home (<i>place of occurrence</i>)
Main procedure/surgery	Gastric lavage

I. FACTORS INFLUENCING HEALTH STATUS AND CONTACT WITH HEALTH SERVICES

Main diagnosis:

- Categories in this chapter should not be the primary morbidity or mortality diagnosis
- Mention the reason for encounter with healthcare (i.e: General medical check-up, routine examination/investigation for specific condition, etc)

Episodes of health care or contact with health services are not restricted to treatment or investigation of current illness or injury. Episodes may also occur when someone who may not currently be sick requires or receives limited care or services; the details of relevant circumstances should be recorded as the “main condition”. Examples include:

- a) Monitoring of previously treated conditions
- b) Immunisation
- c) Contraceptive management, antenatal and postpartum care
- d) Surveillance of persons at risk because of personal or family history
- e) Examinations of healthy persons eg: for insurance or occupational reasons
- f) Seeking of health-related advice
- g) Request for advice by persons with social problems
- h) Consultation on behalf of a third party

Example:

Morbidity Case

Main diagnosis	Adjustment and management of cardiac pacemaker <i>(reason for encounter with healthcare)</i>
Underlying cause	N/A
Other Diagnosis (co-morbid)	Sick sinus syndrome
Other diagnosis	N/A
Complication	N/A
Factors Influencing Health Status and Contact with Health Services	N/A
Main Procedure/surgery	Replacement of pacemaker battery

Main diagnosis	Born before arrival for observation <i>(reason for encounter with healthcare)</i>
Underlying cause	N/A
Other Diagnosis (co-morbid)	N/A
Other diagnosis	N/A
Complication	N/A
Main Procedure/surgery	N/A

6. WORKING COMMITTEE ON MANUAL FOR DOCUMENTING DIAGNOSIS IN PER-PD 301

Dr. Rahimah bt Mohd Ariffin
Senior Deputy Director
Planning Division

Dr. Md. Khadzir bin Sheikh Ahmad
Deputy Director
Health Informatics Centre (HIC)
Planning Division

Dr. Mawar bin Ayub
Emergency and Trauma Physician
Hospital Kuala Lumpur

Dr. Ruhayah bt Omar
Senior Principal Assistant Director
State Health Department, Kelantan

Dr. Mohamad Yurzi bin Ghani
Deputy Director (Clinical III)
Hospital Sultanah Nur Zahirah, Terengganu

Dr. Nur Shaema Darus
Assistant Director
Health Informatics Centre (HIC)
Planning Division

Dr. Azrulreezal Azannee bin Abdul Wahab
Assistant Director
Health Informatics Centre (HIC)
Planning Division

Dr. Charlene Patricia Malukun
Medical Officer
Hospital Queen Elizabeth I, Sabah

Mr. Anuar Zainal
Medical Record Officer
Medical Development Division

Madam Nurul Huda bt Ramlan
Medical Record Officer
Health Informatics Centre (HIC)
Planning Division

Madam Fazlina Suriayanti bt Fazil
Medical Record Officer
Health Informatics Centre (HIC)
Planning Division

Mr. Mohamad Uzuman bin Nordin Ali
Medical Record Officer
Hospital Sultanah Nur Zahirah, Terengganu

Mr. Azmi bin Ibrahim
Assistant Medical Record Officer
Hospital Kuala Lumpur

Madam Normah bt Mohd Shariff
Assistant Medical Record Officer
Hospital Taiping, Perak

Mr. Rosdi bin Ibrahim
Assistant Medical Record Officer
Hospital Raja Perempuan Zainab II, Kelantan

Madam Denisa Joilin
Assistant Medical Record Officer
Hospital Wanita dan Kanak-kanak Likas, Sabah

Miss Norlida bt Osman
Assistant Medical Record Officer
Hospital Tanjung Karang, Selangor

Madam Nurul Adilla bt Mohamed Taib
Semantic Engineer
MIMOS BHD

Madam Saniah bt Mohamed
Semantic Engineer
MIMOS BHD

MANUAL FOR DOCUMENTING DIAGNOSIS IN PER-PD 301

ISBN 978 - 967 - 0399 - 70 - 6



9 789670 399706