

Stroke Care Quality Data Dictionary

Indicator	Detail
S: Standard	
S01	<ol style="list-style-type: none"> 1. Name: Mean time to intravenous thrombolytic therapy (Door to Needle Time) 2. Definition: Mean time to intravenous thrombolytic therapy is mean time from when a patient arrives hospital (ER) until he/she receives intravenous thrombolysis. 3. Aim: To ensure that patients receive intravenous thrombolytic therapy within the specified timeframe. 4. Calculation formula: Total duration of acute ischemic stroke patients with duration of the symptoms not greater than 4.5 hours who receive intravenous thrombolytic therapy within the determined timeframe ÷ Number of ischemic stroke patients with duration of the symptoms not greater than 4.5 hours who receive intravenous thrombolytic therapy and are admitted in the hospital in the same period 5. Goal: ≤60 minutes 6. Data source: Medical records 7. Measurement unit: Minutes
S02	<ol style="list-style-type: none"> 1. Name: Percentage of ischemic stroke patients who receive an antiplatelet for the treatment within 48 hours after the symptom onset 2. Definition: Receiving an antiplatelet (Aspirin) within the first 48 hours means that ischemic stroke patients receive the antiplatelet per oral or via nasogastric tube within the first 48 hours after the symptom onset, however the patients much have no contraindications such as gastrointestinal bleeding/aspirin allergy, etc. 3. Aim: Ischemic stroke patients who received antiplatelet therapy (Aspirin) within the specified timeframe. 4. Calculation formula: Number of ischemic stroke patients who receive the antiplatelet within the first 48 hours after the symptom onset and within the determined timeframe x 100 ÷ Number of ischemic stroke patients being admitted to the hospital within the same period who come within 48 hours 5. Goal: ≥85% 6. Data source: Medical records 7. Measurement unit: Percent
S03	<ol style="list-style-type: none"> 1. Name: Percentage of ischemic stroke patients who are discharged home and receive antiplatelet or anticoagulant on discharge 2. Definition: Receiving antiplatelet or anticoagulants mean that ischemic stroke discharged by physicians receive secondary preventive medications as antiplatelet or anticoagulant, however the patients much have no contraindications to use (Antiplatelets such as Aspirin, Ticlopidine, Clopidogrel, Aspirin + Dipyridamole, Cilostazol, Triflusal/Anticoagulants such as Warfarin, Dabigatran, Apixaban, Rivaroxaban) 3. Aim: Ischemic stroke patients prescribed antiplatelet or anticoagulant therapy at discharge. 4. Calculation formula: Number of ischemic stroke patients who are discharged home and receive antiplatelet or anticoagulant on discharge x 100 ÷ Number of ischemic stroke patients admitted in the hospital within the same period 5. Goal: 100% 6. Data source: Medical records 7. Measurement unit: Percent

Indicator	Detail
S: Standard	
S04	<ol style="list-style-type: none"> 1. Name: Percentage of ischemic stroke patients discharged home who have high LDL and receive statin on discharge 2. Definition: Receiving statin means that ischemic stroke patients with LDL greater than 100 mg/dl on discharge by physicians receive statin. 3. Aim: Ischemic stroke patients prescribed Statin therapy at discharge. 4. Calculation formula: Number of ischemic stroke patients who have LDL greater than 100 mg/dl and receive statin on discharge x 100 ÷ Number of ischemic stroke patients with LDL greater than 100 mg/dl who are admitted to the hospital within the same period 5. Goal: ≥90% 6. Data source: Medical records 7. Measurement unit: Percent
S05	<ol style="list-style-type: none"> 1. Name: Percentage of ischemic stroke patients who have time to intravenous thrombolytic therapy (Door to Needle Time) within 60 minutes 2. Definition: Time to intravenous thrombolytic therapy is time from when a patient arrives hospital (ER) until he/she receives intravenous thrombolysis. 3. Aim: To ensure that patients receive intravenous thrombolytic therapy within the specified timeframe. 4. Calculation formula: Number of acute ischemic stroke patients with duration of the symptoms not greater than 4.5 hours who have time to intravenous thrombolytic therapy (Door to Needle Time) within 60 minutes ÷ Number of ischemic stroke patients with duration of the symptoms not greater than 4.5 hours who receive intravenous thrombolytic therapy and are admitted in the hospital in the same period 5. Goal: ≥75% 6. Data source: Medical records 7. Measurement unit: Percent
S06	<ol style="list-style-type: none"> 1. Name: Percentage of ischemic stroke patients who have time to intravenous thrombolytic therapy (Door to Needle Time) within 45 minutes 2. Definition: Time to intravenous thrombolytic therapy is time from when a patient arrives hospital (ER) until he/she receives intravenous thrombolysis. 3. Aim: To ensure that patients receive intravenous thrombolytic therapy within the specified timeframe. 4. Calculation formula: Number of acute ischemic stroke patients with duration of the symptoms not greater than 4.5 hours who have time to intravenous thrombolytic therapy (Door to Needle Time) within 45 minutes ÷ Number of ischemic stroke patients with duration of the symptoms not greater than 4.5 hours who receive intravenous thrombolytic therapy and are admitted in the hospital in the same period 5. Goal: ≥50% 6. Data source: Medical records 7. Measurement unit: Percent

Indicator	Detail
P: Process	
P01	<ol style="list-style-type: none"> 1. Name: Percentage of stroke patients (I60-I69) who have blood sugar checked after being admitted to the hospital within 24 hours 2. Definition: Having blood sugar checked means that stroke patients (I60-I69) receive blood sugar testing from venous blood or finger sticks after being admitted to the hospital within 24 hours. 3. Aim: Stroke patients (I60-I69) who received blood glucose testing within the specified timeframe. 4. Calculation formula: Number of stroke patients (I60-I69) who receive blood sugar testing after being admitted to the hospital within 24 hours in the determined timeframe x 100 ÷ Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: 100% 6. Data source: Medical records 7. Measurement unit: Percent
P02	<ol style="list-style-type: none"> 1. Name: Percentage of stroke patients (I60-I69) who have EKG within 24 hours after symptom onset 2. Definition: Having EKG means that stroke patients (I60-I69) receive EKG within 24 hours after symptom onset. 3. Aim: Stroke patients (I60-I69) who received an EKG within the specified timeframe. 4. Calculation formula: Number of stroke patients (I60-I69) who have EKG x 100 ÷ Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: 100% 6. Data source: Medical records 7. Measurement unit: Percent
P03	<ol style="list-style-type: none"> 1. Name: Percentage of stroke patients (I60-I69) who have CT scan and/or MRI/MRA brain within 24 hours 2. Definition: Having CT scan and/or MRI/MRA brain means that patients with symptoms of stroke (I60-I69) within 72 hours have CT scan and/or MRI/MRA brain as a diagnostic test by healthcare professionals within the period of 24 hours after being admitted to the hospital or have the test(s) done from outside prior to receiving care in the hospital. 3. Aim: Stroke patients (I60-I69) who received a brain CT scan and/or MRI/MRA within the specified timeframe. 4. Calculation formula: Number of stroke patients (I60-I69) who have CT scan and/or MRI/MRA brain within 24 hours x 100 ÷ Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: 100% 6. Data source: Medical records 7. Measurement unit: Percent
P04	<ol style="list-style-type: none"> 1. Name: Percentage of acute ischemic stroke patients with duration of the symptoms not greater than 4.5 hours (Stroke Fast Track) who have CT scan and/or MRI/MRA brain within 1 hour 2. Definition: Having CT scan and/or MRI/MRA brain means that patients with duration of acute ischemic stroke symptoms not greater than 4.5 hours have CT scan and/or MRI/MRA brain as a diagnostic test by healthcare professionals within the period of 1 hour after being admitted to the hospital or have the test(s) done from outside prior to receiving care in the hospital. 3. Aim: Acute ischemic stroke patients presenting within 4.5 hours of onset who received a brain CT and/or MRI/MRA within the specified timeframe. 4. Calculation formula: Number of acute ischemic stroke patients with duration of the symptoms not greater than 4.5 hours who have CT scan and/or MRI/MRA brain within 1 hour x 100 ÷ Number of acute ischemic stroke patients with duration of the symptoms not greater than 4.5 hours admitted to the hospital within the same period 5. Goal: 100% 6. Data source: Medical records 7. Measurement unit: Percent

Indicator	Detail
P: Process	
P05	<ol style="list-style-type: none"> 1. Name: Percentage of stroke patients (I60-I69) with fever ($\geq 37.5^{\circ}\text{C}$) who receive appropriate fever management 2. Definition: Appropriate fever management is defined as the provision of proper assessment and appropriate care, including identification of the cause of fever and management of the underlying cause. This includes: 1) the patient receiving tepid sponging and/or antipyretic treatment; and/or 2) the patient undergoing relevant laboratory investigations and/or receiving treatment for the underlying cause of fever. 3. Aim: Stroke patients (I60-I69) presenting with fever ($\geq 37.5^{\circ}\text{C}$) who receive appropriate fever care. 4. Calculation formula: Number of stroke patients (I60-I69) with fever ($\geq 37.5^{\circ}\text{C}$) who receive appropriate fever management $\times 100 \div$ Number of all stroke patients (I60-I69) with fever ($\geq 37.5^{\circ}\text{C}$) within the same period 5. Goal: 100% 6. Data source: Medical records 7. Measurement unit: Percent
P06	<ol style="list-style-type: none"> 1. Name: Percentage of stroke patients (I60-I69) who receive care following the planned guideline (Care map/Path way) 2. Definition: Stroke patients (I60-I69) who receive care following the guideline prepared in writing following multidisciplinary team meeting 3. Aim: Stroke patients (I60-I69) who received care according to the established care plan. 4. Calculation formula: Number of stroke patients (I60-I69) who receive care following the planned guideline $\times 100 \div$ Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: 100% 6. Data source: Medical records 7. Measurement unit: Percent
P07	<ol style="list-style-type: none"> 1. Name: Percentage of stroke patients (I60-I69) with duration of the symptoms within 72 hours who receive care in stroke unit 2. Definition: Care in stroke unit means that stroke patients (I60-I69) with duration of the symptoms within 72 hours receive care in dedicated areas that can be special unit (unit) with the following components: <ol style="list-style-type: none"> 2.1 Physician director and other professions such as physicians, nurses, physical therapists, psychologists, nutritionists, etc. taking care and responsibility together 2.2 Prepared system and guideline for patient care in writing following multidisciplinary team meeting 2.3 Regular conference and/or patient care plan meeting, as well as follow-up assessment of care by multidisciplinary team 2.4 Place/instrument/medical equipment accommodating to patient care as determined 3. Aim: Stroke patients (I60-I69) admitted to and treated in a stroke unit. 4. Calculation formula: Number of stroke patients (I60-I69) with duration of the symptoms within 72 hours who receive care in stroke unit $\times 100 \div$ Number of stroke patients (I60-I69) with duration of the symptoms within 72 hours admitted the same period 5. Goal: $\geq 80\%$ 6. Data source: Medical records 7. Measurement unit: Percent

Indicator	Detail
P: Process	
P08	<ol style="list-style-type: none"> 1. Name: Percentage of stroke patients (I60-I69) who receive appropriate patient instruction before discharge 2. Definition: Patient instruction means that stroke patients (I60-I69) receive instructions by healthcare professionals regarding lifestyle/self-care at home, secondary prevention, prevention of complications if stroke recurs, symptoms that should prompt to the hospital. These are measured from patient instruction forms/nurse notes. 3. Aim: Stroke patients (I60-I69) who received appropriate discharge instructions. 4. Calculation formula: Stroke patients (I60-I69) who are discharged home and receive appropriate patient instruction x 100 ÷ Number of stroke patients (I60-I69) discharged from the hospital within the same period 5. Goal: 100% 6. Data source: Medical records 7. Measurement unit: Percent
P09	<ol style="list-style-type: none"> 1. Name: Percentage of stroke patients (I60-I69) who have swallowing evaluation within 72 hours of admission 2. Definition: <ol style="list-style-type: none"> 2.1 Dysphagia means that stroke patients (I60-I69) have swallowing impairment or difficulty which may lead to other problems such as malnutrition, choking, coughing, gagging, feeding via nasogastric tube or aspiration pneumonia. 2.2 Swallowing evaluation means assessment before patients start swallowing of the causes and severity of dysphagia in order to reduce risks of aspiration and complications, by utilizing swallowing assessment form. 3. Aim: Stroke patients (I60-I69) who received a dysphagia screening within 72 hours of hospital admission. 4. Calculation formula: Number of stroke patients (I60-I69) who have swallowing evaluation within 72 hours of admission x 100 ÷ Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: 100% 6. Data source: Medical records 7. Measurement unit: Percent
P10	<ol style="list-style-type: none"> 1. Name: Percentage of ischemic stroke patients who was evaluated/rehabilitation and/or physical therapy/occupational therapy/speech-language therapy within 72 hours of admission 2. Definition: Rehabilitation and physical therapy/occupational therapy/speech-language therapy means that ischemic stroke patients are assessed and/or get physical therapy/occupational therapy/speech-language therapy from physical therapists or healthcare professionals within 72 hours. 3. Aim: Ischemic stroke patients who received a rehabilitation assessment within the specified timeframe. 4. Calculation formula: Number of ischemic stroke patients who was evaluated/rehabilitation and/or physical therapy/occupational therapy/speech-language therapy within 72 hours of admission x 100 ÷ Number of ischemic stroke patients admitted to the hospital within the same period 5. Goal: 100% 6. Data source: Medical records 7. Measurement unit: Percent

Indicator	Detail
P: Process	
P11	<p>1. Name: Percentage of stroke patients (I60-I69) who receive therapy/instructions about smoking cessation</p> <p>2. Definition:</p> <p>2.1 Smoking means any smoking products such as cigarettes, cigars, pipe smoking, roll-your-own, tobacco wrapped in leaves or paper.</p> <p>2.2 Therapy/instructions about smoking cessation means that stroke patients (I60-I69) who smoke cigarettes or any tobaccos receive advice from healthcare professionals.</p> <p>3. Aim: Stroke patients (I60-I69) who received smoking cessation counseling or therapy.</p> <p>4. Calculation formula: Number of stroke patients (I60-I69) who receive therapy/instructions about smoking cessation x 100 ÷ Number of stroke patients (I60-I69) admitted to the hospital within the same period</p> <p>5. Goal: ≥70%</p> <p>6. Data source: Medical records</p> <p>7. Measurement unit: Percent</p>
P12	<p>1. Name: Percentage of stroke patients (I60-I69) with duration of the symptoms within 72 hours who were continuously monitored on an EKG for at least 48 hours after hospital admission</p> <p>2. Definition: Electrocardiogram (EKG) monitoring is defined as patients with stroke (I60-I69) presenting within 72 hours of symptom onset who receive continuous EKG monitoring during the first 48 hours after hospital admission.</p> <p>3. Aim: Stroke patients (ICD-10 I60-I69) who received continuous EKG monitoring.</p> <p>4. Calculation formula: Number of stroke patients (I60-I69) presenting within 72 hours who receive continuous EKG monitoring during the first 48 hours after hospital admission x 100 ÷ Number of stroke patients (I60-I69) presenting within 72 hours who admitted during the same period with a length of stay of at least 2 days.</p> <p>5. Goal: ≥80%</p> <p>6. Data source: Medical records</p> <p>7. Measurement unit: Percent</p>
C: Complication	
C01	<p>1. Name: Percentage of incidence of aspirate pneumonia in stroke patients (I60-I69)</p> <p>2. Definition: Aspiration pneumonia is defined as stroke patients (I60-I69) who develop clinical features consistent with pneumonia, including inspiratory crackles and fever, or clinical symptoms such as fever, cough, and dyspnea, with purulent sputum, the presence of white blood cells with bacterial pathogens in sputum, and/or chest radiographic findings consistent with pulmonary infection occurring 48 hours or more after hospital admission.</p> <p>3. Aim: Stroke patients (I60-I69) who did not develop aspiration pneumonia.</p> <p>4. Calculation formula: Number of stroke patients (I60-I69) who have aspirate pneumonia x 100 ÷ Number of stroke patients (I60-I69) admitted to the hospital within the same period</p> <p>5. Goal: ≤5%</p> <p>6. Data source: Medical records</p> <p>7. Measurement unit: Percent</p>

Indicator	Detail
C: Complication	
C02	<ol style="list-style-type: none"> 1. Name: Percentage of incidence of urinary tract infection in stroke patients (I60-I69) 2. Definition: Urinary tract infection means patients who have clinical symptoms of dysuria/fever and WBC \geq 10/HPF on urinalysis or positive urine culture 48 hours after admission. 3. Aim: Stroke patients (I60-I69) who did not develop a Urinary Tract Infection (UTI). 4. Calculation formula: Number of stroke patients (I60-I69) who have urinary tract infection \times 100 \div Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: \leq5% 6. Data source: Medical records 7. Measurement unit: Percent
C03	<ol style="list-style-type: none"> 1. Name: Percentage of incidence of pressure sore/skin break in stroke patients (I60-I69) 2. Definition: Pressure sore means any skin break or necrosis resulting from either pressure or trivial trauma (skin trauma resulting from falls was not included) after the hospital admission. 3. Aim: Stroke patients (I60-I69) who did not develop pressure ulcers. 4. Calculation formula: Number of stroke patients (I60-I69) who have pressure sore/skin break \times 100 \div Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: \leq0.5% 6. Data source: Medical records 7. Measurement unit: Percent
C04	<ol style="list-style-type: none"> 1. Name: Percentage of incidence of falls in stroke patients (I60-I69) 2. Definition: Falls means that stroke patients (I60-I69) fall in every case such as slipping and falling in a bathroom/falls due to loss of balance/weakness/falls from a bed, etc. (only documented fall regardless of cause). 3. Aim: Stroke patients (I60-I69) who did not experience an accidental fall. 4. Calculation formula: Number of stroke patients (I60-I69) who fall within the determined period \times 100 \div Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: 0% 6. Data source: Medical records 7. Measurement unit: Percent
C05	<ol style="list-style-type: none"> 1. Name: Percentage of incidence of deep vein thrombosis (DVT) in stroke patients (I60-I69) 2. Definition: Deep vein thrombosis (DVT) means that a leg vein is occluded due to thrombus occlusion of the deep vein leading to swelling, pain, and this may lead to complications causing dyspnea or death (diagnosed by Doppler ultrasound of the leg demonstrating thrombus in the leg vein). 3. Aim: Stroke patients (I60-I69) who did not develop Deep Vein Thrombosis (DVT). 4. Calculation formula: Number of stroke (I60-I69) patients who have deep vein thrombosis (DVT) within the determined period \times 100 \div Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: \leq5% 6. Data source: Medical records 7. Measurement unit: Percent

Indicator	Detail
O: Outcome	
O01	<ol style="list-style-type: none"> 1. Name: Percentage of readmission within 28 days of stroke patients (I60-I69) 2. Definition: Readmission is defined as patients with stroke (I60-I69) who were previously admitted as inpatients (presenting to the hospital within 2 weeks of symptom onset) and are subsequently readmitted to the same hospital within 28 days after discharge for the same diagnosis, without a planned readmission. 3. Aim: Stroke patients (ICD-10 I60-I69) with no unplanned readmission within 28 days. 4. Calculation formula: Number of stroke patients (I60-I69) who have readmission due to the same disease within 28 days after discharge without advanced planning $\times 100 \div$ Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: $\leq 1.5\%$ 6. Data source: Medical records 7. Measurement unit: Percent
O02	<ol style="list-style-type: none"> 1. Name: Percentage of stroke patients (I60-I69) with reduced or stable disability ($B_{\text{discharge}} - B_{\text{admission}} \geq 0$ point) 2. Definition: <ol style="list-style-type: none"> 2.1 Morbidity means persons who have limitation of daily activities and social participation due to defects of vision, hearing, mobility, communication, mentality, mood, behavior, cognition and learning, etc. 2.2 Improved or stable disability is defined as patients with stroke (I60-I69) whose level of disability has improved or remained unchanged after receiving medical treatment and rehabilitation, as measured by the Barthel Index. 3. Aim: Improvement or maintenance of functional status among stroke patients (I60-I69). 4. Calculation formula: Number of stroke patients (I60-I69) with reduced or stable disability $\times 100 \div$ Number of stroke patients (I60-I69) admitted to the hospital within the same period 5. Goal: $\geq 70\%$ 6. Data source: Medical records 7. Measurement unit: Percent
O03	<ol style="list-style-type: none"> 1. Name: Mean length of stay of ischemic stroke patients 2. Definition: Mean length of stay means number of days that one ischemic stroke patients spend for the treatment in the hospital. 3. Aim: The average Length of Stay (LOS) for patients with ischemic stroke does not exceed the specified threshold. 4. Calculation formula: Summated length of stay of ischemic stroke patients discharged within the determined period \div Number of ischemic stroke patients discharged within the same period 5. Goal: ≤ 10 days 6. Data source: Medical records 7. Measurement unit: Days/Case
O04	<ol style="list-style-type: none"> 1. Name: Mean expense of ischemic stroke patients 2. Definition: Mean expense of ischemic stroke patients means mean expense of one ischemic stroke patient during the same hospital stay. 3. Aim: Medical expenses for ischemic stroke patients are appropriate and do not exceed the specified threshold. 4. Calculation formula: Summated expense of ischemic stroke patients discharged within the determined period \div Number of ischemic stroke patients discharged within the same period 5. Goal: $\leq 36,776$ Baht 6. Data source: Medical records 7. Measurement unit: Baht/Case

Indicator	Detail
O: Outcome	
O05	<ol style="list-style-type: none"> 1. Name: Percentage of mortality of ischemic stroke patients (I63) 2. Definition: <ol style="list-style-type: none"> 2.1 Ischemic stroke patients are defined as those presenting with symptoms within a 14-day duration. 2.2 Mortality of ischemic stroke patients means number of ischemic stroke patients who die after the admission. 3. Aim: Ischemic stroke patients receive appropriate care following the guideline. 4. Calculation formula: Number of ischemic stroke patients who die after the admission x 100 ÷ Number of ischemic stroke patients admitted to the hospital within the same period 5. Goal: ≤5% 6. Data source: Medical records 7. Measurement unit: Percent
O06	<ol style="list-style-type: none"> 1. Name: Mortality rate of acute ischemic stroke patients receiving intravenous thrombolysis within 4.5 hours. 2. Definition: <ol style="list-style-type: none"> 2.1 Acute ischemic stroke patients are defined as those presenting with symptom onset within 4.5 hours. 2.2 Mortality of acute ischemic stroke patients means acute ischemic stroke patients who die after being admitted and receiving intravenous thrombolytic therapy. 3. Aim: Acute ischemic stroke patients who received intravenous thrombolysis. 4. Calculation formula: Number of acute ischemic stroke patients who receive intravenous thrombolytic therapy and die after being admitted to hospital x 100 ÷ Number of acute ischemic stroke patients who receive intravenous thrombolytic therapy and are admitted in the hospital within the same period 5. Goal: ≤7% 6. Data source: Medical records 7. Measurement unit: Percent
O07	<ol style="list-style-type: none"> 1. Name: Mortality rate of acute hemorrhagic stroke (I60–I62) within 7 days of onset (Excl. Palliative Care). 2. Definition: <ol style="list-style-type: none"> 2.1 Hemorrhagic stroke refers to brain damage caused by intracranial bleeding, resulting in either an intracerebral hemorrhage (ICH) or a subarachnoid hemorrhage (SAH). 2.2 Mortality of hemorrhagic stroke patients refers to patients diagnosed with hemorrhagic stroke (I60–I62) who present with symptoms within 7 days and subsequently pass away after hospital admission. 2.3 Palliative Care refers to care for hemorrhagic stroke patients in critical condition with life-limiting or life-threatening conditions. The objective is to enhance quality of life by providing treatment, healing, and relief for physical, mental, emotional, social, and spiritual suffering from the onset of illness until the end of life. Hospitals must establish clear diagnostic criteria for hemorrhagic stroke (I60–I62) patients eligible for palliative care, including documented palliative services (Z51.5), formal consultation with a Palliative Care Team, and Advanced Care Planning (ACP). 3. Aim: To decrease the mortality rate among acute hemorrhagic stroke patients (I60–I62) within 7 days of symptom onset. 4. Calculation formula: Number of hemorrhagic stroke patients (I60–I62) with symptom onset within 7 days who died after hospital admission x100 ÷ Total number of hemorrhagic stroke patients (I60–I62) with symptom onset within 7 days admitted during the same period 5. Goal: ≤25% 6. Data source: Medical records 7. Measurement unit: Percent

Indicator	Detail
O: Outcome	
O08	<p>1. Name: Percentage of ischemic stroke patients who have reduced or stable disability or stable disability ($mRS_{discharge} - mRS_{admission} \leq 0$ point)</p> <p>2. Definition:</p> <p>2.1 Morbidity means persons who have limitation of daily activities and social participation due to defects of vision, hearing, mobility, communication, mentality, mood, behavior, cognition and learning, etc.</p> <p>2.2 Reduced means ischemic stroke patients who have reduced or stable disability after medical care and rehabilitation, measured by mRS.</p> <p>3. Aim: To follow treatment outcome in ischemic stroke patients</p> <p>4. Calculation formula: $\frac{\text{Number of ischemic stroke patients with reduced or stable disability} \times 100}{\text{Number of ischemic stroke patients admitted to the hospital within the same period}}$</p> <p>5. Goal: $\geq 80\%$</p> <p>6. Data source: Medical records</p> <p>7. Measurement unit: Percent</p>
O09	<p>1. Name: Percentage of ischemic stroke patients who have reduced or stable severity of stroke ($NIHSS_{discharge} - NIHSS_{admission} \leq 0$ point)</p> <p>2. Definition: Reduced or stable severity of stroke after medical care, rehabilitation and being discharged home, measured by NIHSS</p> <p>3. Aim: To follow treatment outcome in ischemic stroke patients</p> <p>4. Calculation formula: $\frac{\text{Number of ischemic stroke patients who have reduced or stable severity of stroke} \times 100}{\text{Number of ischemic stroke patients admitted to the hospital within the same period}}$</p> <p>5. Goal: $\geq 80\%$</p> <p>6. Data source: Medical record</p> <p>7. Measurement unit: Percent</p>