Stroke Patients At Primary Health Care Level Family Health Development Division Ministry of Health Malaysia CAREMANUAL Printed by : Year 2016 Family Health Development Division • Ministry of Health Malaysia3 Words of Welcome Assalamualaikum warahmatullahi wabarakatuh, Greetings Sejahtera and Greetings 1Malaysia. Thanks be to ALLAH swt because of his abundance and permission, the Stroke Patient Care Manual book at the Primary Health Care Level has been produced. This is another initiative of the Family Health Development Division, Ministry of Health Malaysia to improve the quality of care services for stroke patients in primary health. Stroke is one of the common conditions that require continuous health care, especially at the primary health level. This stroke care manual is expected to help health personnel to handle stroke cases as well as their family members in the community. The creation of this manual is in line with the vision of the Ministry of Health Malaysia to promote the well-being and health care of the community. This manual was produced based on the Multidisciplinary Team (MDT) approach, where various specialties are involved in planning and carrying out interventions and treatments for stroke patients at the primary health level. The hope of this Division is that the implementation team in primary health will consist of multidisciplinary health personnel as outlined in this manual. A wreath of appreciation and gratitude to the experts involved in contributing their expertise, commitment and cooperation to realize the publication of this manual. It is hoped that this manual can be used as a reference source for health personnel in handling stroke cases as well as helping their family members in the community. YBHG. MRS DR. SAFURAH BT. HJ. JAAFAR Director Family Health Development Division Public Health Department Ministry of Health Malaysia Contents

Physiotherapy Services 49 Occupational Services 61 Communication Therapy Services 85 Psychological Health Services 99 Social and Welfare Services 111 Appendix 121 References 163 Acknowledgments and Contributions 167 Family Health Development Division • Ministry of Health Malaysia5 CHAPTER 1 Introduction 6 Stroke Patient Care Manual at the Primary Health Care Level | INTRODUCTION Stroke is the leading cause of severe disability. The average incidence is 2:1,000 population. Data from the Framingham study showed the incidence increased exponentially from 1 to 2 in 1,000 in the age group 45 to 54 years, 10 in 1,000 in the age group 65 to 74 years, and 20 in 1,000 in the age group 75 to 84 years. The prevalence of stroke is 6.1:1,000 population. Prevalence of disability (disability) due to stroke: 4: 1,000. The discharge rate of stroke patients in Malaysia for the year 2010 was 17,009 and increased to 18,788 in 2011 and the latest in 2014 was 17,250. Stroke patients discharged from hospital require treatment and follow-up care. Almost 30-80% of these patients need care and rehabilitation assistance. Some patients are sent home with a referral for follow-up treatment at the primary health service. This referral process needs to follow the following three basic points: (a) A comprehensive discharge plan that includes the necessary aspects of medical treatment and rehabilitation. (b) Good communication between the hospital and the health clinic that provides domiciliary care services (PPD). (c) Appropriate placement of patients after discharge for continuation of treatment. The current situation shows that these three basic points are often not followed when referrals are made. Therefore, a work process needs to be created to ensure that the three basic things above can be done perfectly. At the same time, health personnel need to know and take into account the needs of patients. | DEFINITION OF STROKE A stroke is a condition in which the narrowing of a blood vessel to the brain or a ruptured blood vessel occurs. Some of the brain tissue will be damaged due to lack of oxygen supply. When that part of the brain tissue is damaged, it will die and brain function will be lost. Stroke consists of 2 types; i. Ischemic (ischaemic), occurs when the arterial

blood vessels to the brain are blocked ii. Haemorhagic, occurs when the arterial blood vessels to the brain burst. | RISK FACTORS Modifiable factors Hypertension Diabetes mellitus Dyslipidemia Obesity and inactive lifestyle Smoking Drinking alcohol Excess salt intake Atrial fibrillation Non-modifiable factors Increasing age Gender Ethnic group Past history of stroke Family history of stroke Family Health Development Division • Ministry of Health Malaysia7 | PROGNOSIS AFTER STROKE The Framingham study showed that 35% of stroke patients are still alive after 10 years. Among the surviving patients, 10% recover almost completely, 15-20% have severe disability and the rest have moderate disability. 15% of stroke patients can recover to be able to return to work. Almost 80% can do activities independently at a certain level. In terms of morbidity, 32% get depression, 48% experience symptoms of half-body paralysis, 22% cannot walk, 12-18% have communication problems and 24-53% need help in daily activities. | STROKE SYMPTOMS Stroke symptoms are varied; depending on the location of the stroke. The classification that is often used is the Oxfordshire Community Stroke Project (OCSP) classification as below: Oxfordshire Community Stroke Project Classification (OCSP) Total Anterior Circulation Stroke (TAC) Partial Anterior Circulation Stroke (PAC) Lacunar Stroke (LAC) Pathological definition All of : Contralateral Hemiplegia to the cerebral lesion, usually with ipsilateral hemisensory loss Hemianopia contralateral to cerebral lesion New disturbance of higher cerebral function (dysphasia, visuospatial) Any of: Motor / sensory deficit + hemianopia Motor/sensory deficit + new higher cerebral dysfunction New higher cerebral dysfunction + hemianopia New higher cerebral dysfunction aloneA pure motor/sensory deficit less extensive than for LAC (eg. confined to one limb, or to face and hand but not to whole arm) Occlusion of a single deep (LS) perforating artery 5% can be due to hemorrhage Occurs at strategic sites More likely seen on MRI than CT scan Classical lacunar syndromes correlated with relevant lacunes at autopsy Posterior Circulation Stroke (POC) Any of : Ipsilateral cranial nerve palsy (single / multiple) with contralateral motor and/or sensory deficit Bilateral

motor and/or sensory deficit Disorder of conjugate eye movement (horizontal /vertical)Cerebellar dysfunction without ipsilateral long tract sign Isolated hemianopia or cortical blindness Other signs include Horner's sign, nystagmus, dysarthria, hearing loss, etc 8 Stroke Patient Care Manual at the Primary Health Care Level | COMPLICATIONS OF STROKE Individuals who have suffered a stroke are likely to experience certain complications and require specific interventions. Common complications are as follows: 1) Spasticity and contracture 2) Deep Vein Thrombosis 3) Chronic pain 4) Post Stroke seizure 5) Incontinence 6) Pressure sores (Pressure Sore) 7) Emotional disorder | TREATMENT OF STROKE The problems identified after an individual has suffered a stroke involve physical, psychosocial, cognitive and perceptual aspects. This situation needs to be handled professionally in addition to the cooperation of the patient, caregivers/family and the community to ensure the recovery process runs smoothly. After the patient is treated in the hospital, some patients will continue to undergo follow-up treatment in the hospital with a multidisciplinary team (MDT). While some will be referred to a health clinic for follow-up treatment. The challenge for health workers in health clinics is to ensure that stroke patients receive comprehensive and holistic treatment to maintain health, avoid complications, and reduce the risk of recurrent strokes. In addition, health personnel need to support and empower patients' families and caregivers. Aspects of treatment and services that need attention for stroke patients are as follows: • General status of stroke patients • Patient medical issues • Re-evaluation of medications (especially medications related to recurrent stroke prevention) • Status by system: neurological, cardiorespiratory, GIT, urinary , musculoskeletal • Cognitive, mental status and emotional disturbances • Vision • Speech and communication • Swallowing function • Skin care (pressure ulcers) • Mobility • Activities of daily living • Use of support and adaptation tools • Community integration • Health education & awareness • Disability Registration Efforts (OKU) with the Department of Social Welfare (as needed) • Home visits and domiciliary care

services • Involvement of non-governmental organizations. Family Health Development Division • Ministry of Health Malaysia9 | PREVENTION OF REPEATED STROKE Individuals who have had a stroke are at risk of having a repeat stroke. Therefore, the prevention of repeated strokes must be taken seriously. Prevention of recurrent stroke generally depends on the etiology of the stroke. Among the preventive measures that need attention is the appropriate use of anti-platelet drugs and the control of co-morbidities that are risk factors for stroke. A. Use of anti-platelets B: Control of risk factors Medicines before stroke No antiplatelet Aspirin Do not start Aspirin only Clopidogrel Aspirin and dipyridamole Clopidogrel Clopidogrel no allergy to aspirin Clopidogrel Clopidogrel has allergy to aspirin Clopidogrel Warfarin During acute and ischemic large strokes, should be stopped for up to 2 weeks and given aspirin. Warfarin is restarted after 2 weeks after stabilization. Recommended drug change Ischemic Stroke No AFIschemic Stroke AF/PAFStroke with Brain Bleeding Risk Factors Hypertension Diabetes mellitus Dyslipidemia Smoking Obesity Recommended Treatment ACE inhibitor/ARB is recommended as the first choice even if the blood pressure reading is normal. Optimal blood glucose control Optimal lipid control. Statins are recommended. All smokers must quit smoking. Live a healthy lifestyle and achieve a superior body weight. Stop and start after 2 weeks with brain CT confirmation (please refer to the hospital if there is no brain CT confirmation) Aspirin for 2 weeks then changed to warfarin 10 Stroke Patient Care Manual At Level Primary Health Care | CONCEPT OF STROKE REHABILITATION SERVICES The rehabilitation process involves the main points below: • Detection, prevention, and reduction of risk factors to prevent repeated stroke attacks. • Train to be independent to the optimum level and improve the quality of life even if there are disabilities that do not fully recover (residual disabilities). • Help patients and families/caregivers to be able to adapt and achieve optimal psychological coping skills. • Encouraging patient involvement in the community including emphasizing issues of accessibility, suitability of living and working places, recreational

and vocational activities. Family Health Development Division • Ministry of Health Malaysia11 | STROKE PATIENT HANDLING FLOWCHART Stroke Patient Admission to Hospital Acute Treatment & Rehabilitation Discharge from hospital Follow-up Treatment in Hospital Referral to Health Clinic (KK) Outpatient (OPD) Home and other Domiciliary institutions (PPD) *please refer to PPD Guidelines in Health Primer, 2014 • Continue follow-up treatment • Monitor the patient's condition • Refer to the MDT discipline in KK who has therapist expertise according to the patient's needs Problem Meet the discharge criteria Discharge Detect and refer cases with stroke complications that require specific intervention Yes No No Yes 12 Stroke Patient Care Manual (Stroke) At Primary Health Care Level | PATIENT ASSESSMENT AND TREATMENT FOLLOW-UP Medical Problems • General status • Complications of Stroke • Stroke risk factors Mental and cognitive health status Vision Swallowing Communication Universal Communication (Type KK 5 & 6) • Assistant Medical Officer• Health Nurse • Assistant Medical Officer• Health Nurse• Monitor and detect health status and risk factors • Refer as needed • Mental health screening (DASS) (Refer to Appendix I) • Cognitive screening (ECAQ) (Refer to Appendix II) • Refer as needed • Detect vision problems • Screening for swallowing problems (Water Test/ CODA)) (Refer to Appendix III) • Refer as needed • Screening for speech and language problems for Stroke Patients (Refer to Appendix XXVIII and Appendix XXIX) . • Refer as needed For patients who use a catheter: • Ensure there is a specific treatment plan. • Consult the hospital if there is no treatment plan. For patients who do not use a catheter: • Refer to the Intermediate Nursing Section (Type KK 3 & 4) • Medical Officer • Assistant Medical Officer • Health Nurse • + MDT • Medical Officer • Assistant Medical Officer • Health Nurse • + MDT • Stroke prevention assessment and treatment stroke recurrence and complications • Refer as needed. • Confirm the level of mental and cognitive status. • Refer to allied health members as needed. • Confirm vision problems. • Refer to the hospital as needed • Confirm the level of Advance swallowing status (Type KK 1 &

2) • Family Physician • Medical Officer • Assistant Medical Officer • Health Nurse • MDT • Family Physician • Medical Officer • Assistant Medical Officer • Health Nurse • MDT • Optimizing treatment to prevent recurrent stroke and stroke complications • Refer to MDT as needed • Plan and implement specific interventions according to patient needs Family Health Development Division • Ministry of Health Malaysia13 ADL Mobility • Ensure specific treatment plan for mobility from hospital.• Detect contractures and abnormalities that not detected early or occurs later• Refer as needed • Use checklists to assess the patient's condition.• Refer as needed Confirmation by medical officers and hospital referrals • Confirms the patient's needs. • Assess the need for adaptive equipment. • Refer to the relevant discipline Family Health Development Division • Ministry of Health Malaysia CHAPTER 2 Nursing Care Services 16 Stroke Patient Care Manual At Primary Health Care Level | INTRODUCTION Rehabilitation for stroke is a process where patients who are disabled to function as usual are trained by teaching and learning daily activities. This can be done with a multidisciplinary and interdisciplinary approach that involves a task force in this program. | OBJECTIVES General Objectives • To help self-care by stroke patients, caregivers and families. Specific Objectives• To provide guidance and instruction to patients, caregivers and families to improve self-care. • To assist patients with effective nursing care with skin care, nutrition, hydration, excretion, repositioning and monitoring of vital signs to avoid complications due to stroke. • To improve daily activities so that patients can be independent. • Encourage community participation in the management of stroke patients to prevent readmission to hospital. • Empowering caregivers and families in the continuous care process at home to manage stroke patients. | NURSING CONCEPTS IN THE TREATMENT OF STROKE PATIENTS Acute or chronic stroke patients cannot take care of themselves, usually will depend on others to meet their daily needs. Treatment of stroke patients carried out at home/clinic is a continuation of hospital treatment. This treatment is carried out by specially trained health personnel. They provide care and

guidance to patients, caregivers and families. Among the activities carried out are health education, providing care training and helping patients and caregivers so that patients can improve their self-functioning, doing independent daily activities throughout the recovery process at the clinic and at home. | FACTORS THAT INFLUENCE THE RECOVERY PROCESS OF STROKE PATIENTS Health status Support equipment Ability level. Family/community support Medicines Economic status 17 Family Health Development Division • Ministry of Health Malaysia | PHASES OF CARE FOR STROKE PATIENTS 1. Patient Assessment ACTIVITY RECOVERY PHASE CONTINUOUS CARE PHASE Assessment • Clinical assessment • Disability Level Assessment (Pain Assessment Chart - Refer to Appendix IV) • Laboratory investigation Implementation • Home care • Treatment at the Social Clinic Follow-up Care Assessment above :-• Patient • Home and environment • Consent from the caregiver • History taking • Vital signs • Respiratory tract • Nursing diagnosis • Patient blood collection according to the instructions of the Family Physician. According to nursing diagnosis :-• Skin Integrity Disorders (Braden Scale for Pressure Ulcers (Refer to Appendix V) • Respiratory Tract Disorders • Nutritional Disorders. Use Intake Output Chart (Refer to Appendix VI) • Elimination Disorders Use Bowel Chart – (Refer to Appendix VII and Bristol Stool Chart – Refer to Appendix VIII) • Sleep Patterns . Use Sleep Chart – Refer to Appendix IX) • Changes in Sexual Activity / Reproductive Health • Self-Image Disorders • Communication Disorders • Cognitive Disorders • Potential Injury eg: Falling. • Interaction of stroke patients with family members and health personnel • Employment • Introducing and encouraging patients to become members of stroke patients' associations • Continuing recreational activities • Continuous monitoring at the health clinic • Domiciliary care (given for 3 months). • Assessment of functional level and detection of complications • Patient monitoring by nurses. • Review by Family Physicians. 1) Monitoring: • Taking medicines • Continuing rehabilitation therapy • Side effects of medicines. 2) Carrying out treatment actions • Re-evaluation according to nursing

diagnosis • Appointments according to the set schedule. • Be a member of a stroke patient association on an ongoing basis • Interaction of stroke patients with family members and health personnel • Employment • Continuing recreational activities. • Ensuring that patients undergo follow-up treatment at the hospital/ health clinic • Discharge when the patient has recovered • Assisting in the registration of Persons with Disabilities (OKU). 18 Stroke Patient Care Manual (Stroke) At Primary Health Care Level 2. Treatment And Rehabilitation Of Stroke Patients 2.1. Stroke Patient Handling Activities 2.1.1. Personal Hygiene Personal hygiene is a daily activity that includes activities such as bathing, using the toilet and so on. This is important for caregivers in assisting, assisting and monitoring stroke patients. Hand washing is important for both caregivers and patients to prevent infection and transmission of microorganisms. Washing hands must be:- • Before and after eating • After patient care by carers, for example: o holding the bedpan/urinal or going to the toilet o if the hands touch the patient's body fluids (blood, phlegm, pus from a wound). For Hand Washing Techniques (Refer to Appendix X) 2.1.2. Oral care a) The purpose of oral care • To clean the mouth from food waste • To prevent mouth ulcers and gum infections • To ensure customer comfort. b) Equipment to maintain oral hygiene • Toothbrush • Toothpaste • Glass of water • Small towel • Water for gargling. 2.1.3. Bathing Bathing is important because it can maintain :- • Removes dirt and germs • Removes body odor • Helps in blood circulation • Appearance. Things to be taken into account when bathing the patient: • Maintain the patient's "privacy" while bathing them. • Observe if there are pressure sores, wounds, rashes, bruises and others. • Use enough soap and water to clean. • Supervise this patient to wash their genitals while bathing. 19 Family Health Development Division • Ministry of Health Malaysia 2.1.4. Hair care Hair needs to be combed every day and needs to be neat and short to: • Increase blood circulation to the head • Make hair clean and healthy • Maintain hair neatness • Use anti-dandruff shampoo to prevent dandruff. 2.1.5. Changing disposable diapers

(Diapers) Changing disposable diapers is important for the purpose of:- • Maintaining hygiene in the genital area • Maintaining the balance of skin integrity • Providing comfort to the patient. Care of disposable diapers • Change diapers every time they are wet / dirty. • Wash and dry the genital area. • Wear disposable diapers according to the size that suits the stroke patient. Pad care – for female patients • Change the pad every time it gets wet. • Wash and dry the genital area. • Wear a sanitary pad that is appropriate for the patient. 2.1.6. Care of Fingernails and Toenails • Fingernails and toenails should be cut short and straight to prevent nail extension and infection. • Nails should be cut every 2 weeks as shown. 2.1.7. Skin Care Skin problems commonly experienced by stroke patients Problem Prevention And Treatment Small wounds on the skin surface caused by:- • Friction when pulling the patient from the chair to the bed • Pressure sores, due to loss of skin surface and friction Dry skin Diaper rash (diaper rash) • Changing the bed • Make sure the patient is always dry and clean • Avoid rough handling • 'Lifting Technique' / Technique for changing the correct bed. • Apply moisturizing lotion • Encourage fluid intake of at least 2 liters per day (if there is no instruction to "limit" water intake). • Make sure the skin is clean and dry, change diapers / cloths • Appropriate size diapers • Apply cream on the folds of the skin. 20 Stroke Patient Care Manual at the Primary Health Care Level a) Pressure Scabies Pressure scabies is a disorder of skin integrity caused by continuous pressure on the skin that causes blood flow disorders in certain parts. Care of pressure sores • Assess the severity of the patient's pressure sores. • Wash the wound using hydrosin / dermasin. • Do the frequency of washing according to the severity of the wound. • Use solcoceryl gel, duoderm, lotion or sofratul on the wound to help healing. • Encourage the use of "Ripple Mattress" • Change the patient's position every 2 hours on a regular basis • Provide health education:- o Nutrition o Wound care o Personal hygiene o Observation of the skin to detect early pressure sores • Re-evaluate effectiveness after handling (Refer to Appendix V) • Consult a doctor, if

necessary. Body parts that often suffer from pressure sores Pressure parts when the patient lies in a supine position Pressure parts when the patient lies in a sideways position 21 Family Health Development Division • Ministry of Health Malaysia Pressure parts when the patient lies in a prone position How to avoid pressure sores (Pressure sores) Pressure sores caused by constant pressure on the blood vessels in the skin. This condition causes blood flow to the area to decrease. The lack of blood flow will cause the epithelial cells to lack the oxygen and glucose they need. Early signs of pressure sores are like redness in the skin. b) Wounds Wounds are injuries to the skin whether abrasions, tears, cuts or ulcers. Although the conditions or causes are different, wound care is for the same purpose, which is: • to heal quickly; • to prevent further infection; • so as not to leave scars or ugly scars. Type of wound Size of wound • small and clean wounds heal faster than large wounds. • Acute Wound O Surgical Incision O Donor Site O Burn Wound O Abrasions / Laceration O Complex Surgical Wounds.• Chronic Wound O Pressure Ulcers O Vascular Ulcers O Diabetic Ulcers O Fungating Ulcers 22 Stroke Patient Care Manual at the Primary Health Care Level Causes of wounds • surgical wounds are usually clean and easier to care for. • wounds that are dirty, for example due to an accident, need to be cleaned as best as possible to avoid infection • infected wounds such as boils, pus need close care to prevent them from spreading. The position of the wound • wounds in parts that are difficult to see or reach require others to help in wound care • wounds on the soles of the feet or the back of the body such as ulcers need to be carefully looked after because prolonged pressure on those parts can cause wounds to heal slowly and repeatedly. Basic handling of wounds In general : • Maintaining personal hygiene and surroundings • Healthy eating • Weight control • Ensuring the body is at a healthy level • Taking oral medicine @ injection • Blood sugar check • Blood investigation / c&s. Specifically: • Ensure that the wound is always clean and properly treated (do 'dressing' or wound cleaning treatment) • Make sure that the injured or stitched wound is always dry, especially the first 24 hours

• If you are given a topical medicine (cream): wash the wound first with clean water or saline, then apply a thin layer of antiseptic or antibacterial medicine (cream) (to allow ventilation in the wound and help the wound dry) • Do not touch the wound that is starting to dry; for example try to pick dry scars on the wound ('scab') because this may cause the wound or re-infection and the wound will heal slowly. Among the signs of a bacterial infection are fluid discharge or pus from the wound, the skin around the area is red and swollen, the wound seems to be open, increased pain and possible fever. • If the wound is bandaged: change the bandage every day or when it gets wet/dirty • Finish the antibiotic if given by the doctor. 23 Family Health Development Division • Ministry of Health Malaysia Wound Care • Assessment Identify factors in the wound healing process. o History of illness (med/surg/etc) o Level of pain – the main factor in wound healing. Pain o Makes the patient limit movement - requires analgesics. o Environment (cleanliness). • Provide appropriate wound care. Selection of the type of "dressing" according to:- o Wound Type o Condition of the wound surface and size. o Dry wounds or a lot of fluid. o Wound location o Signs of infection. Wound complications • slow healing • wound infection • sepsis (spreading infection) • scarring. What is a scar? • Is the effect seen when the wound has healed. It results when new tissue arises to replace tissue that is injured or lost due to a wound. There are types of scars that need attention; among them • Keloid (abdominal that continues to grow or appears beyond the wound) • Hypertrophic scar (scar appears on the healed wound) • Avoid getting a scar: • Treat the wound as best as possible • Do not scratch the scar. Individual Physical Factors Affecting Wounds • Obesity, • Diabetes and • Diseases of low endurance can delay wound healing. 24 Stroke Patient Care Manual (Stroke) At the Nursing Level

Primary Health Care 2.1.8 Respiratory Disorders a) Tracheostomy Indication Definition • The need for an artificial airway in the long term. • Blockage in the respiratory tract

caused by injury (fire, fracture), tumor or larynx cancer, foreign body and bleeding in the respiratory tract. • Neuromuscular disease that causes paralysis or weakness in the chest and diaphragm muscles. • Inability to remove secretions in the lower respiratory tract. • Maximize the need for continuous ventilation (positive pressure ventilation). • Sleep apnea. • Defects such as congenital atresia, chronic stenosis after TB infection. Types of Tracheostomy • Tube cuff - inflated cuff is used to protect the airway from the entry of mucus, blood and secretions. A surgical incision is made in the trachea—temporarily or permanently—under the cricoid cartilage to open the airway. 25 Family Health Development Division • Ministry of Health Malaysia Fenestrated Tracheostomy There is a hole in the posterior wall of the tracheostomy tube. It is used to a) make a sound b) assess the patient's ability to breathe through the air coming in from the upper airway. Double Lumen Tracheostomy : Parts :- • Outer cannula Attached to the stoma and part of the airway flange/ neck plate to attach the tube to the trachea. There is a hole for the rope to be attached to the neck. Needs to be changed every 3-6 months at the ENT clinic. • Inner Tube There is a lock on the outer tube to prevent tube dislodgement. It can be removed for washing. • Non cuff - for long-term use for patients who are able to swallow (gag reflex). 26 Stroke Patient Care Manual at the Primary Health Care Level PICTURE OF TRACHEOSTOMY • Obturator o Blunted end is used for insertion. o The tip is longer than the inner tube to prevent injury during tube insertion. o Removed after the tube is inserted but placed next to the patient in case it needs to be adjusted. Tracheostomy tube used by the patient while in the ward Patients are discharged with a tracheostomy 27 Family Health Development Division • Ministry of Health Malaysia Responsibilities In Tracheostomy Care Hygiene • Clean the stoma at least once a day or when necessary. • Clean the inner cannula at least 3 times a day. If the phlegm is too thick and sticky, wash it often. • Outer cannula must be washed clean, dry and stored in a clean container. • There should be a second reserve tube in case of emergency. Changing the Tracheostomy Band • Change the

tracheostomy band when it is dirty and needs the help of 2 people to change it. • Make sure the tie is not easily opened or loose with dead knots. • Insert 2 fingers to ensure that the tracheostomy strap is not too tight and irritates the skin. • Change the tracheostomy tube every 1-2 weeks. Suction • Do suction when necessary in a pressure of 80 - 120 mmhg. Inhalation should not exceed 15 seconds per inhalation. • Use the appropriate catheter size, Formula: Diameter of the tracheostomy divided by 2. Example: 8 (tracheostomy size) divided by 2 = 4mm 4mm x 3Fg = 12F (catheter size) • Observe the content of the secretion whether it is smelly mucus or bleeding, signs of pulmonary distress blocked lung or tracheostomy. • Observe the stoma whether it looks red, swollen or exudate. Things to Avoid : • Swimming is not allowed. • Avoid using talcum powder, aerosol spray, dust, smoke and foodstuffs. • Keep away from children for safety. 2.1.9. NUTRITIONAL DISORDERS Eating Disorders • Stroke patients need to maintain a perfect eating pattern. Their inability to take care of themselves does not mean they cannot eat nutritious food. 28 Stroke Patient Care Manual at the Primary Health Care Level • The food given is the same unless recommended by a nutritionist. • The food given should be in small quantities and at the right time, this will give comfort to the patient. • An imperfect diet can be harmful to the patient's health • To avoid constipation, the patient needs to eat a balanced diet that contains a lot of fiber such as fruits and vegetables should be given. • Water should be given in abundance. Actions : • Patient Assessment o Consciousness level o Understand instructions / cooperate o Movement (sitting) o Mixing milk according to instructions (to get enough nutrition). • Refer to the Dietetic Officer • Health Education for caregivers and stroke patients o Personal Hygiene o How to give Ryles Tube Feeding o Hygiene o Position during giving Ryles Tube Feeding o Test to make sure the tube is in the gaster o Flow before and after giving milk o Mix milk according to measurements o Tube height during fluid flow (20 cm) o Observation of the patient during Ryles tube feeding (Cough / difficulty breathing). • Record "Intake and Output Chart" (SISC/SIC Chart.

Refer to Appendix VI). a) Giving Food Through Nasogastric Tube Purpose: Giving liquid food for patients who cannot meet the requirements of oral food intake. 29 Family Health Development Division • Ministry of Health Malaysia "Mitten" For Back Hand "Mitten" For Front Hand "Mitten" For Front Hand Natural Needs : i) Container filled with liquid food ii) Syringe 10cc and 50cc iii) Container filled with warm water iv) Gauze v) Protective cap vi) Container for excrement vii) Stethoscope held at a level that allows fluid to flow slowly into the gaster Feeding procedure through Ryle's tube • Wash hands • Prepare equipment • Greet and inform the patient/caregiver • Give privacy and sit the patient or if unconscious put in a recumbent position (1 or 2 pillows) turn to the right • Wear a protective cap • Clamp the tube, remove the spigot then place it to in a clean container • Connect the syringe to the tube. 30 Stroke Patient Care Manual at the Primary Health Care Level • Test the position of the tube in the stomach, either by : o Pulling out a small amount of liquid from the stomach o Listening for a small amount of air entering the stomach using a o stethoscope • Pour liquid food into in the syringe, hold it at a level that allows the liquid to flow slowly into the gaster • Refill the syringe with feeding liquid before it is empty • Repeat steps 9 to 10 until the required amount of food is used up • Pour warm water to rinse the tube • Clamp the tube when the tube is empty • Remove the syringe from the tube • Remove the protective cap • Comfort the patient • Pack the equipment and documentation. Tips to Remember • Long-term use of Ryle's tube can cause necrosis of the nasal mucosa and result in ulcers. If Ryle's tube is used for 3 months, it is necessary to refer to the FMS to refer to the ENT specialist clinic (SP) for the evaluation of the patient's swallowing (Dysphagia). • Salicon Ryles tube is recommended. Ryles tube size - size No. 12 - 14 • If the SP results suggest the patient needs PEG (Percutaneous Endoscopic Gastrostomy) for dysphagia. b) Gastrostomy Care Percutaneous Endoscopic Gastrostomy [PEG] Definition Surgical opening to the gaster organ through the abdominal wall for the provision of liquid and nutritional needs.

Indications • Prolonged use of Ryle's tube. • There is a restriction in the upper airway and Gastro Intestinal tract (ex: Cancer esophagus). • Narrowing / stricture in the esophagus following the ingestion of poison causes erosion. • Post esophagectomy. • Head and neck injuries. Contraindications • Severe Ascitis • Peritonitis • Gastric Outlet Obstruction. 31 Family Health Development Division • Ministry of Health Malaysia Responsibility for Feeding Through Gastrostomy/ Peg Tube • Food preparation must be clean to avoid contamination. • If the patient is conscious, gargle before feeding through gastrostomy. • Can give a little food by mouth for the patient to taste the food. • Nutritious foods and drinks such as milk, soup or blended diet can be given through the PEG tube. • Avoid giving cold food, keep the food temperature warm. • Start warm water before and after feeding to determine tube patency so that food does not easily stick. • Observation of the patient during feeding and listening to complaints such as discomfort or flatulence. • Avoid giving food too fast to reduce stomach bloating and the patient will feel indigestion. • Never pull on the PEG tube as it can become dislodged. • Can shower and make sure to clean the soft plastic bottom of the PEG tube with wet cotton or a cotton bud. • Keep the area around the PEG tube dry. • If there is clear fluid around the PEG tube (gastric juice leaking) clean it with a tissue if necessary. • Always make sure there are no signs of inflammation • (inflammation) around the PEG tube such as redness, fluid/pus production, swelling and pain. • Make sure the end of the PEG tube is in the spigot. • PEG Tubes need to be changed every 6/12 at the Surgical Specialty Clinic, hospital (SOPD) Catheter Type • Foley's catheter size 20 - 22 FG. • Complete tube PEG set estimated at RM 250 32 Stroke Patient Care Manual At Primary Health Care Level What Should Be Done If The PEG Tube IS DISCONNECTED / IS PROBLEM? DO NOT PANIC! • Clean the area around the hole of the PEG tube and cover with clean gauze and tape. • If there are other problems such as signs of redness, swelling, leakage, pain or pus around the PEG tube, come to the hospital as soon as possible. 2.1.10 Elimination Disorders (Constipation / Incontinence) a) Constipation Or

Failure to Control Defecation Constipation occurs when the body is unable to remove waste matter. Stools become hard and stuck. Stroke patients can easily become constipated due to less effective digestive system disorders due to weak peristalsis movements, and other reasons such as:- • Weak muscles • Lack of equipment in the toilet • Confusion • Ignoring the need to defecate. • Small amount of nutrition • Inadequate fluid intake • Medicines. Actions : • Encourage balanced food that contains high fiber • Encourage adequate fluid intake • Encourage "Toilet Training" at the same time after meals / morning • Encourage PEG movement The tube needs to be changed every 6/12 at the Surgical Specialist Clinic, hospital (SOPD) 33 Family Health Development Division • Ministry of Health Malaysia • Giving medicine according to Doctor's instructions o Lactulose 15ml ON o Dulcolax Supp. o Ravin enema o Record "Bowel Chart" and "Bristol Stool Chart" (Refer to Appendix VII & VIII). Equipment Used in the Toilet Types of toilet equipment available in the market Techniques Used to Help Patients Who Have Problems with Constipation Who Are Abandoned Ways: • Explain to the patient what you will do and how the client can help • Make sure their "privacy" is preserved . • Follow the instructions as in the diagram • For patients who are unable to help themselves, straighten the patient's back and anus, if he has defecated. • Dry and clean the clothes. The brush used to wash the toilet 34 Stroke Patient Care Manual (Stroke) At the Primary Health Care Level Equipment :- Suppository, lubricating cream, cotton, gloves. Ways:- • Explain to the patient how we can help him. • Position the patient on the left side and the knee is lifted to the level of the abdomen. • Wear gloves. Clean the anus with cotton and tell the patient to "relax" and soften the abdominal muscles. • Apply the cream to the anus. • Insert the suppository into the anus. • Push the suppository into the anus using the index finger. • Clean the anus and make sure the patient is comfortable. • Advise the patient to relax and hold the suppository for up to 1-2 hours to get a better effect. • Remove gloves and wash hands. b) Urinary Bladder

Elimination Disorder Action : • Encourage the patient to urinate every 2 hours • Give privacy • Place equipment such as bedpan, urinal to facilitate the client • Encourage fluid intake • Insert the CBD catheter according to the doctor's instructions. 35 Family Health Development Division • Ministry of Health Malaysia Techniques Used To Help Bedridden Patients To Excrete Urine Patient Care With Catheters Some bedridden patients have catheters due to nerve problems that control the bladder muscles or patients who have prostate problems and cannot undergo surgery .it is important for the caregiver to clean the catheter at least 2 times a day. Care of Continuous Bladder Drainage (CBD) Objectives • Avoid acute/chronic urine retention • Avoid bacterial infection • Perineal hygiene • Patient has sacral sore • Urine specimen collection Equipment : Bowl of warm water, wash cloth, towel and soap 36 Stroke Patient Care Manual (Stroke) At Primary Health Care Level Equipment Requirements • Disposable catheter set. Size 12 - 16 • Folley's catheter / silicone catheter according to size • Syringe 10mls • Water for injection • Urine bag • Distilled water • S wab • Ky jelly • Glove sterile • Plaster • Hanger bag urine. CBD Procedure Definition • It is a sterile procedure where a catheter is inserted into the bladder through the urethra to remove urine • To empty the bladder Responsibilities of the Procedure Before • Prepare the equipment • Place the male/female patient in the appropriate position • Wear gloves • Swab the urethra using a swab and distil water. • Connect the urine catheter with the urine bag • Smooth the tip of the catheter with KY jelly • Instruct the patient to take a deep breath while the urine catheter is inserted. Male urinary tract Female urinary tract 37 Division of Family Health Development • Ministry of Health Malaysia Current • Make continuous observations of patients • Ensure patient privacy is guaranteed • Practice aseptic technique throughout the procedure • Place perineum towel • Perform sterile swabbing and maintain/hold open labia minora/ penis until the catheter is inserted • Add water for injection to 'inflate the balloon' to maintain the position of the catheter. After • Hang the urine bag on the side of the bed below the level of the

bladder to encourage the flow of urine with gravity • Avoid the urine bag falling on the floor to avoid microorganism infection • Plaster the urinary catheter on the thigh to avoid tension. • Measure the urine output and note the color/content of the urine • If there is an abnormality take appropriate action c) Health Education • Ensure personal hygiene every day • Advise the patient about the cleanliness of the catheter and perineal area • Ensure the catheter is always in situ and functioning • Encourage the patient to drink enough water to urinate 2.1.11 Sleep Pattern Disorder Actions • Comfort o Clean / dry clothes o Good ventilation (Fan/ air conditioning) o Clean/ dry diapers o Make sure the patient is not hungry / sick • Environment o Dim light o Reduce noise o "Soft music" o Avoid interruptions during sleep / rest • Drinks o Give milk preferably 2 hours before bed o Avoid caffeinated drinks 38 Stroke Patient Care Manual At Primary Health Care Level • Sedative treatment o must follow the doctor's instructions. For the elderly, benzodiazepines carry a risk of falls and should be avoided. • Sleep o "Sleep Chart" Record (Refer to Appendix IX) 2.1.12. Self-Image Disorder: • Encourage family members to support and cooperate in undergoing the treatment process for stroke patients, to build confidence and improve self-image • Introduce the patient to other patients who have recovered from a stroke, to increase self-confidence • Emphasize training and exercises that have been taught by the Rehabilitation Officer /Occupational Medical Therapist/Physiotherapy (OT/PT) to achieve an optimal level of recovery • Encourage patients to engage in daily activities so that stroke patients feel valued • Encourage stroke patients to participate in rehabilitation activities such as NASAM (National Association Of stroke) • Refer to a psychologist if necessary. 2.1.13. Communication Disorders Communication is the process of conveying and receiving information Good communication methods • Can foster good relationships • Cultivate trust in each other • Reduce pressure on caregivers and patients • Clear and easy-to-understand instructions. Poor communication problems cause • Frustration • Unsettled feelings • Misunderstandings

and feelings of prejudice. 2.1.14. Risk of Falling and Injury • Rate the patient using the "Morse Fall Scale" (Refer to Appendix XI) • Low / fenced bed • Environment : o Bright lights o Neat / orderly equipment o Dry non-slip floor o Handles on the wall (Hand Railing) o Nearby lockers bed 39 Family Health Development Division • Ministry of Health Malaysia • Clothing o Pants / cloth - not too long • Pay attention to patients who have problems : o "Visual Spatial" o "Neglect" o "Hemianophio" • Fall o Morse Record Fall Risk (Refer to Appendix XI). 2.1.15. Risk of Contracture • Support the weak part of the limb while sleeping/sitting • Use AFO orthosis to prevent "Foot Drop" • Encourage passive/active exercise to maintain ROM (Range of motion) • Maintain the correct position of the body while sleeping/sitting • Avoid "shoulder subluxation" by being supported with a pillow or "arm sling". 41 Family Health Development Division • Ministry of Health Malaysia CHAPTER 3 Nutritional Therapy Services 42 Stroke Patient Care Manual at the Primary Health Care Level | INTRODUCTION Nutritional support therapy is one of the treatments to improve the quality of patient care to reduce the risk of malnutrition among stroke patients. It is implemented by the Dietetic Officer stationed at the health clinic with the help of health personnel. For clinics that do not have a Dietetic Officer, scheduled visits will be made by a Dietetic Officer from a nearby health clinic. However, in facilities where there is no Dietetic Officer service, these guidelines can be used by referring to the nearest Dietetic Officer if there is a problem to implement. | OBJECTIVES • Make a basic nutritional assessment for all stroke cases and then allow further supportive nutritional interventions to be implemented. • Assist the health team to provide guidance on nutritional therapy to the patient's family to improve the patient's self-care. | NUTRITION THERAPY IMPLEMENTATION CONCEPT Basic nutrition screening by health personnel (Nurses and Assistant Medical Officers) using the Nutrition Screening Form (Refer to Appendix XII, XIII). Basic nutritional therapy intervention for stroke patients: a) Feeding through a tube (Ryles

Tube Feeding) b) Transitional feeding (Transitional Feeding). Basic Nutritional Assessment Equipment • Measuring tape • Portable weighing scales. a) Tube Feeding (Ryles Tube Feeding) • Most stroke patients are unable to take food orally. • Enteral nutrition is the administration of enteral formula directly into the gastrointestinal tract through a tube. Tube feeding is able to meet the energy and macronutrient needs of stroke patients. • Enteral nutrition is started when the patient cannot take food orally or food intake is minimal / insufficient. 43 Family Health Development Division • Ministry of Health Malaysia Category Body Weight Kcal / kg body weight / day Note • There are 6 feeding routes through the tube namely nasogastric, orogastric, nasoduodenal, nasojejunal, PEG (Percutaneous Endoscopic Gastrostomy) and PEJ (Percutaneous Endoscopic Jejunostomy). Refer to Chapter 2 (Care Services 2.1.9). • Estimated energy needs of patients based on the patient's body weight: • Estimated protein needs of stroke patients: o Stroke patients without complications (1.0-1.2 g/kg body weight/day) o Stroke patients with complications (1.2-1.6 g/kg body weight/day) • Estimated fluid requirements for stroke patients o 30-35 mls/kg body weight/day o This recommendation is only to meet normal requirements. Fluid requirements recommendations for patients suffering from fluid overload or dehydration need to be adjusted according to the patient's condition. Actual body weight is used. Underweight, to increase body weight (BMI <18.4 kg/m2) Normal (BMI 18.5 - 24.9 kg/m2) Overweight body, obese (BMI >25 kg/m2)30-35 30 21-25 Ideal body weight is used at BMI = 22.5 44 Patient Care Manual Stroke (Stroke) At Primary Health Care Level Tube Feeding Route a) Nasogastric b) Orogastric Used for patients who need enteral nutrition for a short period of time and do not have any digestive problems. c) Nasoduodenal d) Nasojejunal Used for patients who need enteral nutrition for a short period of time and suffer from gastric digestion problems, risk for esophageal reflux or after undergoing upper GI tract surgery. a) PEGb) PEJ Used for patients who require long-term enteral nutrition. TypesTypes of Enteral Tubes (Refer to Appendix

XVI).Formula/Diet Enteral formula products only Enteral formula products Finely ground food Preparation Formula / Diet There are 2 types of enteral milk products:i. Ready-to-Use (RTU). Formula in liquid form that can be given directly to the patient.ii. Powder. The formula that needs to be mixed with water according to the prescribed measure before being given to the patient. A mix of full cream/low fat milk according to the measurements set by the Dietetic Officer for specific cases. List of Enteral Nutrition Products (Refer to Appendix XIV). As above Food texture: finely ground, no small lumps Contains food groups such as carbohydrates, proteins and fats. Can also be added with vegetables. Example: rice porridge mixed with finely ground chicken/fish and vegetables. Examples of nutritious drinks: milk, fruit juice, malt drinks Giving the Formula The dosage should be determined by the Dietetic Officer Frequency: 3-4 hours Number of giving: 5-6 times/day Before giving the formula, raise the patient's head by 30-45 degrees. Gastric Residual Volume (GRV) should be checked before administration of enteral formula products. (Refer to Appendix XV). Do flushing with 20-30mls of boiled water before and after giving the formula. Medication should not be mixed into enteral/milk formula to avoid side effects. As above Frequency : 3 times a day as the main meal (Breakfast, Lunch, Dinner) Nutritious drinks can be given as a snack (Morning Drink, Afternoon Drink, Night Drink). 45 Family Health Development Division • Ministry of Health Malaysia b) Transitional Feeding (Transitional Feeding) • Transitional feeding is the transition process from enteral feeding through a tube to taking food orally. • The purpose of this process is to ensure that the patient's nutrient needs can be achieved only by oral intake. • What needs to be monitored during the transition process is the amount of oral food intake, the amount of fluid intake and the patient's ability to chew and swallow. Health personnel can obtain food intake history information from the patient's caregiver or patient. • Enteral feeding through a tube can be stopped when the patient is able to achieve and maintain nutrient requirements or generally, when at least 75% of the patient's

energy needs are met by oral food alone. • The transition process can take place over several days or weeks, depending on the condition of the patient or the monitoring of health personnel. 46 Stroke Patient Care Manual at the Primary Health Care Level Type of Diet a) Liquid Diet b) Pure Diet Description Type of liquid diet: i. Clear Liquid Diet Drinks in the form of clear liquid at room temperature that have easily digestible nutrients and result in minimal residues in the gastrointestinal tract. Full Liquid Diet Drinks are a liquid and nutritious form. Examples: chocolate/malt powder drinks, yogurt, ice cream and others. The ground food becomes fine and thick which will stick to the spoon if lifted. Usage Indicator For patients in the early stages of feeding orally. For patients after undergoing surgery who cannot yet be given a nutritious drink diet. For patients who have problems digesting certain nutrients. Patients who show good progress, which is able to swallow liquid diet perfectly. Features of Diet Must be clear and in liquid form such as glucose, honey water, clear soup, meat extract, barley water, filtered fruit juice and others. Whole liquids are such as milk, cream soups and other colored liquids Foods are cut into small sizes and cooked until soft before being finely ground. Examples of foods that can be pureed are vegetables and fruits, which have been boiled/steamed. Method of preparation: - peel a fruit / vegetable such as carrot / potato / apple and wash clean - cut into cubes and boil until soft - grind using a grinding machine until smooth Note If used in the long term, intake of enteral formula products is required. To reduce the risk of the patient choking when taking liquids, a thickener can be used. Commercial thickeners such as Thixer can be used according to the following measurements: Nectar : 1 scoop/100 mls Honey : 1.5 scoop/100 mls Spoon thick : 2 scoops/100 mls Diet puri should be introduced slowly according to the patient's acceptance rate. If the patient has problems swallowing food (dysphagia), a swallowing assessment should be done. Patients with dysphagia should be given a liquid diet (according to the appropriate concentration) and supplemented with milk/enteral products. 47 Family Health Development Division • Ministry of Health

Malaysia Type of Diet c) Soft diet Description Food is soft in texture in terms of the choice of type of food or its preparation so that it is easy to eat or chew. Indicators of Patient Use who show the development of chewing and swallowing well. Patients who have chewing problems or swallowing problems. Features of Diet - the resulting puree can be given to the patient using a spoon. Soft foods such as bread, yam porridge, fish, tofu, chicken and soft vegetables are encouraged. Hard meat or vegetables should be avoided. Food is cut into small pieces and cooked until soft. The use of chili, spices in cooking is avoided. Note Normal diet can be given when the patient is ready. 49 Health Development Division K

family • Ministry of Health Malaysia CHAPTER 4 Physiotherapy Services 50 Stroke Patient Care Manual at the Primary Health Care Level | INTRODUCTION Effective community rehabilitation should be seen as a priority. All stroke patients need comprehensive rehabilitation services from health professionals. Therefore, the health department is responsible for ensuring that all stroke patients receive treatment from the rehabilitation team at the community level. Physical rehabilitation in the early stages is very important. Every stroke patient must seek rehabilitation treatment as soon as possible. This is because, the sooner rehabilitation therapy is started, the sooner the brain can relearn normal movements while the longer rehabilitation therapy is delayed, the harder it is for stroke patients to recover. The benefits obtained from physical rehabilitation include building muscle strength, learning how to walk properly and subsequently increasing the patient's self-confidence to achieve an optimal level of quality of life. | OBJECTIVES • Accelerate early physical recovery of acute stage stroke patients. • Avoid other complications such as complete bed rest, pressure sores and contractures. • Restore the patient's ability to manage themselves without assistance. • Improve the functional ability in terms of the patient's level of coordination, balance and active movement. • Improve the theoretical and practical

knowledge of patients, carers and support groups in the care of stroke patients. Stages of the Physical Rehabilitation Program • Learning movement control from 'proximal' to 'distal' which is the upper body (upper trunk) and shoulders to the lower body (lower trunk) and hips. • All movements are performed according to the patient's ability level, i.e. passive movement, assisted active movement and active movement. If the patient's ability increases, resistive exercise can be started. • Recovery continues by following a series of exercises according to normal development. For example: Lying → sideways → sitting → standing and walking. • Stroke patients are encouraged to do daily activities (refer to the ADL section) in order to improve self-functioning to an optimal level. For example: a) Getting out of bed: The patient is encouraged/helped to move to the affected part and sit on the edge of the bed and then move/be moved to a chair. b) Toileting: Patients are encouraged/helped to walk to the toilet. The use of a bedside commode is not recommended, as the activity of going to the toilet is part of physical exercise. 51 Family Health Development Division • Ministry of Health Malaysia c) Balance while sitting : Restoring balance while sitting is important at the beginning of stroke patient recovery. For example, reaching for a cup on the table on the side of the affected limb can improve the patient's body balance. This is one of the daily tasks that patients have to do. • Ensuring shoulder and elbow movement control has been acquired before learning hand control movements such as gripping and releasing | THE PHASES OF CARE FOR STROKE PATIENTS ASPECTS OF PHYSICAL REHABILITATION 1. Treatment According to Identified Problems Every Rehabilitation Officer/ Physiotherapy Physician involved needs to have skills in identifying the problems acquired by stroke patients and be able to handle the patient in the right way as a whole. The selection of activities is directed towards the achievement of the patient's skills and functionality. Each activity is divided into several movement components and the patient is encouraged to do this movement component as an exercise. The table below

shows the common problems faced by stroke patients, assessment, measurement and patient handling: BilBilBil Problems Treatment Outcome Measure 1.1 1.1 1.1 1.2 1.3 Breathing Problems and Cardiorespiratory Fitness Improper Posture and Edema Pressure Ulcers on Upper/Lower Limbs • Breathing Exercises • Continuous Fitness Training • Modified Postural Drainage and Chest Percussion/ Vibration (refer to Standard Operating Procedures-Respiratory Physiotherapy Treatment) • Positioning Techniques • Advice and training to patients, caregivers/ families and health personnel (refer to the Basic Physiotherapy Operation Training Module for the Elderly 2013 Module 3; Stroke). • Dynamic Pressure Garment • Electrical Stimulation for example: (Tanscutaneous Electrical Nerve Stimulation (TENS) and Electrical Muscular Stimulation (EMS) • Patient Education and Home Exercises Program. • Peak Flow Meter • Spirometry • 3 Minute Walk Test (MWT) (before assessment using 6MWT). • None • None 52 Stroke Patient Care Manual at the Primary Health Care Level Number of Problems Treatment Outcome Measure 1.1 1.1 1.4 1.5 1.6 1.7 1.8 Shoulder Pain and Subluxation Muscle weakness- muscle and contracture/ Spasticity Balance/ Coordination/ Proprioception on the Upper and Lower Limbs Lack of mobility and movement Correct Way of Walking (Gait Correction) • Shoulder support • Ice/ Hotpack (reduce pain) • Electrical Stimulation (example: (Tanscutaneous Electrical Nerve) Stimulation (TENS) and Electrical Muscular Stimulation (EMS)• Patient Education and Home Exercises Program. • Passive/Active Exercise • Icing Technique • Mechanical Exercise (for example; Motomed) • Electrical Stimulation • Passive Neuromuscular Facilitation (PNF) • Patient Education and Home Exercise Program. (Refer to Basic Physiotherapy Management for the Elderly 2013; Module 4: Immobility). • Manual Joint Approximation • Standing Tilt Table • Trunk Control • Hip/ Knee Control • Balance Training (Static/ Dynamic) in Sitting and Standing • Passive Neuromuscular Facilitation (PNF) • Motor Relearning Program (MRP) • Neurodevelopment Therapy (NDT). (Refer to the SOP of Physiotherapy Services at Primary Health). • Lifting and Moving Techniques

• Patient Education and Home Exercises Program (Refer to Basic Physiotherapy Management for the Elderly 2013 Module 3; Stroke). • Walking Training with/without using Walking Aids. (Refer to the Book Therapeutic Exercise, Foundations and Techniques)• Visual Analogue Scale (VAS) (Refer to Appendix XVII) • Oxford Scale (Refer to Appendix XVIII) • Modified Ashworth Scale (MAS) (Refer to Appendix XIX). • Motor Assessment Scale (MAS) (Refer to Appendix XX) • Dynamic Gait Index (Refer to Appendix XXI) • Time Up and Go Test (TUG) (Refer to Appendix XXII) • None • Measurement techniques for walking aids (such as walking frames, sticks and wheelchair assessment). 53 Family Health Development Division • Ministry of Health Malaysia 2. Basic Physiotherapy Training For Paramedics In Health Clinics That Do Not Have Physiotherapy Services 2.1. Breathing Techniques Breathing techniques: Inhale through the nose and exhale through the mouth 2.2. Passive Exercise Joints: Shoulders Position: Supine Movement: Raise the arm up and down Joints: Elbow Position: Supine Movement: The elbow joint is straightened and bent. Joints: Shoulder Position: Supine Movement: Bring the arms to the side. Joints: Elbow Position: Supine Movement: Arms close to the body, elbows bent and rotation and supination of the elbow joint. EXERCISES OF THE UPPER LIMBS EXERCISES OF THE UPPER LIMBS 54 Stroke Patient Care Manual at Primary Health Care Level Joints : Wrist Position : Supine Movement : Bend the joint up and down Bend the thumb to the base of the little finger Bend and straighten the fingers *Do the movement 10 times for each joint involved Joints: Hips and knees Position: Supine Movement: Bend the knees to the chest then straighten them again Joints: Hips Position: Supine Movement: Lift the legs to the side then bring them closer to the center line LOWER EXERCISES LOWER EXERCISES Joints: Hips and knees Position: Supine Movement: Bend knees to chest then straighten back 55 Family Health Development Division • Ministry of Health Malaysia POSITION DESCRIPTION Stroke Right Side Position: Side Side Stroke Right Side Position: Side Side Stroke Right Side Position: Supine Side Stroke Right Side Position: Sitting Position side on the

uninvolved limb: • The head is supported with a pillow. • The involved upper limb is supported with a pillow in a straight forward position. • The involved lower limb is supported with a pillow with the hip joint and knee flexed. Lateral position on the involved member: • Head supported with a pillow. • The involved upper limb is straight forward with the palms facing upwards. • The uninvolved hip and knee joints are bent at 90 degrees and supported with a pillow. • The involved hip joint is straight back. Position while lying on your back : • Head supported with a pillow • The involved upper limb supported with a pillow with the palm facing upwards Position when sitting on a chair: • Sit upright. • The upper limb is supported with a pillow. 2.3 Positioning Techniques 56 Stroke Patient Care Manual At the Primary Health Care Level The technique of lifting from a chair to a wheelchair alone Lifting and moving from a wheelchair to a bed is done alone The technique of lifting and moving a client from a bed to a wheelchair is done alone TECHNIQUE DESCRIPTION 2.5 Lifting And Moving Techniques ONE MEN LIFT 57 Family Health Development Division • Ministry of Health Malaysia One-man technique • Hold the client's arm through the armpit • The lifter stands upright and moves one step to the side • Bend the knees slightly, one in front and one again behind • Slowly lower the client to the floor Lifting technique from wheelchair to car for left hemiplegic client TECHNIQUE DESCRIPTION OF TECHNIQUES PERFORMED ALONE (ONE MEN LIFT) TECHNIQUE OF LIFTING & TRANSFERRING TO CAR 58 Stroke Patient Care Manual At Level Primary Health Care LIFTING & MOVING TECHNIQUES USING THE HELP OF A SLIDING BOARD • Place a sliding board under the client's back • The caregiver holds the client's knees and legs. • The client bends forward. • Caregiver holds hips to transfer sideways from bed to wheelchair/chair to chair/wheelchair to car and vice versa. EXPLANATION TECHNIQUES 3. PRECAUTIONS AND CONTRAINDICATIONS THAT SHOULD BE TAKEN ATTENTION WHEN HANDLING STROKE PATIENTS BilBilBil Complications Precautions Contraindications 1.1 1.1 3.1 3.2Joint Subluxation Shoulder/ Hip Dislocation• Supporting the shoulder blade

while handling the patient (while lifting and moving the patient) • Using strapping/ kinesiotape for shoulder support • Supporting the shoulder blade while handling the patient (while lifting and moving the patient) • Using shoulder support and strapping/ kinesiotape for hip and shoulder joint support • It is forbidden to pull the involved limb while handling the patient. • It is forbidden to involve members while handling the patient. 59 Family Health Development Division • Ministry of Health Malaysia Bill Complications Precautions Contraindications 3.3 Contracture and Spasticity • Support the joint part of the involved limb while doing mobilization exercise/passive exercise.• It is forbidden to do mobilization exercise/passive exercise beyond the existing joint range of motion. 61 Family Health Development Division • Ministry of Health Malaysia CHAPTER 5 Work Services 62 Stroke Patient Care Manual at the Primary Health Care Level | INTRODUCTION Stroke can cause patients to lose abilities including cognitive / perceptual, sensorimotor, occupational and leisure functions. This will cause the patient to experience problems in carrying out activities of daily life. Patients are also exposed to secondary complications such as contractures, pressure sores, deformities, infections and others that have implications for quality of life. Functional Rehabilitation for stroke patients can contribute to efforts to restore functionality to an optimal level and improve the patient's quality of life. | OBJECTIVES • Patients can regain optimal functional levels and independence in terms of motor, daily life activities, work, leisure, spiritual, cognitive / perception and psychosocial. • The burden of patient care by family / caregivers can be reduced. • Secondary complications (such as pressure sores, contractures, deformities and infections) of patients can be prevented or minimized. • Improve the quality of life of stroke patients. | FUNCTIONAL SERVICE PROGRAM STAGES • Assessment and retraining of physical, perceptual and cognitive/ memory functionality. • Education and training for patients and caregivers. • Consultation and recommendations for the use of appropriate aids. • Assessment of the home environment, recommendations for appropriate modifications and fall prevention. •

Assessment and training of activities of daily living. • Wheelchair assessment and training. | THE PHASES OF CARE FOR STROKE PATIENTS ASPECT OF FUNCTIONAL RECOVERY 1. Activities of Daily Living (ADL - Activities of Daily Living) Purpose - To provide understanding, knowledge and basic skills in handling stroke patients who experience problems in daily life activities. Evaluation - Refer to the basic evaluation form ADL (Modified Barthel Index) Refer to Appendix XXII AND XXIV. 1.1. Personal hygiene Physical and cognitive functional disorders in stroke patients that cause personal hygiene care activities to be affected. Among the problems that are often encountered are difficulties in cleaning the face, brushing teeth, shaving, cutting nails, self-care activities and others. This is to ensure a neat and appropriate appearance. 63 Family Health Development Division • Ministry of Health Malaysia • Training the functionality of weak members. • Teach appropriate positions. • Equipment modification. • Using strong members to help weak members. • Using an electric shaver. • A simple hairstyle. • Using hand helper/reacher equipment, enlarged handle, big mirror. 1.2. Bathing Ensure that activities in the bathroom can be done safely and perfectly. Intervention: • Train the functionality of the members involved. • Teach appropriate positions. • Equipment and bathroom renovation. • Using strong members to help weak members. • Using a shower chair. • Installing side handles (Grab rail). • Placing non-slip mats on the entire floor. • Using fountain water, long-handled sponge, slip in sponge, liquid soap (shower liquid/gel). ADAPTATION OF PERSONAL CARE EQUIPMENT 64 Stroke Patient Care Manual at Primary Health Care Level INTRODUCTION 1.3. Eating/Drinking (Feeding) Disruption of physical and cognitive functioning in stroke patients that causes activity during eating to be affected. Among the problems that are often encountered are taking food, holding cutlery and feeding food. Intervention – train the functionality of the hands: • Straighten the body posture, put the weak hand on the table and the weak leg should be supported with the table leg (Refer to the picture of the position while eating). • Teach appropriate positions. • Modify eating utensils

(appropriate adaptations will be made by the Rehabilitation Officer/Occupational Medicine Therapist, if not at the Health Clinic, the patient can be referred to the Rehabilitation Officer/Occupational Medicine Rehabilitation Officer at the nearest hospital). • Enlarge the handles of spoons, forks, knives. • Using a plate guard to prevent food from spilling. • Using a non-slip mat under the plate to prevent the plate from moving. • Cut food into small pieces. • Establish mealtime scheduling to train regular mealtimes. BATHROOM MODIFICATION 65 Family Health Development Division • Ministry of Health Malaysia PLATE GUARD NON-SLIP POSITION WHILE EATING Plate guard to help patients take food and prevent food from coming off the plate while eating. Non-slip mat to prevent the plate from moving during eating activities. The position during eating where the hand is placed on the table and the leg involved is supported by the table leg. The normal hand holds the utensils. 66 Stroke Patient Care Manual (Stroke) At Primary Health Care CUP WITH HOLDER AND BEVERAGE SUCTION MODIFIED HOLDER SPOON AND FORK ADAPTATION Non-slip mat to prevent the plate from moving during eating activities. Modification of equipment is made to make it easier for patients to do drinking activities independently. Modification of equipment is made to make it easier for patients to do eating activities independently. 67 Family Health Development Division • Ministry of Health Malaysia 1.4. Activities in the toilet (Toileting) Ensure that activities in the toilet can be done safely and perfectly. Intervention: • Train the functionality of the weak member. • Teach appropriate positions. • Renovation of equipment and toilets. • Using strong members to help weak members. • Doing activities in an appropriate way. • Using a sitting toilet, commode chair. • Installing the side handle (grab rail). • Laying non-slip mats. • Using toilet tissue, pipe rubber that is easy to reach and use • Cleaning for bedridden patients - use moist tissue (if possible containing alcohol/ antiseptic) or toilet tissue and a water spray bottle. Make sure the washed part is dried, for example use a 'Good Morning' towel and others. Non-slip mat to prevent plates from moving during

eating activities. GRAB RAIL COMMODE CHAIR 68 Stroke Patient Care Manual (Stroke) At Primary Health Care Level 1.5. Going up/down the stairs (Stairs) Experiencing problems in going up/down the stairs. Intervention: • Training using ladder 1.6. Clothing (Dressing) Experiencing problems in the process of putting on and taking off clothes such as taking, putting on, taking off and neatness of clothes. Intervention: • Train the functionality of the weak member. • Teach the correct position when dressing and undressing. • Modifications to clothing. • Using strong members to help weak members. • Putting on and pulling pants in a lying position or leaning to the left and right. • If standing, use more width to pull up the pants. • Modification of clothing by using velcro, zips, buttons and straps to facilitate independent dressing and undressing. • Using hand helper/reacher, shoe horn, stocking aids. The end of the stairs is marked for safetyStair climbing seat 69 Family Health Development Division • Ministry of Health Malaysia a) Place the shirt on the thigh/table, the collar side of the shirt pointing upwards a) Open the shirt button and hold the back of the shirt collar with a strong hand. d) Insert your hand strongly into the sleeve.b) Put your weak hand into the sleeve and pull the sleeve to shoulder level b) Bend your head while pulling the shirt collar out of your head.e) Button the shirt starting from the bottom button up and fix the shirt so that it is neat. c) Pull the shirt collar towards the back of the strong shoulder. c) Remove the strong hand from the shirt sleeve then remove the shirt sleeve from the weak hand using the strong hand. Steps to put on a shirt: Steps to put on a shirt: 70 Stroke Patient Care Manual At Primary Health Care Level a) Cross your legs weak on strong legs. Put the pants on the weak leg.b) Put the strong leg into the pants leg. Pull the pants up to pass the knee level. c) If your body balance is good, you can zip/button the pants while standing. If not, zip / button the pants sitting down. Steps to put on pants: Steps to remove pants: • Sit on a chair / by the bed. • Open the buttons and zips of the pants with strong hands. • Lower the pants to hip level as much as possible. • Stand alone / with help. Let the pants fall from the hips to the legs. • Sit back on the chair / on the

side of the bed. • Remove the strong leg from the trouser leg. • Cross the weak leg over the strong leg and remove the pants. • Dressing with help. • Tilting the patient's body to insert the hand into the sleeve. • Put on clothes. • Lay the patient on his side to wear one arm. • Button up and tidy the patient's clothes. Putting on the pants with help: • Bend the patient's legs and put the pants on. The patient can help by raising the back. • This technique can also be done by leaning the patient to the side. Adaptation tools and materials that can help to put on clothes: • Big buttons • Velcro • Button hook • Zipper holder 71 Family Health Development Division • Ministry of Health Malaysia Velcro – makes hand manipulation easier. Button hook – helps insert buttons using only one hand Zipper holder – makes it easier to hold the zipper. 1.7 Control of small and large bowel movements (Bowel & Blader Control) Among the problems in the control of small and large bowel movement: • Patients who are not independent in bladder management, unable to hold, or who wear catheters / Patients cannot control bowel movements . • The patient is unable to hold urine but can help with the application of external and internal devices / The patient needs help to be in a suitable position and also techniques that encourage the movement of defecation. • The patient is usually dry during the day but not at night and the patient can perform appropriate positions but cannot use simple techniques or clean himself without assistance and frequently urinate / defecate involuntarily. Help is needed to use incontinence aids such as pads and others. • The patient is usually dry during the day or night but occasionally urinates involuntarily or needs a little help to use an assistive device / The patient needs supervision with the use of suppositories or enemas and occasionally defecates involuntarily. Interventions: • Can't be fully independent (functional) - colostomy bag, urine bag, diapers can be used. • Bladder control works - if there is no urine pan, adaptations are easily obtained such as mineral bottles (for men) and basins / bowls (for women). • Bowel control is working - recommended assistive devices for example using a portable float (inflatable toilet

pan). 72 Stroke Patient Care Manual at the Primary Health Care Level USE OF TOOLS FOR CONTROL OF SMALL / LARGE WATER Adaptation for defecation Urinal Use of Urinal 1.8. Transfer activities from the chair/bed (Chair/bed transfer) Transfer activities of stroke patients are important to help them carry out daily activities and other functional activities independently. This transfer activity can also help patients go out to do leisure and social activities in the community. The following are the problems faced by patients: • Can't perform a transplant. Two people are required to move the patient with or without the use of mechanical devices. • Able to perform activities with maximum assistance in all aspects of transfer with one person's assistance required. • Observation from another person is required as a confidence measure for the patient or as surveillance for patient safety. Intervention : • Train patients and caregivers to carry out transfer activities correctly and safely to carry out daily activities. • An example is transfer from a wheelchair to a toilet 73 Family Health Development Division • Ministry of Health Malaysia 1.9. Ambulation (Ambulation) Ambulation problems among stroke patients will cause functional difficulties in carrying out activities of daily living (ADL), leisure and work. These can be categorized as follows: • Not being independent in ambulation. • Needs one or more assistants during ambulation. • Assistance is required when taking assistive devices and/or manipulating assistive devices. Someone is needed to offer help. • The patient is able to ambulate independently but cannot walk 50 meters without assistance, or supervision is required for the patient's confidence or safety in hazardous situations. HELP TOOLS FOR TRANSFER ACTIVITIES TRANSFER ACTIVITIES OF STROKE PATIENTS HELP IN ACTIVITIES IN THE COMMUNITY Bed rail Ladder rope Transfer board 74 Stroke Patient Care Manual (Stroke) At Primary Health Care Level 1.10. Use of a wheelchair (Wheelchair) • Not being independent in wheelchair ambulation. • The patient can ambulate short distances on a flat surface, but assistance is required for all steps of wheelchair management. • Someone's presence is necessary to assist the patient and

constant assistance is required to manipulate the chair to the table. • The patient is able to move for a reasonable period of time on a walking surface. Minimal assistance may still be required in a narrow corner or to pass a curb with a height of 100 mm. Intervention :• Selecting and training patients and caregivers to use appropriate aids to carry out the functional activities of ambulation. • For example, training patients and caregivers to use walking frames, quadripods/tripods, etc. Intervention: • Select and train patients and caregivers to use appropriate aids to carry out functional ambulation activities. 75 Family Health Development Division • Ministry of Health Malaysia 2. Instrumental Activities of Daily Living (IADL - Instrumental Activities of Daily Living) These are daily activities that are more complex and require higher skills that involve physical interaction and social environment. Among them: • Domestic activities such as preparing food, washing and ironing clothes etc. • House management such as tidying and cleaning the house etc. • Use of vehicles for mobility in the community whether using own vehicles or public vehicles. • Money management such as shopping, paying bills, bank affairs etc. • Medication intake • Communication activities such as telephone use, computer correspondence etc. • Assessment – refer to the Instrumental Activity of Daily Living (IADL) form – Refer to Appendix XXIV. 3. Leisure Activities Leisure activities are important to motivate and fill free time in a quality way. There are two main components which are: • Exploration of Leisure Activities - to identify interests, skills and provide options for suitable leisure activities. • Involvement in leisure activities - to plan and participate in appropriate leisure activities. In addition, patients need to balance between leisure activities, daily life activities and work by using available equipment and resources. 4. Physical Functional Activity, Perception And Cognitive/ Memory 4.1. Physical Functionality Brief hand exercises performed by stroke patients using non-involved hands to obtain normal muscle tone and prevent complications such as 'contracture'. Start the activity by moving the large upper limb joints / close to the body. All movements must be done: • Together • Slowly • Repetitively.

Make sure the patient carries out activities without signs of pain or fatigue. If there are signs of excessive pain please stop the activity and refer to the Medical Officer or Rehabilitation Officer/Occupational Medical Therapist. 76 Stroke Patient Care Manual at the Primary Health Care Level Functional activity is encouraged every time after carrying out the following exercise: 'Self Help Arm Raise' A strong limb helps the limb

a weak to get shoulder movement. This is preparatory training for functional activities such as putting on clothes, brushing hair and washing the face. Up down In out Out to the side • Close the elbows to the body, grasp the weak hand with the strong hand (make sure the thumb of the weak hand is at the top) • Turn as in the diagram • This exercise is a preparation for the functional activities of hand manipulation and dexterity • For example such as holding a spoon, brushing teeth, buttoning a shirt and others. Stretch the weak wrist up and down using the strong hand Bring both palms together push left and right to get wrist movement 77 Family Health Development Division • Ministry of Health Malaysia • While sitting straighten your elbows Shift your body weight from left to right repeatedly . If the elbow is unstable, support it with the hands that are not involved • This exercise is preparation for sitting activities while carrying out activities of daily life such as sitting while eating etc. Pressure is given to certain joints in the upper limbs by using the stroke patient's own body weight to get normal muscle tone • While standing, place your hands on the table in front of you with your elbows in a straight position. • Shift your body weight from front to back repeatedly. If the elbow is unstable, support it with the hand that is not involved • This exercise prepares for standing activities while carrying out activities of daily life such as bathing and others. 78 Stroke Patient Care Manual At Primary Health Care Level Raise both hands as high as they can then touch the shoulders again While sitting, place your hands on the table in front of you with your elbows in a straight position. Clasp and lie

down on both hands. 4.2. Active Exercise When the muscle tone of the affected part of the stroke patient recovers and begins to show movement, active exercise can be started. This exercise is a preparation for standing activities while carrying out activities of daily life such as putting on/undressing etc. While holding hands, move the wrists: -up / down -left / right Move the thumb close to the index finger and open it again Touch the thumb to the finger little finger like in the picture and open it again. 79 Family Health Development Division • Ministry of Health Malaysia Bend the radius as in the picture, hold for five seconds, straighten the radius again. Place the palm of your hand on a piece of paper and crumple the paper.Bend one finger while keeping the other fingers straight. Do it for the other fingers (for the little finger allow the ring finger to follow the same) 4.3. Resistance activity ('Resisted Activity') Resistance exercise is carried out by providing obstacles or using strong hands to provide resistance to weak hands to strengthen muscles. This training is preparation for carrying out activities of daily life, work and leisure, especially those involving manipulation and fine motor coordination. 4.4. Activities to increase hand strength The use of equipment according to the patient's ability level to increase hand muscle strength and further improve hand functionality. 80 Stroke Patient Care Manual (Stroke) At Primary Health Care Level ACTIVITIES TRANSFER STROKE PATIENTS HELP IN ACTIVITIES IN THE COMMUNITY USE OF RUBBER OR NET USE OF HAND HELPER, HAND EXERCISER OR DIGIFLEX 81 Family Health Development Division • Ministry of Health Malaysia REHABILITATION ACTIVITY ISSUES 4.5. Perception, cognitive and memory activities Purpose: Improve function or reduce cognitive impairment. Assessment – refer to the Mini Mental State Examination (MMSE) assessment form. Refer to Appendix XXV. Intervention – training cognitive functionality: Refer to Appendix XXVI. • Memory impairment • Intellect • Agnosia- problems in sensory perception 5. Assessment of the Home Environment, Recommendations for Appropriate Modifications and Fall Prevention 5.1 The evaluation and recommendations for modifications carried out are

to: • Identify circulation obstacles found at home • Make it easier for the patient to move with alone at home so that they can be independent in carrying out daily life activities safely • Assess the patient's functional level with the environment at home and problems that prevent the patient from being independent. • Make it easier for caregivers to provide assistance to bedridden patients. • Avoiding the risk of falling at home. • Give recommendations for modifications to ensure that the patient's movement path is free of obstacles such as in the living room, bathroom, kitchen and bedroom. For example: No wires or curbs (curbs that block the way to the bathroom. • Ensure the structure of furniture and equipment is orderly and easy to reach. a) Memory impairment b) Intellect c) Agnosia- problems in sensory perception • Games such as checkers, congkak, mahjung and old music can bring back old memories. • Show old photographs and encourage the client to identify relatives, places and events in the photographs. • Keep a calendar and encourage the client to tear / mark the calendar every day. • Have a clearly numbered clock, placed at eye level for time orientation. • Provide picture cards to facilitate communication. • Exercise for sensory stimulation. • For example : o Touch : Prepare materials with different textures, shapes, temperatures. o Smell: Identify the smells of coffee, pepper, fragrance o Sound: Sounds such as birds chirping, the voices of relatives o Visual: art therapy such as painting, making sculptures o If there are physical problems, it is necessary to have hearing and vision aids . 82 Stroke Patient Care Manual at the Primary Health Care Level EQUIPMENT ADAPTATION • Isolate damaged/unstable furniture to avoid the risk of falling. • Suggestions for modification by using aids and adaptations such as the use of non-slip mats and grab bars in the toilet. • Ensure sufficient lighting levels to carry out daily activities safely 5.2. Assistive Tools and Equipment Adaptation The use of assistive tools and equipment adaptation is to train the patient to use the normal one-handed technique (one handed technique): • Help and facilitate the patient to carry out daily life activities, work and leisure activities. • Reduce limitations or deterioration in the

members involved. • Increase the patient's ability to perform daily activities perfectly towards independent living. Intervention: • Suggested aids according to the patient's needs such as walking frame, button hook, sock aid and others. • Suggested adaptation of equipment according to patient needs such as Long handle equipment, velcro button, Palmar pocket and others. • Splints – for example resting hand splints, antispacity splints and ankle foot orthoses (AFO). Modified toothbrush holder Buttoning hook Angled comb 83 Family Health Development Division • Ministry of Health Malaysia TRAINING PATIENTS TO USE A NORMAL SIDE MEMBER (ONE HANDED TECHNIQUE) Using long handle equipment. Wearing a shirt using Button hook Nail clippers 85 Family Health Development Division • Ministry of Health Malaysia CHAPTER 6 Service Ter Communication 86 Stroke Patient Care Manual At Primary Health Care Level | INTRODUCTION Communication is the process of transferring information from one individual to another individual or group of individuals. It is a process of meaningful interaction that can produce understanding between the speaker and receiver. Messages are received and sent when we interact with other people and this is where communication happens every day. Messages can be received in various forms, namely through: • verbal communication, for example: the speech we hear; • non-verbal communication eg.: gestures, drawings, writing, gestures and symbols and others. Communication problems occur when individuals have difficulty sending, receiving, processing and understanding verbal, non-verbal or visual messages. There can be inefficiencies when receiving messages and/or understanding, and/or delivering messages. The following are the types of communication problems among stroke patients: a) Aphasia Language problems that cause difficulty in understanding and producing speech. Two important aspects in language are: b) Dysarthria Speech problems caused by muscle weakness or failure of muscles to coordinate structures (eg breathing, voice, articulation) that produce speech sounds. This condition causes the rate and clarity of speech to be disturbed. c) Apraxia The problem of organizing and

controlling the mechanism that produces speech sounds causes the patient to fail to pronounce words accurately. Language Comprehension Language Production The received language must be translated, understood and stored. Communication will take over once the message is remembered. Language can be produced and communicated in many forms. For example: • oral communication example. speech • non-verbal communication eg. body movements, pictures, writing, gestures 87 Family Health Development Division • Ministry of Health Malaysia | OBJECTIVES • Provide basic information to Nurses / Assistant Medical Officers (Paramedics) about ways to identify stroke patients who have communication problems. • Provide guidance to Nurses / Assistant Medical Officers (Paramedics) for language and speech rehabilitation at an early stage. • Identify the patient's condition that requires re-referral to the Medical Rehabilitation Officer (Speech) EQUIPMENT ADAPTATION Screen Patients by Paramedics/ Refer by the Medical Rehabilitation Officer (Speech) using • Speech Screening Form For Stroke Patients (Refer to Appendix XXVIII) • Language Screening Form For Stroke Patients (Refer to Appendix XXIX) Using the Manual (Give Advanced Training after the treatment session) Second Screening (Conducted by the Paramedic using the Screening Form above) Using the Manual (Give Advanced Training after the treatment session) Third Screening (Conducted by the Paramedic using the Patient Progress Checklist Stroke (Refer to Appendix XXX) Rehabilitate Family Physician / Medical Officer Refer to Medical Rehabilitation Officer (Speech) DiscajYesNo 88 Stroke Patient Care Manual At Primary Health Care Level TREATMENT FLOW CHART OF SPEECH PROBLEMS (PHASIA) AMONG STROKE PATIENTS Aphasia Problems (Smooth) /Unfluent Comprehension Performance Good Good Poor Treatment • Identify daily objects and actions • Follow simple instructions • Respond to yes/no questions Treatment • Name objects and actions • Produce simple sentences • Alternative communication (PCS, Signals) Weak Recover Discharge No Treatment Referral Family Physician/ Medical Officer Refer to Medical Rehabilitation Officer (Speech) Yes No 89 Family Health

Development Division • Ministry of Health Malaysia TREATMENT FLOWCHART OF SPEECH PROBLEMS (DYSATRIA & APRAXIA) AMONG STROKE PATIENTS Aphasia problem (Smooth/Smooth Comprehension Output Good Good Weak Weak No Need Treatment Breathing- Voice production Articulation (Pronunciation) Oro- Motor Treatment • Repeating vocal sounds • Repeating consonant sounds • Repeating syllabic verbs Recover Discaj Refer to Family Physician/Medical Officer Refer to Medical Rehabilitation Officer (Speech) No Yes 90 Stroke Patient Care Manual) At the Primary Health Care Level SPEECH, LANGUAGE AND SWALLOWING REHABILITATION PROGRAM Part No. Oro Motor Procedure 1.1 1.2 1.3 Lips Teeth and Mouth Tongue) Close your lips and move your mouth to the right and left b) Move your lips in a circle 5 times c) Pucker your lips and say "ooo" and flatten your lips and say "eeee" d). Close your lips, puff out your cheeks 5 times. Always keep your teeth and mouth clean (oral hygiene) by brushing your teeth 3 times a day. Tongue to the left a) Place the tongue depressor along the right side of the tongue. b) At the same time, push the tongue to the tongue depressor. c) Hold for 4-5 seconds. d) Repeat 3 times. Tongue to the right a) Place the tongue depressor along the left side of the tongue. b) At the same time, push the tongue to the tongue depressor c) Hold for 4-5 seconds d) Repeat 3 times. 91 Family Health Development Division • Ministry of Health Malaysia Bill Oro Motor Division Procedure Pushing back the tip of the tongue a) Place the tongue depressor on the tip of the tongue and push the tongue depressor to the tip of the tongue. b) At the same time, ask the patient to push the tongue depressor with the tip of the tongue c) Hold for 4-5 seconds. d) Repeat for 3 times. a) Move the tip of the tongue around the lips in a large circle. b) Move the tip of the tongue from right and left 5 times c) Take out (stick out) the tongue and pull the tongue back into the mouth 5 times. d) Raise and lower the tip of the tongue 5 times. 1.4 Cheeks a) Use your fingertips / toothbrush to massage your cheeks with moderate pressure 5 times b) Use your fingertips / toothbrush to "tap" your cheeks with moderate pressure 5

times. c) Use your fist to "flick" 5 times. d) Use your fingertips to gently massage in a circular motion 5 times. 92 Stroke Patient Care Manual at the Primary Health Care Level 2. Language Comprehension Skills Training Increases Understanding of Body Parts and Daily Objects 3. Identifying Family Members and Surrounding People Bill Goal Equipment Procedure 3.1 Enable the patient to identify family members and surrounding people Pictures of members family Pictures of people around a) Provide some pictures of family members or people around b) Ask the patient to respond by pointing or moving the eyes to the picture c) The examiner will ask "Show the picture of the child" d) If the patient cannot point to the picture, give help by pointing to the picture and asking the patient to imitate the behavior e) If the patient still fails, hold the patient's hand and help point to the picture. Bill Objective Equipment Procedure 2.1 2.2 Enable the patient to identify everyday objects. Allow the patient to identify body parts • Comb • Cup • Spoon • Shirt Patient's body parts a) Prepare some everyday objects and place in front of the patient b) Give simple instructions, for example "For me _____" (object) c) If the patient fails to respond which is correct, help the patient to choose the object d) Repeat the above steps until the patient can identify the object. e) Use another object if the patient already understands the object above. a) Give simple instructions, for example "Show the eyes" to the patient. b) If the patient fails to point to the correct limb, help the patient to point to that limb. c) Repeat the above steps until the patient can understand the limb. 93 Family Health Development Division • Ministry of Health Malaysia 4. Improve Understanding of Yes / No Questions 5. Improve Understanding of Simple Instructions Bill Bill Goal Goal Equipment Equipment Procedure Procedure 4.1 5.1 Enable patients to respond to Yes / no questions Enable patients to obey simple instructions None None a) Prepare some questions Yes / no b) For example • "Do we drink with cups" • "Are you wearing a red shirt?" • "Do cows eat grass" c) The examiner asks the patient a question and waits for a response

from the patient. d) If the patient does not respond, give an answer and ask the patient to copy the answer. e) Repeat the practice of these simple questions until the patient can respond correctly spontaneously. a) Prepare some simple instructions. b) For example : • Show the door • Raise your hand • Close your eyes • Open your mouth c) The tester gives instructions and asks the patient to follow the instructions d) If the patient cannot understand the instructions, repeat the instructions and show how to do the instructions. e) If the patient still fails, help the patient do the instructions with physical assistance. 94 Stroke Patient Care Manual (Stroke) At Primary Health Care Level 6. Improving Action Understanding 7. Language Production Skills Training (Oral) Bill Bill Goal Goal Equipment Equipment Procedure Procedure 6.1 7.1 Enable the patient to understand the verb Enable the patient to answer simple questions orally Picture actions such as: • Eating • Drinking • Sleeping • Sitting None) Prepare some pictures of actions. b) Arrange the pictures in front of the patient c) Give instructions as follows: "Show the picture of the person eating" d) If the patient cannot show the correct picture, help the patient to show the correct picture. e) Repeat the above steps for the other 1 picture. a) Prepare some simple questions b) Examples of questions are: What is your name? what do you want to eat What day is today? c) The examiner asks questions and gives the patient time to answer spontaneously. d) If the patient cannot answer the question, the experimenter will ask the question again and answer on behalf of the patient. e) The patient is asked to repeat the answer earlier. f) Do this exercise repeatedly until the patient can answer the questions spontaneously. 95 Family Health Development Division • Ministry of Health Malaysia 8. Saying Automatic Speech 9. Object Naming Bill Bill Goal Goal Equipment Equipment Procedure Procedure 8.1 9.1 Improving spontaneous speech production Allowing patients to name objects to help patients express their wishes Examples of automatic speech are: • Count 1-20 • The name of the day of the week, . • Name of the month of the year Picture / simple object: • Shirt • Rice • Water • Shoes • Medicine a) Ask the patient to speak

automatically by giving the command "Count from 1 to 20" or "Name the day of the week" b) Wait for a response patient c) If the patient does not give any response, the tester should say the automatic speech and ask the patient to imitate the speech d) Repeat this exercise until the patient can speak the automatic speech spontaneously. a) Provide some objects or pictures of objects b) Ask the patient to name the objects shown one by one. c) If the patient fails to name the picture, help the patient by giving help with the front syllable of the word. For example, the target word "baju", say "ba". d) If the patient still fails to name the picture, ask the patient to imitate the target word, for example "shirt" e) If the patient still fails to imitate the picture, show the position of the lips and tongue to help him imitate. f) Repeat the above steps with other object pictures. 96 Stroke Patient Care Manual at Primary Health Care Level 10. Increasing Sentence Length 11. Language Production Skills (Non-Verbal) Bill Bill Goal Goal Equipment Equipment Procedure Procedure 10.1 10.1 Enable the patient to speak two to three word sentences spontaneously Enable the patient to speak sentences of two to three words spontaneously Pictures of actions such as: • Eating • Drinking • Sleeping • Sitting Pictures of actions such as: • Eating • Drinking • Sleeping • Sitting) Prepare several pictures of actions b) Give an example of the desired target sentence; for example "This man eats. c) Ask the patient to make a sentence containing two to three words that match the picture shown. d) If the patient can only say one word, help the patient to say two words by giving example sentences. e) If the patient can only say two words, help the patient to say three words by giving example sentences. a) Prepare several pictures of the act b) Give an example of the desired target sentence; for example "This man eats. c) Ask the patient to make a sentence containing two to three words that match the picture shown. d) If the patient can only say one word, help the patient to say two words by giving example sentences. e) If the patient can only say two words, help the patient to say three words by giving example sentences. (If the

patient is unable to make hand gestures more clearly, please refer to the Picture Communication System @ Picture Communication Symbol). 97 Family Health Development Division • Ministry of Health Malaysia 12. Picture Communication Symbols (Picture Communication Symbols @ PCS) Bill Goal Equipment Procedure 12.1 Patients can express their wishes and feelings using PCS Objects and pictures a) Get some food and objects known to the patient such as bread and brush b) Prepare pictures that match the objects and place them in the square in front of the patient (Refer to the picture on the side) c) Real objects such as combs and bread are on the tester's side while the pictures representing the real objects are on the patient's side . d) If the patient wants the bread that is on the tester's side, ask the patient to point to the picture of the bread in front of him and then the tester hands the bread to the patient. e) If the patient cannot point to the picture, give physical help to the patient. f) Repeat the above exercise over and over until the patient can point to the desired picture spontaneously. g) Add and change other pictures that are suitable for the patient. 99 Family Health Development Division • Ministry of Health Malaysia CHAPTER 7 Psychological Health Services 100 Stroke Patient Care Manual at the Primary Health Care Level | INTRODUCTION Counseling in stroke rehabilitation is very important in helping patients to continue a better life. A stroke attack usually has a great impact on themselves and their family members. The physical, psychological, emotional and social changes of a stroke patient will require a major adjustment in one's life. Emotional changes, personality, cognitive disability of stroke patients should be emphasized by caregivers and health personnel. Stroke patients will experience symptoms such as depression, frustration and so on. As health personnel, we have a role to identify the problems and needs of stroke patients by having the qualities of empathy, sincerity and being able to communicate intelligently. This module should be conducted by a Registered Counsellor, certified Psychological Officer or specially trained health personnel. | OBJECTIVES • Help health personnel provide effective

assistance services based on patient needs using available resources • Maximize psychological function and social function to enable patients to live more productively and confidently • Help and provide encouragement to stroke patients to adapt to community life | EMOTIONAL ISSUES AND PSYCHOLOGICAL EFFECTS ON STROKE PATIENTS • Usually stroke patients will experience problems from cognitive aspects such as lack of concentration, poor memory, lack of decision-making ability, lack of understanding and loss of ability to plan and learn. • Stroke patients often feel tired quickly, emotional instability, and have difficulty dealing with family members, as well as people around them. • Elisabeth Kubler-Ross has articulated 5 stages in grief. There are 5 emotional stages that stroke patients go through. 101 Family Health Development Division • Ministry of Health Malaysia (Each individual will go through this phase differently and not necessarily in order) | PHASES OF CARE 1. Denial (Denial) Stroke patients experience shock, difficulty accepting facts and denying what happened to them. This may be the first reaction when a person has a stroke. A stroke patient will experience "uncertainty" that is not knowing what has happened to him and what will happen. At this stage, some family members of the patient may also not accept the reality and still think this should not happen to them. They could not believe this incident had happened. Identify Levels of Denial (Denial) • Give patients an opportunity to express their feelings. • Shows sincere acceptance and encourages patients to share their feelings. • Give honest answers to the patient's questions about his illness. 102 Stroke Patient Care Manual at the Primary Health Care Level 2. Anger – as a result of being surprised, feelings of anger will exist. The patient will express anger such as "I can't believe all this has happened to me, it's unfair". Identify Levels of Anger • Allow and encourage the patient to express anger verbally, without provoking anger. • It should be explained that the anger that is done is not actually directed at them. • Allow the patient to cry and encourage the patient to discuss his anger. • Family members can help the patient by: o Listening

attentively / Listening actively o Encourage the patient to talk about his fear or guilt o When the patient always says "if" or "if ...." inform patients that health personnel can only help provide services according to expertise based on established procedures. o Explore and explain the cause of his guilt and fear. 3. Bargaining In the supply phase, the stroke patient will start bargaining with himself, God or with the environment, ie the stroke patient hopes that he will recover. For example, the patient expects a miracle to happen by stating "Oh! God, if I could use my hands again, I would do a good job for the rest of my life.”. 4. Depression (Depression) Patients will experience feelings of frustration, anger, and depression as a result of their inability to be like others. They cannot accept the change in themselves and feel guilty due to the disability. Identify the Level of Depression (Depression) • Help the patient identify guilt and fear by observing the patient's behavior and exploring their feelings • Help the patient avoid any act of self-harm • Appreciate the patient's feelings • Listen with empathy and identify negative thoughts • Help the patient gain common sense and positive thinking • Assess the level of symptoms of depression, anxiety and stress using the PHQ 9 screening form (Refer to Appendix XXXI) 103 Family Health Development Division • Ministry of Health Malaysia 5. Acceptance Stroke patients will be in this phase when they are in a state of mind that be rational and accept what has happened to yourself. In this phase the recovery process can be carried out well and the patient's motivation will increase. Identify the Level of Acceptance (Acceptance) • Help the patient accept the inevitable loss: • Help the family visit the patient regularly • Provide information about the patient to family members The following are the symptoms commonly experienced by Stroke patients: 5.1. Depression • Few stroke patients will experience depression • Depression is a common reaction after a stroke. • Emotional changes occur due to changes in the way of life due to stroke • Here are the signs of depression: 5.1.1 Signs of depression include: Sadness, worry, irritability, restlessness, guilt, feeling worthless Loss of interest

in activities that favorite Changes in sleeping habits (Difficulty falling asleep, sleep disturbances or excessive sleeping) Restless and lethargic behavior Changes in eating habits; (Increased or decreased appetite or can be seen with weight gain and loss) Persistent headache, digestive problems (eg: stomach pain, nausea, constipation or diarrhea), 104 Stroke Care Manual At Stage Primary Health Care 5.1.2. Treatment If you have two or more of the above symptoms for more than two weeks, please contact your doctor. Depression can be prevented through early detection by seeking the services of trained professionals such as Counselors, Psychological Officers

, Psychiatrist, taking anti-depressant drugs, or both. a) Continuous and Uncontrollable Laughing and Crying • Stroke patients cry more easily and are sensitive. There are also those who consider themselves embarrassing and burdensome • Crying is a way for patients to express their feelings which are easily touched and sensitive to what is happening around them • Some stroke patients also often laugh uncontrollably in inappropriate situations. (laughing when sad) • Frustration (Frustration) This feeling exists due to the difficulty of stroke patients to complete daily tasks as usual b) Lack of Motivation • Stroke patients will be less motivated due to various factors. One of the factors is extreme fatigue. • Most stroke patients find they will experience rapid fatigue, unable to move actively for the rest of the day. • Stroke patients should recognize the symptoms experienced by their body. • Other factors are depression, fear, difficulty planning and carrying out tasks Difficulty concentrating, remembering or making decisions Feeling tired and lacking energy Having thoughts of suicide or death – if it happens, seek professional help immediately 105 Family Health Development Division • Ministry of Health Malaysia | PART 2 : CAREGIVER FOR STROKE PATIENT (Caregiver for Stroke Patient) • Responsibilities as a stroke patient caregiver require high skills, ability and commitment • Caregivers should be ready to help stroke patients do their daily routine. • One of the main tasks of a stroke patient's caregiver is to help the

stroke patient to become independent. • Caregivers are a resource for stroke patients to maintain a sense of comfort, safety, dignity and confidence. • Caregivers will be enveloped with a sense of responsibility as a caregiver of a stroke patient. This is a normal reaction. • Discuss with professionals who may be able to help The Role of Caregivers of Stroke Patients Can Help in the Recovery Process With : 1. Empathy Stroke patients need time to relearn life skills to live a daily routine. Therefore, caregivers need to be prepared to understand and accept the frustration experienced by stroke patients. Despite the difficulties, you will be able to discover abilities that you did not realize all along. 2. Discuss Have a discussion with doctors, nurses, counselors, social workers, religious leaders or religious support groups, hospitals or stroke support groups or community information centers to get stroke care services in your area. Among the services that can help in the care of stroke patients are: • temporary carers so you can rest • community services • stroke support groups • outpatient services / day care • religious or ethnic support groups. 3. Get involved in the rehabilitation program for stroke patients. Get guidance from therapists, nurses and doctors about ways to recover. Learn the right way to help. 106 Stroke Patient Care Manual at the Primary Health Care Level 4. Getting information from a stroke recovery support group The information can help caregivers know how a stroke can affect the patient and it helps in the patient care process. In addition, you can prepare a set of questions and get the answers you need. One of the roles of a stroke patient caregiver is to help stroke patients increase their self-confidence. Caregivers can help by: • Explaining that the patient is able to be independent with rehabilitation therapy • Involving the stroke patient in your daily conversations. Talk to the patient about a variety of current issues, rather than just talking about himself. • Ensure stroke patients understand the development of their family's activities. Get their views and advice. • Express love, understanding, and respect for the patient • Focus on the present and positive aspects. Don't make comparisons between your current and previous lives.

Caregivers should encourage stroke patients to do activities that they are able to do based on professional advice rather than what they are not currently able to do. • Get involved in a stroke support group. This can help you and the stroke patient share his feelings of anger, sadness, and frustration with a support group member who understands the situation. Caregivers of Stroke Patients (Caregiver) 1. Self-Care • Physical and emotional changes in stroke patients can affect the life of stroke patient caregivers. • Caregivers may experience burnout, frustration, depression, fear and even anger. Caregivers of Stroke Patients Steps in Dealing with Emotional Problems. • Share feelings with those close to you or with other caregivers who are willing to listen • Try to get at least one conversation session every day that is not related to the stroke • Do something that you find enjoyable, such as going for a walk, reading, yoga, tai chi, or listening to soothing music • Update yourself with information about current issues and local news to broaden your horizons • Get help from family members, friends and other agencies and the community. Don't blame yourself if you are unable to be with the patient all the time • Take care of yourself physically such as practicing a healthy lifestyle and getting a balanced diet. • Get spiritual/spiritual support • Undergo regular health screening including Mental Health screening (Healthy Mind Screening-DASS 21 - Refer to Appendix I). 107 Family Health Development Division • Ministry of Health Malaysia 2. Rest Duties as a stroke patient caregiver require a lot of time and energy. But, this does not mean that a caregiver should sacrifice his whole life in the work of caring for the patient. It is important for a caregiver to take adequate rest as this may help both the caregiver and the stroke patient. This is because the patient himself has the space to be independent and the caregiver is able to provide good care after enough rest. Here is a guide to preparing yourself for rest: • Make a plan in advance. o Discuss with your superiors or those involved first before leaving a stroke patient under care for a certain period. Without advance planning, this may make your job of taking over difficult. • List the type of help or assistance you need. o This is

important because if you need a long leave that requires help from another caregiver to replace the task. • Get help from the closest people o Don't feel shy to get help from a neighbor or friend once in a while. They may be happy to help. o Build a good relationship with the assistant who will take over the task of caring for the stroke patient in order to understand your routine and expectations. o Don't worry that the stroke patient will feel isolated without you. Instead, encourage your patient to be more independent. 108 Stroke Patient Care Manual at the Primary Health Care Level | SECTION 3: GUIDELINES FOR HEALTH WORKERS FOR STROKE PATIENT AND FAMILY GUIDANCE SESSIONS 1. Welcoming the presence of stroke patients as prescribed. 2. Provide comfort to stroke patients/ families. 3. Introduce yourself to the stroke patient/ family • Create rapport. (therapeutic relationship) • Accepting the presence of stroke patients unconditionally and sincerely. 4. Help stroke patients who feel unhappy Be friendly and approachable (skills to serve - SOLER) • Listen with empathy (verbal and non-verbal communication). After listening, you can encourage the stroke patient to express the feelings that are stuck in their thoughts using minimal prompting skills, which is by using the words below: o Hmm..... o Aha..... ... o Yes...Yes o Continue ... o Be quiet or listen actively. 109 Family Health Development Division • Ministry of Health Malaysia • Encouraging stroke patients to talk You can show that they understand how stroke patients feel by : For example o You look sad... o You feel hurt... o You now feel angry. I can understand... • Encourage the stroke patient to talk You can show that they understand how the stroke patient feels by : For example o You look sad... o You feel hurt... o You now feel angry. I can understand... • Empathize, respond to the client's emotions If you find that a stroke patient is facing problems, you must: o Help the stroke patient to feel comfortable and understood o Be sensitive to the stroke patient's needs and examine the problems faced o If you find symptoms identified does not stop, you are asked to get a referral to a professional for further advice. | SECTION 4: SEXUAL RELATIONSHIPS Sexual desire is a very personal thing. •

Usually, stroke patients' desire for sexual intercourse does not change either before or after the stroke • However, the physical condition will cause some disturbance and discomfort depending on the injury suffered. • You may not be able to feel parts of your body or have difficulty speaking. Concerns About Involvement in Sexual Relations Feelings of concern are normal for stroke patients. Sexuality is closely related to how you imagine yourself. • If a stroke has changed your physical condition, you may wonder if your partner is still interested. • The patient feels depressed and is not interested in giving or receiving any attention. • All this will create anxiety and subsequently cause you to avoid sexual intercourse 110 Stroke Patient Care Manual at the Primary Health Care Level • Self-involvement in sexual intercourse requires some changes. You and your partner need physical adjustment. • Acceptance of this fact will take time, effort and honest communication. • If you feel uncomfortable discussing sexual feelings with others, get a referral from your doctor to a professional. Tips for Having a Sexual Relationship • Love for a partner can be expressed in many ways, not only through sexual relationships. Hugging, kissing, flirting, massaging and touching can show love and affection. Couples need to wisely diversify different methods to comfort each other's hearts. • Continue life as a person who always takes care of his skills and health to look attractive • Make a plan in advance before having sexual relations. Choose a suitable time when both parties are physically and mentally ready and free from any distractions. • Always think positively. Avoid worrying that you will have a stroke while having sex. This is because, although sexual activity will raise your blood pressure but it will not reach a high level. • Talk and try to calm down together before you start. For example, massage first, listen to soothing music, use pleasant aromatherapy or soak in a bath. • Trying new ways to have sex if you have had a stroke or lost sensation. This adaptation is not easy. But, it is important for your sexual activity to be easier and more comfortable. • Make sure you urinate before engaging in sexual activity. Reduce the intake of liquids such as water, coffee and juice about two hours

before sexual intercourse to reduce the amount of urine in the body. • Some medications given to stroke patients can affect the desire and ability to have sex. Talk to your doctor. Do not stop taking medicines before getting advice from a doctor. 111 Family Health Development Division • Ministry of Health Malaysia CHAPTER 8 Social and Welfare Services 112 Stroke Patient Care Manual at the Primary Health Care Level | INTRODUCTION The Medical Social Work Service at the Health Clinic is to provide psychosocial assistance to stroke patients and their families/caregivers. This psychosocial assistance involves a biopsychosocial assessment that needs to be carried out on stroke patients and/or their relatives by the Medical Social Work Officer (PKSP) before practical assistance interventions and supportive therapy interventions are given. The social work intervention process focuses on three main processes which are case work, multidisciplinary group work and community work. Practical assistance interventions involve aspects of financial assistance (purchase of medical equipment, purchase of medicines, financing the cost of treatment or general assistance), placement in a welfare institution and tracing heirs. Support therapy intervention is an activity or problem-solving process focused on 3 types of intervention, namely consultation services, emotional support and crisis intervention. Stroke patients are one of the target groups for clinical medical social work services in primary health. The purpose of social work intervention is to improve the well-being of stroke patients' lives and help restore their social functionality in the community in accordance with the limits of ability caused by the disease. This manual is a guideline for Medical Social Work Officers at the Health Clinic of the Ministry of Health Malaysia in case management, especially in providing psychosocial assistance to stroke patients. | OBJECTIVES • Meet the needs of stroke patients within a set period to help the treatment, recovery and prevention process. • Help restore the patient's social functionality so that they become more productive, independent and return to the community in line with their ability limits. Main Operating Policy • This manual must be

used and adhered to by Medical Social Work Officers throughout Malaysia in providing psychosocial assistance services to stroke patients at Health Clinics • All case referrals must be made by Specialists/Medical Officers only. • All patients must be registered before services are provided • Responses to referrals must be given within three (3) days / 72 working hours after receiving the referral document. • Stroke patients who need practical (financial) assistance need to be assessed according to the Medical Social Work Service's Socioeconomic Report Guidelines. • Collaborate with various professionals such as Medical Officers, Nurses, Assistant Medical Officers, Rehabilitation Officers / Physiotherapy / Occupational Therapists, Psychological Officers and others in the context of case management. • Patients and referrals must work together to provide supporting documents and information to ensure the psychosocial assistance process can be provided efficiently. • Practical (financial) assistance is only given to stroke patients who are Malaysian citizens. • For Hospitals, Health Institutions and Health Clinics that do not have Medical Social Work Officers, patients should be referred to the Medical Social Work Department at the nearest Hospital or Health Clinic. 113 Family Health Development Division • Ministry of Health Malaysia 1. WORK BIOPSYCHOSOCIAL ASSESSMENT PROCEDURE FLOWCHART Start Receive referral Register case / submit to relevant PKSP Identify case needs Discuss with referrer Make Biopsychosocial assessment Refer to AK1 Determine social diagnosis Determine appropriate intervention Carry out intervention procedure 114 Stroke Patient Care Manual (Stroke) At Primary Health Care Level 1.1. Description of Biopsychosocial Assessment Procedures • Receive referrals from the clinic either manually or electronically referrals and verify the patient's latest treatment. • Register the case in the Patient Information System/ Patient Register Book, open the Medical Social Work Department's patient record and submit it to the responsible Medical Social Work Officer. • Identify the needs of the case according to the reference documents received. If a referral is identified do a biopsychosocial assessment. • Have a discussion

with the referrer (Specialist/Medical Officer) about the disease suffered and identify the patient's needs in more detail. • Do a biopsychosocial assessment to get information related to the patient's physical (biological), psychological and social issues. (Refer to Work Instruction 1) • Determine the Social Diagnosis of the referred case based on the biopsychosocial assessment that has been done. • Determine the appropriate type of psychosocial intervention whether the patient needs practical help or supportive therapy. • Implement psychosocial interventions. Refer to Practical Assistance Intervention Procedures and Supportive Therapy Intervention Procedures. 115 Family Health Development Division • Ministry of Health Malaysia 2. Practical Assistance Intervention Procedure 2.1. Practical Assistance Intervention Flow Chart Start Practical assistance eligibility value Refer to Socioeconomic Assessment Guidelines Give consultation Identify required practical assistance Manage the determined practical assistance Refer to: 1. Financial Assistance SOP Give feedback on practical assistance results to patients/referrals Follow-up Actions Documentation of cases Completion Eligible? 116 Stroke Patient Care Manual at the Primary Health Care Level 2.2. Description of Practical Assistance Intervention Procedures • Make a practical assistance eligibility assessment according to the Assessment Guidelines o Socioeconomic Medical Social Work Services. • If the patient is not eligible to receive practical help, give a consultation explaining why the patient is not eligible and suggest alternatives if any. • If the patient is eligible, PKSP will identify the type of practical assistance required by the patient. • Manage practical assistance that has been identified : • Financial Assistance – Refer to the Financial Assistance SOP • Institutional Placement Assistance – Refer to the Institutional Placement SOP o Tracking Beneficiaries - Refer to SOP Tracking Beneficiaries o Patients may need more than one type of practical assistance at the same time. • Provide feedback on the approval status of practical assistance applications to o patients/referrals from time to time to ensure that the patient's treatment process is not affected. • Make follow-up

actions according to the needs of the social intervention plan that has been o suggested by PKSP and the referrer. • Create case documentation. 117 Family Health Development Division • Ministry of Health Malaysia 3 Supportive Therapy Intervention Work Procedure 3.1. Support Therapy Intervention Flow Chart Start Identify the type of support therapy Implement the support therapy that has been identified Refer to: 1. Crisis Intervention SOP 2. Emotional Support SOP3. Consultation Service SOP Give feedback to the referrer Follow-up Actions Do case documentation End 118 Stroke Patient Care Manual (Stroke) At the Primary Health Care Level 3.2 Support Therapy Intervention Procedure Description • Identify the type of support therapy according to the stroke patient's needs. • Carry out support therapy that has been identified according to relevant work instructions based on Appendix B of the Medical Social Work Service's Socioeconomic Report Guidelines. o Crisis Intervention - Refer to the Crisis Intervention SOP o Emotional Support - Refer to the Emotional Support SOP o Consultation Services - Refer to the Consultation Services SOP. Patients may need more than one type of supportive therapy at the same time. • Inform the referrer about the development and planning of the case • Carry out follow-up actions according to the needs and planning agreed by PKSP for stroke patients. • Conduct case documentation. 4. Work Instructions 4.1 Work Instructions 1: Biopsychosocial Assessment • Fill out the Medical Social Work Service Referral Form (Refer to Appendix XXXII) for permission to obtain information. • Discuss with the Multidisciplinary Team (MDT) to obtain accurate information and explanations related to patient problems including disease diagnosis, disease epidemiology, treatment and disease implications on the social life of stroke patients / families. • Make further investigations if necessary to obtain additional information of the patient by visiting the home, workplace and environment. During this visit, PKSP needs to obtain information based on Appendix XXXII. Methods of conducting home visits in the Socioeconomic Assessment Guidelines. • Complete the Patient's Home Visit Report (Refer to Appendix XXXIII) o Analyze the results of the

investigation to: o Identify the validity of the patient's information o Identify obstacles and limitations in undergoing the treatment process. o Identify other related problems. • Complete all patient information and conduct patient assessment in Aspects : a) Biology o Identify the patient's dysfunction due to the disease they are suffering from. b) Psychology o Make observations and identify if there are psychological problems such as emotional disturbances, stress and the level of coping skills of the patient and his family. c) Social o Economic status of the patient and family. o What work is done o Amount of Income received 119 Family Health Development Division • Ministry of Health Malaysia o Total Expenses – are financial resources sufficient for daily expenses o Expenses for treatment and purchase of medicine d) Other financial resources that support the patient i.e. family contributions , Social Welfare Department Assistance, Zakat, Pension, emergency savings, EPF, SOCSO and others (Refer to Appendix XXXV). e) Social Support Networks o Identify existing social support networks covering family, workplace, community, people who play an important role (significant other) as well as family dynamics. f) Determine the social diagnosis and make an intervention plan. 121 Family Health Development Division • Ministry of Health Malaysia CHAPTER 9 Appendix 122 Stroke Patient Care Manual At Primary Health Care Level APPENDIX I DASS COPY FORM (DASS QUESTIONNAIRE) Step 1 : Please read and write the score that suits you. PART 1 Please read each statement and write a score on the scale that describes how you were LAST WEEK. There is no right or wrong answer. DO NOT spend too much time on any statement.0 = Never at all 1 = Rarely 2 = Often 3= Very Often Q 1.2.3. 4. 5. 6.7. 8.9. 10.11.12.13.14. 15. 16.17.18.I find it difficult to calm down I realize my mouth feels dry I can't seem to experience positive feelings at all I have difficulty breathing (for example, breathing too fast, panting even when not doing physical activity I don't feel motivated to initiate a situation I tend to overreact to a situation I used to shake (eg hands) I feel too anxious I worry about situations that cause me to panic and act stupid I feel hopeless

(Despair) I find I get restless easily I find it difficult to relaxI feel gloomy and sad I can't accept anything that prevents me from continuing what I'm doing I feel almost panicked I'm not enthusiastic at all I feel worthless I'm easily offended Never Rarely Often Very often 123 Family Health Development Division • Ministry of Health Malaysia Q 19. 20 21. TOTAL TOTAL QUESTIONS QUESTIONS ANXIETY DEPRESSION SCORE SCORE SCORE NORMAL MEDIUM SEVERE VERY SEVERE0 - 5 6 - 7 8 - 10 11 - 14 15 +0 - 4 5 - 67 - 8 9 - 10 11 +0 - 78 - 9 10 - 1314 - 17 18 +DEPRESSION (DEPRESSION) WORRY (ANXIETY) PRESSURE (STRESS) S1 S2 S3S6 S4 S5S8 S7 S10S11 S9 S13S12 S15 S16S14 S19 S17S18 S20 21Even though I don't do physical activity , I am aware of my heartbeat (for example, my heartbeat is faster I feel scared for no reason I feel that this life has no meaning anymore Step 2 : Enter the answer score scale in the blank space in Section 2, according to question (S) for each category (Stress, Anxiety and Depression). Step 3 : Total the score scale for each category to find out the level of your mental health status. Refer to the screening score box and translate the total score to find out the level of your mental health status. PART 2 Score Calculation Guide :- Enter the answer score scale for the question (S) of each category. Never Rarely Often Very Often 124 Stroke Patient Care Manual At Primary Health Care Level TEST LEVEL Step 4 : Please fill in the results in part 3 and fill in the Healthy Mind Screening Results form PART 3 Fill in the level of mental health (normal, mild, moderate, severe, or very severe) into the table. RESULTS OF THE DASS TEST Interpretation Normal : A comfortable life Mild : Healthy Moderate : Seek Knowledge about mental health management Severe : Meet and discuss with a Psychological Officer to manage mental health more positively Very severe : Meet and discuss with a Psychological Officer and refer to a psychiatrist, if necessary. STRESS ANXIETY DEPRESSION 125 Family Health Development Division • Ministry of Health Malaysia APPENDIX II COGNITIVE SCREENING FORM (ECAO) ELDERLY COGNITIVE ASSESSMENT QUESTIONNAIRE MEMORY 1. I want you to remember this number. Can you repeat after

me (eg 4517) I shall be testing you again in 10 mins. 2. How old are you? 3. When is your birthday? or In what year were you born? ORIENTATION - INFORMATION 4. What day of the week is today? 5. 6. 7. 8. What is the place called (eg clinic, hospital)? No necessary to give name of place. 9. What is his/her job (eg nurse, doctor)? MEMORY - RECALL 10. Can you recall the number again? SCORE 0-4 Probable cases 5-6 Borderline cases 7> NormalScore 1 for Correct Answer Day Month Year Total 126 Stroke Patient Care Manual at the Primary Health Care Level SORF COPY UNCLEAR 127 Family Health Development Division • Ministry of Health Malaysia DATE MASAPAIN SCORE PATIENT NURSING ACTION ANALGESIC GIVEN TIME SIGNED NAME :..... ..... N :..... .....DATE ADM :..... ..... AGE :..... ..... AD :..... ..... DIAGNOSIS :..... .....APPENDIX IV CHERAS REHABILITATION HOSPITAL PAIN ASSESSMENT CHART NURSING UNIT Left Right Left Right 0 1 2 3 4 51 2 3 4 5 6 7 8 9 10 128 Stroke Patient Care Manual At Primary Health Care Level APPENDIX V CHERAS REHABILITATION HOSPITAL SLEEP CHART NURSING UNIT NAME :..... ..... WARD :..... ..... R/N :..... .... BED NO :..... ..... DATE 8am10am 12n 2pm 4pm 6pm 8pm10pm 12mn 2am 4am 6am TIME - Sleep - No Sleep 129 Family Health Development Division • Ministry of Health Malaysia APPENDIX VI BRADEN SCALE - For Predicting Pressure Sore Risk SEVERE : Total score ≤ 9 MODERATE RISK : Total score 13 - 14 SENSORYPERCEPTIONAbility to respondmeaningfully topressure-relateddiscomfort MOISTURE Degree to whichskin is exposed tomoisture ACTIVITY Degree of physicalactivity MOBILITY Ability to changeand control bodyposition NUTRITION Usual food intakepattern 1NPO : Nothing by mouth.2IV : Intravenously.3TPN : Total parenteral nutrition. 1. COMPLETELYLIMITED- Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of consciousness or sedation OR limited ability to feel pain over

most body surface 1. CONSTANTLY MOIST Degree to which skin is exposed to moisturealmost constantly by perspiration, urine, etc. Dampness is detected every time the patient is moved or turned. 1. BEDFAST - Confined to bed. 1. COMPLETELY IMMOBILE- Does not make evenslight changes in body or extremly position without assistance. 1. VERY POOR - Never eats a complete meal. Rarely eats more than 1/3 of any food offered. Eat 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take liquid dietary supplement, ORis NPO1 and/or maintained on clearliquids or IV2 for more than 5 days. 2. VERY LIMITED - Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness OR has a sensory impairment which limits the ability to feel pain or discomfort over 1/2 of the body. 2. OFTEN MOIST - Skin is often but not always moist. Linen must be changed at least once a shift. 2. CHAIRFAST - Ability to walk severely limited nonexistent. Cannot bear down weight and/or must be assisted into a chair or wheelchair. 2. VERY LIMITED - makes occasional slight changes in body or extremity position but enables to make frequent or significant changes independently. 2. PROBABLY INADEQUATE - Rarely eats a complete meal and generally only eats about 1/2 of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take dietary supplement OR receive less than optimal amount of liquid diet or tube feeding3. SLIGHTLY LIMITED- Responds to verbal commands but cannot always communicate discomfort or need to be turned OR has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities. 3. OCCASIONALLY MOIST - Skin is occasionally moist, requiring an extra linen change approximately once a day. 3. WALKS OCCASIONALLY- Walks occasionally during the day, but for very short distances, with or without assistance. spends the majority of each shift in bed or chair. 3. SLIGHTLY LIMITED - makes frequent though slight changes in body or extremity position independently. 3. SLIGHTLY LIMITED -

makes frequent though slight changes in body or extremity position independently. 4. NO IMPAIRMENT- Responds to verbal commands. Has no sensory deficit which would limit ability to feel or discomfort. 4. RARELY MOIST - Skin is usually dry; linen only requires changing at routine intervals. 4. WALKS FREQUENTLY- Walks outside the room at least twice a day and inside the room at least once every 2 hours during working hours. 4. NO LIMITATIONS - Makes major and frequent changes in position without assistance. 4. NO LIMITATIONS - Makes major and frequent changes in position without assistance. HIGH RISK : Total score 10 - 12MILD RISK : Total score 15 - 18 1234 130 Stroke Patient Care Manual at the Primary Health Care Level PREDICTION AND SHEAR PREDICTION AND SHEAR NAME - List Form 3166P BRIGGS, Des Moines, IA 5030 (800) 247-2343 Source : Barbara Braden and Nacy Bergstrom. Copyright, 1988, Reprinted with permission. Permission should be sought to use this tool at www. bradenscale.com BRADEN SCALEFirst Middle Attending Physician Record No. Room/ BedASSESS DATE / / / /EVALUATOR SIGNATURE/ TITLE ASSESS. DATE // /EVALUATOR SIGNATURE/ TITLE1. PROBLEM - Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures, or agitation leads to almost constant friction2. POTENTIAL PROBLEM - Moves feebly or requires minimum assistance. During a move, skin probably slides to come extent against sheets, chairs, restraints, or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down. 3. NO APPARENT PROBLEM- Moves in bed and in chair independently and has sufficient muscle strength to lift up completely during move. maintains good position in bed or chair at all times. 131 Family Health Development Division • Ministry of Health Malaysia APPENDIX VII HRC / UK / 0 5 7 CHERAS REHABILITATION HOSPITAL SISC/SIC CHART NURSING UNIT NAME :..... ..... WARD :..... ..... R/N :..... ..... BED NO :.... ..... DATE TIME 7am

8am 9am 10am11am 12pm 1pm 2pm 3pm 4pm5pm 6pm 7pm 8pm 9pm 10pm 11pm 12am 1am2am 3am4am 5am 6am SPONTANEOUS INTERACTION -EOUSSISC/ SICLEAKING REMARKSNAME & SIGN 132 Stroke Patient Care Manual At Primary Health Care Level APPENDIX VIII HRC / UK / 0 5 7 CHERAS REHABILITATION HOSPITAL BOWEL CHART NURSING UNIT DATE TIMETABLET DULCOLAXDULCOLAX SUPPOSITORYBO TIME/ NATURE OF STOOLREMARKS : MANUAL EVACUATIONNAME & SIGN 133 Division of Family Health Development • Ministry of Health Malaysia APPENDIX IX BRISTOL STOOL CHART TYPE 1Separate hard lumps, like nuts (hard to pass) Sausage-shaped but lumpy Like a sausage but with cracks on its surface Like a sausage or snake, smooth and soft Soft blobs with clear-out edges (passed easily) Fluffy pieces with ragged edges, a mushy stool Watery, no solid places, entirely liquidTYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6 TYPE 7 SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR SORF UNCLEAR COPY 134 Stroke Patient Care Manual at the Primary Health Care Level APPENDIX X HAND WASHING TECHNIQUES • Remove jewelry and decorations (including watches) • Wet hands and arms with soap and water i. Rub by moving both palms iii. Rub the fingers of the right hand between the cracks of the fingers of the left hand and vice versa v. Grasp the right ring finger with the left palm while rubbing in a circular motion. Repeat over the left ring finger with the right palm vii. Rub the wrist in a circular motion. Then wash and dry your hands.ii. Right palm on top of left hand and vice versa. iv. The back of the right radius is rubbed on the right palm and vice versa vi. Turn the tip of the right radius on the left palm and vice versa SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR SORF COPY UNCLEAR 135 Family Health Development Division • Ministry of Health Malaysia APPENDIX XI CHERAS REHABILITATION HOSPITAL MORSE FALL RISK NURSING UNIT (Re-Assessment) - Adult Name :..... .... R/N :.....

.... Date of Admission :..... .... Ward :.. .... No. 1. 2. 3. 4. 5. 6. History of falling : Immediate or withing 3 months (if age > 65 years fall within 12 months) Secondary diagnosis Ambulatory aid I/V Heparin Lock / CBD Gait Transferring Mental Status TOTAL SCORE Name And Staff Signature Determination of Risk and Prevention Strategies Risk Level No Risk Low Risk High RiskMFS Score 0-24 25-50 >51Action Good basic Nursing Care Implement Standard Fail Prevention Intervention Implement High Risk Fail Prevention Intervention3.1 Bed rest / nurse assist 3.1 Bed rest / nurse assist 5.1 Normal/ bed rest/ immobile 6.1 Oriented to own ability 6.2 Forgets limitations5.2 Weak 5.3 Impaired3.2 Crutches / cane / walker 3.1 FurnitureNo : 0 No : 0 Yes : 25 Yes : 25 No : 0 No : 0 No : 00 Yes : 25 0 0 15 10 2015 30Morse Fall Risk ScaleReassessment Date 136 Stroke Patient Care Manual at the Primary Health Care Level APPENDIX XII MODIFIED ASHWORTH SCALE PHYSIOTHERAPY UNIT INSTITUTION _____ NAME :..... ..... R/N :..... ..... IC NUMBER :... ..... AGE :..... .... DIAGNOSIS :..... ..... RT/LT MUSCLE UNDER STRETCHGRADE DATE DATE DATE 137 Family Health Development Division • Ministry of Health Malaysia SOURCE AIMS TOOL SCORING INSTRUCTION GRADE 0 1 2 3 4 5TONUS No increase in muscle tone. Slight increase in tone with a catch and release or minimal resistance at the end of the range. As 2 but with minimal resistance through range following catch More marked increase tone through ROM. Considerable increase in tone, passive movement difficult. Affected part rigid. Modified Ashworth Scale 1987 (Bohannon & Speed) To Measures muscle hypertonia instead of spasticity Modified Ashworth Scale i PROCEDURE The Modified Ashworth Scale (MAS) has a 6-point scale that assists with stroke patients. 2.1 MODIFIED ASHWORTH SCALE 2.1 MODIFIED ASHWORTH SCALE

138 Stroke Patient Care Manual at Primary Health Care Level Physical Therapy Toolbox Pain Scales www.physicaltherapytoolbox.com APPENDIX XIII Visual Analog Scale Visual Descriptive Scale Wong - Baker Facial Grimace Scale Activity Tolerance ScaleNo pain No pain No painMild pain Can be IgnoredInterferes With TasksInterferes With Concentrationinterferes With Basic NeedsBedrest RequiredModerate painModerate painSevere painWorst pain PossibleWorst Possible Pain0 0 1 2 3 4 5 6 7 8 9 1010 139 Family Health Development Division • Ministry of Health Malaysia 1.1 OXFORD SCALE SOURCE AIMS TOOL INTERPRETATION OF SCORESelf-report questionnaire designed to measure strength of the muscle : i Upper limbs ii Lower limbs iii Abdominal iv Backv Neck A. Oxford Scaleb. Scale of 0-5 • Grade 5 : Muscle contracts normally against full resistance. • Grade 4 : Muscle strength is reduced but muscle contraction can still move the joint against resistance • Grade 3 : Muscle strength is further reduced such that the joint can be moved only against gravity with the examiner's resistance completely removed. As an example, the elbow can be moved from full extension to full flexion starting with the arm hanging dowm at the side. • Grade 2 : Muscle can move only if the resistance of gravity is removed. As an example, the elbow can be fully flexed only if it is maintained in a horizontal plane. • Grade 1 : Only a trace or flicker of movement has been or felt in the muscle or fasciculation is observed in the muscle. • Grade 0 : No movement is observed.APPENDIX XIV 140 Stroke Patient Care Manual at Primary Health Care Level NO 1 2 3 4 5 6SHOULDER ELBOW WRIST HIP KNEE KNEEanterior deltoid posterior deltoid supraspinatus / middle deltoid adductor Biceps Triceps Flexor Extensor Radial Ulnar Deviator Deviator ILIAPSOAS GLUTEUS MAXIMUS GLUTEUS MEDIUS ADDUCTOR Hamstring Quadriceps Tibialis Anterior Gastrocnemius Tibialis Posterior Evertor InvertorJOINT MUSCLEGRADEMUSCLE STRENGTH : OXFORD SCALE UNIT PHYSIOTHERAPY HEALTH CLINIC _____ NAME _____ R/N_____ IC NUMBER _____ AGE _____ DIAGNOSIS

_____ 141 Family Health Development Division • Ministry of Health Malaysia 5.3 MOTOR ASSESSMENT SCALE (MAS) SOURCE AIMS TOOL INTERPRETATION PROCEDURE OF SCOREi. To assess the return of function following a stroke or other neurological impairment. ii The test looks at a patient's ability to move with low tone or in a synergistic pattern and finally move actively out of that into normal movement. Carr J, Shepherd R et al (1985) Investigation of a new Motor Assessment Scale for stroke patients. Physical Therapy 65, 2, 175-180 Motor Assessment Scale Questionnaire i. PROCEDURE Staff-completed scale measuring physical disability. Consist of 8 hierarchical areas of every day motor function and one item to rate muscle tone. Each motor item is assessed 3 times, the best performance being rated on a scale of 0-6. Also included are criteria to aid grading (some measuring quality, others time) and a set of general rules for carrying out the assessment. Following reliability studies the authors suggest dropping the muscle tone section. The higher the score - the higher functioning the patient is on the affected side High Score : 54 Low Score : 0 APPENDIX XV 142 Stroke Patient Care Manual at the Primary Health Care Level PHYSIOTHERAPY UNIT ISNTITUSI _____ NAME _____ IC NUMBER _____ R/N _____ AGE _____ DIAGNOSIS _____ MOTOR ASSESSMENT SCALE (MAS) If the patient cannot complete any part of a section score a zero (0) for that section. There are (sections in all). MOVEMENT 1. Supine to Side-lying onto intact side (starting position : supine with knees straight) 1. Use intact arm to pull body towards intact side. Use intact leg to hook impaired leg to pull it over. 2. Actively moves the impaired leg across the body to roll but leaves the impaired arm behind. 3. The impaired arm is lifted across the body with the other arm. Impaired leg moves actively & body follows as a block. 4. Actively moves the impaired arm across the body. The rest of the body moves as a block. 5. Actively moves impaired arm and leg rolling to intact side but overbalances. 6. Rolls to intact side in 3 seconds without using hands. 2. Supine to sitting over side of bed 1. Pt

assisted to the side-lying position : Patient lifts heard sideways but can't sit up. 2. Pt may be assisted to side-lying & is assisted to sitting but has head control throughout. 3. Pt may be assisted to side-lying & is assisted with lowering LEs off bed to assume sitting. 4. Pt may be assisted to side-lying but is able to sit up without help. 5. Pt able to move from supine to sitting without help. 6. Pt able to move from supine to sitting without help in 10 seconds. 3. Balance Sitting 1. Pt is assisted to sit and needs support to remain sitting. 2. Pt sits unsupported for 10 seconds with arms folded, knees and feet together & feet on the floor. 3. Pt sits unsupported with weight shifted forward and evenly distributed over both hips/legs. Head and thoracic spine extended. 4. Sit unsupported with feet together on the floor. Hands resting on thighs. Without moving the legs the patient turns the head and trunk to look behind the right and left shoulders. 5. Sit unsupported with feet together on the floor. Without allowing the legs or feet to move & without holding on the patient must reach forward to touch the floor (10cm 0r 4 inch in front of them) the affected arm may be supported if necessary. 6. Sit on a stool unsupported with feet on the floor. Pt reaches sideways without moving the legs or holding on returns to sitting position. Support affected arm if needed. 4. Sitting to Standing 1. Pt assisted to standing - any method 2. Pt assisted to standing. The patient's weight is unevenly distributed & may use hands for support. 3. Pt stands up. The patient's weight is evenly distributed but hips and knees are flexed - no use of hands for support. 4. Pt stands up. Remain standing for 5 seconds with hips & knees extended with weight evenly distributed. 5. Pt stands up and sits down again 3 x in 10 seconds with hips & knees extended & weight evenly distributed. DATE DATE DATE 5. Upper Arm Function 1. Supine : Therapist places affected arm in 90 degrees shoulder flexion and holds elbow in extension - hand towards the ceiling, the patient protracts the affected shoulder actively. 2. Supine : Therapist places affected arm in above position. The patient must maintain the position for 2 seconds with some external rotation and with the elbow in at

least 20 degrees of full extension. 143 Family Health Development Division • Ministry of Health Malaysia MOVEMENT 6. Hand Movement 1. Pt assisted to standing - any method. Sitting at a table (Wrist Extension) : Affected forearm resting on table. Place a cylindrical object in the palm of the patient's hand. Patient asked to lift object off table by extending the wrist - no elbow flexion allowed. 2. Sitting at a table (Radial Deviation of Wrist): Therapist should place forearm with ulnar side on table in mid-pronation / supination position. Thumb in line with forearm and wrist in extension. Fingers around cylindrical object. Patient is asked to lift hand off cable. No wrist flexion or extension. 3. Sitting (Pronation / Supination) : Affected arm on table with elbow unsupported at side. Patient asked to supinate and pronate forearm (3/4 range acceptable). 4. Place a 5 inch ball on the table so that the patient has to reach forward with arms extended to reach it. Have the patient reach forward with shoulders protracted, elbows extended, wrist in neutral or extended, pick up the ball with both hands and put it back down in the same spot. 5. Have the patient pick up a polystyrene cup with their affected hand and put it on the table on the other side of their body without any alteration to the cup. 6. Continuous opposition of thumb to each finger 14 x in 10 seconds. Each finger in turn taps the thumb, starting with the index finger. Do not allow the thumb to slide from one finger to the other or go backwards. 7. Advanced Hand Activities 1. Have the patient reach forward to pick up the top of a pen with their affected hand, bring the affected arm back to their side and put the pen cap down in front of them. 2. Place 8 jellybeans, (beans), in a teacup an arms length away on the affected side. Place another teacup an arms length away on the intact side. Have the patient pick up one jellybean with their affected hand and place the jellybean in the cup on the intact side. 3. Sitting (Pronation / Supination) : Affected arm on table with elbow unsupported at side. Patient asked to supinate and pronate forearm (3/4 range acceptable). 4. Have the patient pick up a pen/pencil with their affected hand, hold the pen as for writing, and position it without assistance and make rapid consecutive dots

(not strokes) on a sheet of paper. Goal: at least 2 dots a second for 5 seconds. 5. Have the patient take a dessert spoon of liquid to their mouth with their affected hand without lowering the head towards the spoon or spilling. 6. Have the patient hold a comb and comb the back of their head with the affected arm in abduction and external rotation, forearm in supination. 8. Walking 1. With assistance the patient stands on the affected leg with the affected weight bearing hip extended and steps forward with the intact leg. 2. Walks with the assistance of one person. 3. Walks 10 feet or 3 meters without assistance but with an assistive device. 4. Walks 16 feet of 15 meters without a device or assistance in 15 seconds. 5. Walks 33 feet or 10 meters without assistance or a device. Is able to pick up a small object from the floor with either hand and walk back in 25 seconds. 6. Walks up and down 4 steps with or without a device but without holding on to a rail 3 x in 35 seconds. 8. Walking 1. Flaccid, limp, no resistance when body parts are handled. 2. Some resistance felt as body parts are moved. 3. Variable, sometimes flaccid, sometimes good tone, sometimes hypertonic. 4. Hypertonic 50% of the times. 5. Hypertonic all the time. 6. Consistently normal response. DATE DATE DATE 3. Supine : Patient assumes above position and brings hand to forehead and extends the arm again. (flexion & extension of elbow) Therapist may assist with supination of forearm. 4. Sitting: Therapist places affected arm in 90 degrees of forward flexion. Patient must hold the affected arm in position for 2 seconds with some shoulder external rotation and forearm supination. Excessive shoulder elevation or pronation. 5. Sitting : Patient lifts affected arm to 90 degrees forward flexion - holds it there for 10 seconds and then lowers it with some shoulder external rotation and forearm supination. No Pronation. 6. Standing : Have patient's affected arm abducted to 90 degrees with palm flat against wall. Patient must maintain arm position while turning body towards the wall. 144 Stroke Patient Care Manual at Primary Health Care Level 2.2 DYNAMIC GAIT INDEX SOURCE AIMS TOOL PROCEDURE INTERPRETATION OF SCORETo assess the likelihood of falling in older adults. Designed to test eight facets of gait. 1.

Herdman SJ, Vestibular Rehabilitation, 2nd ed. Philadelphia, PA; FADavis Co; 2000. 2. Shumway-Cook A, Woolacott M. Motor Control Theory and Applications, Williams and Wilkins Baltimore, 1995; 323-324 a. Box (Shoebox b. Cones (2), Stairs c. 20' length and 15" wide walkway I PROCEDURE a. Has 8 items. b. Each item ranging from 0-3 c. Grading the lowest category that applies. d. Total Score is 24 0 3 Lowest level of function to the highest level of function Less than 19 = Predictive of falls in the elderly More than 22 = Safe ambulators APPENDIX XVI 145 Family Health Development Division • Ministry of Health Malaysia DYNAMIC GAIT INDEX HEALTH CLINIC PHYSIOTHERAPY UNIT :_____ NAME :_____ IC NUMBER :_____R/N :_____ AGE :_____DIAGNOSIS :_____ No 1 2Scale 3 2 1 03 21 0Activity Gait level surface Instructions : Walk at your normal speed from here to the next mark (20') Change in gait speed Instructions: Begin walking at your normal pace (for 5'), when I tell you "go", walk as fast as you can (for 5'). When I tell you "slow", walk as slowly as you can (for 5') Normal : Able to smoothly change walking speed without loss of balance or gait deviation. Shows a significant difference in walking speeds between normal, fast and slow speeds. Mild Impairment: Is able to change speed but demonstrates mild gait deviations, or not gait deviations but unable to achieve a significant change in velocity, or uses an assistive device. Moderate Impairment: Makes only minor adjustments to walking speed, or accomplishes a change in speed with significant gait deviations, or changes speed but loses balance but is able to recover and continue walking. Severe Impairment : Cannot change speeds, or loses balance and has to reach for wall or be caught.Normal : Walks 20', no assistive devices, good speed, no evidence for imbalance, normal gait pattern Mild Impairment : Walks 20', uses assistive devices, slow speed, mild gait deviations. Moderate Impairment: Walks 20', slow speed, abnormal gait pattern, evidence for imbalance. Severe Impairment: Cannot walk 20' without assistance,

severe gait deviations or imbalance. Pain is mild and comes and goes.DATE DATE DATE 146 Stroke Patient Care Manual at Primary Health Care Level 3 4 3 2 103 2 1 0Gait with horizontal head turns Instructions : Begin walking at your normal pace. When I tell you to "look right," keep walking straight, but turn your head to the right. Keep looking to the right until I tell you, "look left," then keep walking straight and turn your head to the left. Keep your heard to the left until I tell you "look straight" then keep walking straight, but return your head to the center. Gait with vertical head turns Instructions: Start walking at your normal pace. When I tell you to "look up," keep walking straight, but turn your head up. Keep looking up until I tell you, "look down," then keep walking straight and keep your head down. Keep your hearing down until I tell you "look straight" then keep walking straight, but return your head to the center. Normal : Performs head turns smoothly with no change in gait. Mild Impairment: Performs head turns smoothly with slight change in gait velocity, ie, minor disruption to smooth gait path or uses walking aid. Moderate Impairment : Performs head turns with moderate change in gait velocity, slows down, staggers but recovers, can continue to walk. Severe Impairment : Performs task with severe disruption of gait ie, staggers outside 15" path, loses balance, stops, reaches fo wall.Normal : Performs head turns smoothly with no change in gait Mild impairment : Performs head turns smoothly with slight change in gait velocity, ie, minor disruption to smooth gait path or uses walking aid. Moderately Impaired: Performs head turns with moderate change in gait velocity, slows down, staggers but recovers, can continue to walk. Sevege Impairment : Performs task with severe disruption of gait, ie, staggers outside 15' path, loses balance, stops, reaches for wall. 147 Family Health Development Division • Ministry of Health Malaysia 5 63 3 2 1 02 1 0 Gait and pivot turn Instructions : Begin walking at your normal pace. When I tell you, "turn and stop," turn as quickly as you can to face the opposite direction and stop. Step over Obstacle Instructions: Start walking at your normal speed.

When you come to the shoebox, step over it, not around it, and keep walking. Normal : Pivot turns safely within 3 seconds and stops quickly with no loss of balance. Normal : Is able to step over the box without changing gait speed, no evidence of imbalance. Mild Impairment : Is able to step over box, but must slow down and adjust steps to clear box safely. Moderate Impairment : Is able to step over box but must stop, then step over. May require verbal cueing. Severe Impairment: Cannot perform without assistance. Mild Impairment: Pivot turns safely in > 3 seconds and stops with no loss of balance. Moderate Impairment: Turns slowly, requires verbal cueing, requires several small steps to catch balance following turn and stop. Severe Impairment: Cannot turn safely, requires assistance to turn and stop. 148 Stroke Patient Care Manual at the Primary Health Care Level 7 83 3 2 1 02 10Step over Obstacle Instructions : Begin walking at your normal speed. When you come to the first cone (about 6' away), walk around the right side of it. When you come to the second cone (6' past the first cone), walk around it to the left. Steps Instructions: Walk up these stairs as you would at home, ie, using the railing if necessary. At the top, turn around and walk down. Normal : Is able to walk around cones safely without changing gait speed, no evidence of imbalance. Normal : Alienating feet, no rail. Mild Impairment: Alternating feet, must use rail. Moderate Impairment : Two feet to stairs, must use rail. Severe Impairment: Cannot be done safely. TOTAL SCOREMild Impairment : Is able to step around both cones, but must slow down and adjust steps to clear cones. Moderate Impairment : Is able to clear cones but must significantly slow, speed to accomplish task, or requires verbal cueing. Severe Impairment: Unable to clear cones, walks into one or both cones, or requires physical assistance. 149 Family Health Development Division • Ministry of Health Malaysia 3.2 TIMED UP & GO TEST SOURCE AIMS TOOL PROCEDURE INTERPRETATION OF SCORE To measure & predict the probability for falls a. Arm chair b. Tape measure c. Tape d. Stop watch a. Begin with subject sitting correctly on chair with arms, back should rest on the back of the chair. The chair should be stable

and positioned such that it will not move when the subject moves from sitting to standing. b. Place a piece of tape on the floor 3 meters away from the chair. c. Instructions to subject: 1. "on the word GO you will stand up, walk to the line on the floor, turn around and walk back to the chair and sit down. Walk at your pace.” d. Start timing on the word 'GO' and stop timing when the subject is seated again correctly on the chair with their back resting. e. The subject should be given a practice trial that is not timed before testing. < 10 seconds = Normal < 20 seconds = Good mobility, can go out alone, mobile without a gail aid < 30 seconds = Problems, cannot go outside alone, requires a galt aid APPENDIX XVII 150 Stroke Patient Care Manual at the Care Level Primary Health TIME UP & GO TEST (TUG) PHYSIOTHERAPY UNIT HEALTH CLINIC :_____ NAME :_____ IC NUMBER :_____ R/N :_____ AGE :_____ DIAGNOSIS :_____ Interpretation DateTIME 1st 2nd 3rd Average 151 Division of Family Health Development • Ministry of Health Malaysia MODIFIED BARTHEL INDEX NAME :_____ MRN :_____ DIAGNOSIS :_____ Activity Personal Hygiene Feeding Chair/ Bed transfers Or Wheelchair (score only if patient is unable to ambulance and is trained in wheelchair) MBI TOTAL SCORE SCORING : Date :..... ..... Signature :..... Therapist : .....0 - 24 0 - 24 0 - 240 - 24 0 - 24 DEPENDENCY LEVEL Total Tota

l TotalTotal TotalHOURS OF HELP REQUIRED PER WEEK 27.0 27.0 27.027.0 27.0TOTAL SCORE (100) AmbulationToilet Stair Climbing Dressing Bowel Control Bladder ControlBathingCRITERIA Unable to perform task (0) Substantial help required (1) Moderate help required (3) Minimal help required (4) Fully independent (5) Unable to perform task (0) Substantial help required (1)Moderate help required (5)Minimal help required (8)Fully independent (10) Unable to perform task (0)Substantial help required

(3)Moderate help required (8)Minimal help required (12)Fully independent (15)) Unable to perform task (0) Substantial help required (3) Moderate help required (8) Minimal help required (12) Fully independent (15) Initial Ass. After 2 weeks After 4 weeks After 6 weekAfter 8 weekAfter 10 weekAfter 12 week APPENDIX XVIII 152 Stroke Patient Care Manual at the Primary Health Care Level FUNCTIONAL REHABILITATION UNIT THE LAWTON INSTRUMENTAL ACTIVITIES OF DAILY LIVING SCALE Circle the item description that most closely resembles the clients highest functional level (either 0 or 1) Ability to Use Telephone 1. Operate telephone on own initiative: look up an dial numbers 2. Dial a few well-known numbers 1 3 Answer telephone, but does not dial 0 4. Does not use telephone at all 0 Shopping 1. Takes care of shopping needs independently 1 2. Shop independently for small purchase 0 3. Needs to be accompanied on any shopping 0 trip 4. Completely impossible to shop 0 Food Preparation 1. Plan, prepare and serve adequate meals 1 independently 2. Prepare adequate meals if supplied with 0 ingredients3. Heat and serve prepared meals or prepare 0 meals but does not maintain an adequate diet 4. Needs to have meals prepared and serves 0 House Keeping1. Maintain house alone with occasion 1 Assistance (heavy work) 2. Perform light daily task such as dishwashing, 1 bed making 3. Perform light daily tasks, but cannot maintain 1 adequate level of cleanliness 4. Does not participate in any house keeping 1 tasks Score : /8 The higher the score, the greater the person's ability (Assessment of older people self maintaining and instrumental activities of daily living) A summary socre ranges from 0 (low function, dependent) to 8 (high function, independent) for women, and 0 through 5 for men. Laundry 1. Does personal laundry completely 1 2. Launders small items, rinses sock, stocking, etc 1 3. All laundry must be done by others 0 Mode of Transportation 1. Travels independently on public transportation 1 or drive own car 2. Arranges own travels via taxi, but does not 1 otherwise use public transportation 3. Travels on public transportation when assisted 1 or accompanied by another 4. Travel limited to taxi or automobile with 0 assistance of another 5. Does not

travel at all 0 Responsibility for Own Medication 1. Is responsible for taking medication in correct 1 dosages at correct times 2. Take responsibility if medication is prepared in 1 advance in separate Dosages 3. Is not capable of dispensing own medication 0 Ability to Handle Finance1. Manages financial matters independently 1 (budget, writes check, pay rent bill, goes to bank) Collect and keep track of income 2. Manages day-to-day purchase, but needs help 1 with banking, major Purchase, etc 3. Incapable of handling money 0APPENDIX XIX 153 Family Health Development Division • Ministry of Health Malaysia INTEREST CHECKLIST Activity Gardening Yardwork Sewing/ needle work Paying card Foreign languages Church activities Radio Walking Car repair Writing Dancing GolfFootball Listening to popular music PuzzlesHoliday ActivitiesPets/ livestock Movie Listening to classical musicSpeeches/ lectures Swimming BowlingVisiting Mending Checkers/ ChessBarbecues Reading TravelingParties Wrestling Housecleaning Model building TelevisioConcerts PotteryWhat has been your level of interest In the past ten years Strong Strong Some Some No No Yes Yes No NoIn the past yearsDo you currently participate in this activity?Would you like to pursue this in the future?APPENDIX XX 154 Care Manual Stroke Patients At Primary Health Care INTEREST CHECKLIST Continued Activity Camping Laundry/ IroningPolitics Table games Home decoratingClubs/ Lodge Singing ScoutingClothers Handicrafts hairstylingCycling Attending plays Bird watchingDatingAuto-racing Home repairs ExerciseHunting Woodworking PoolDriving Child care TennisCooking/ Baking Basketball HistoryCollecting Fishing Science Leatherwork ShoppingPhotography Painting/ DrawingWhat has been your level of interest In the past ten years Strong Strong Some Some No No Yes Yes No No In the past years Do you currently participate in this activity? Would you like to pursue this in the future? 155 Family Health Development Division • Ministry of Health Malaysia Home Assessment Form (Brief) KK :..... .... Name :..... ..... Date :..... .... Add :.....

..... General Desciption : Apartment/ flat :..... ..... No. Persons Residing :..... ..... Transportation :..... .... Neighborhood description :..... .... Access to Living Area : (Consider entryway, ramps, steps, rolling, sidewalk)..... ..... General Household Description (consider general appearance, floor surface, laundry, width of haft-ways, telephone, storage and stairs..... .... 1. Bedroom : Accessibility to : Bed (heaight, firmness)..... .... Closets .... Light Switch..... .... Functional Abilities : Bed transfers..... .... Bed Mobility..... .... Comments..... .... 2. Bathroom : Accessibility to : Sink :..... .... Toilet :..... .... Shower :..... .... Equipment (grab bars, rubber mat etc.) Turn around Space. Functional Activities • Toilet transfers Relationship to patients :..... .....Terrace :..... Banglow :..... ..... Village :.....Diagnosis : .....

.....APPENDIX XXI 156 Stroke Patient Care Manual at the Primary Health Care Level 3. Kitchen : Accessibility to : Sink..... .... Store (range and oven, control)..... .... Refrigerator..... .... Work area (counter height)..... .... Storage Area..... .... Functional Abilities : Able to transport articles..... .... Reach store top and oven..... .... Take items from refrigerator..... .... Reach cabinet. .... 4. Summary/ Recommendation : .... Occupational Therapist 157 Family Health Development Division • Ministry of Health Malaysia HOME EVALUATION CHECKLIST (Detailed) KK :..... .... NAME :..... ..... MRN :..... ..... CURRENT ADDRESS :..... ....

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CONTACTABLE TELEPHONE / MOBILE : .....

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..... DIAGNOSIS / PATIENT DETAILS

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PHOTOGRAPH TAKEN : YES / NO 1. MOBILITY STATUS :..... 3. DRIVEWAY SURFACE:..... 4. ENTRANCE :..... ..... Front :..... ..... Gate :..... ..... Path 5. DOOR : Width .....Swing in .. ..Swing out ....Sliding..... .... Front .... Gate . ...Others2. TYPE OF HSE..... .....

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....

....

....Ambulatory..... Inclined.....Cane.....

..... Smooth.....Walker..... Level... .....Wheelchair.....

Rough.....SEX : M / F RACE : M / C / ID.OB : ....OTHERS

:..... 158 Stroke Patient Care Manual at Primary Health Care Level 6. STAIRS : Width..... Height fr. Step surface..... .....

.... COMMENTS :.....

....

....

.... 7. LIVING ROOM: Furniture arrangement suitable for maneuver? Y / N Height and Depth of most frequently used chair..... ....On / Off chair

....

.... 8. HALLWAY : Can w / c or walking aid be maneuvered in hallway? Y / N Steps / no : Y / N.....Sharp turns ? Y / NType of floor covering :..... .....Electric switches / outlets accessible? Y / N COMMENTS :.....

....

....

....Is frequently used furniture accessible? Y / NHeight..... Depth..... Number..... Handrails : Y / N on R / L 9 DINING ROOM : Ht. of dining table :..... accessible ? Y / N COMMENTS..... .....

....

....

.... 10. BEDROOM :..... .....Single Door Width.....Drawer accessible ? Y / N On / Off bed..... Type : Hard / M / SoftSwitches accessible? Y / N Is there enough room for w / c maneuver ? Y / NBed frame Ht..... Mattress Ht..... .....Closet accessible? Y / N Is the lighting sufficient? Y / N.....Swing in ....Swing out.....Sliding..... ....SharedSwitches ? Y / NHt. of dining chair :..... .....W / c 159 Family Health Development Division • Ministry of Health Malaysia COMMENTS :..... .... 11. BATHROOM : Door Width..... ....Swing In ....Swing Out .....Sliding Shower facilities accessible ? Y / N Bathtub..... .....Ht. & Dh..... ..... COMMENTS :..... ....Can w / e get close to : Sink..... Ht. & Dh..... 12. TOILET : Door Width..... Type :..... .... Toilet facilities accessible? Y / N Toilet location :..... .... COMMENTS :..... ....

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....

....

....On / Off Toilet..... Toilet seat Ht..... .....Swing in .....Swing out ....Sliding COMMENTS :.....

....

....

....

....13. KITCHEN: Door Width..... .. Sliding W / e Accessible ? Y / N Stove accessible with w / c or walking aids ? Y / N Sink accessible with w / e or walking aids ? Y / N Will w / e fit under neath ? Y / N Cabinet accessible with w / c or walking aids ? Kitchen table accessible with w / c or walking aids ?Y / N Ht..... Y / N Ht. ..... Y / N Ht..... .....Y / N Ht..... Dh.. ..... Dh..... ..... Dh..... ..... Dh..... .....Swing In ....Swing In.....Swing Out..... .....Swing Out 160 Stroke Patient Care Manual at Primary Health Care Level 16. HOME MANAGEMENT ACTIVITIES :14. PATIENT FUNCTIONAL ACTIVITIES: Can the patient enter / leave home independently? Y / N, if N what assistance is needed? Can the patient move about his/her home freely? Y / N, if N what assistance is needed? Which transfer activities is the patient's unable to perform independently? ....

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..... Bed to w / c. ..... Toilets.....

.Shower..... Automobile..... ..... COMMENTS

:..... ....

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....

.... COMMENTS :.....

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....15. RELATIVES / NEIGHBORS /

STAFF OF HOME / HELP AVAILABLE : .....

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....

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.... 17.

PROBLEM LIST :..... .....

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....

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 18. AIDS AND

ADAPTATION RECOMMENDED : ....

(OCCUPATINAL THERAPIST SIGNATURE)..... .....

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162 Stroke Patient Care Manual at the Health Care Level Primer APPENDIX XXII PATIENT HEALTH QUESTATIONNAIRE - PHQ-9 NAME :_____ Fill in the boxes with pen or pencil to mark your answers. A. Over the last 2 weeks, how often have you been bothered by any of the following problems? 1. Little interest or pleasure in doing things 2. Feeling down, depressed, or hopeless 3. Trouble falling/staying asleep, sleeping too much 4. Feeling tired or having little energy 5. Poor appetite or overeating 6. Feeling bad about yourself – or that you are a failure or have let yourself or your family down. 7. Trouble concentrating on things, such as reading the newspaper or watching television. 8. Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual. 9. Thoughts that you would be better off dead or of hurting yourself in some way. B. If you have been bothered by any of the 9 problems listed above, please answer the following: How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people? Not difficult at all Total Score_____= _____+ _____+ _____+ _____+ This health survey was adapted from the PRIME-MD® Patient Health Questionnaire © 1999, Pfizer Inc. Reproduced with permission. For research information, contact Dr. Robert L. Spitzer at rls8@columbia.edu. Copyright © August 2003 CaremarkSomewhat Difficult Very Difficult Extremely DifficultNot at All 0 Several days 1More than half the days 2Nearly every day 3DATE OF BIRTH :_____ TODAY DATE :_____

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