NATIONAL CENTRE FOR DISEASE INFORMATICS AND RESEARCH

Indian Council of Medical Research

HOSPITAL BASED STROKE REGISTRIES

CORE FORM

I. IDENTIFYING INFORMATION

1. Name of Participating Centre : ..... Code ☐☐☐
2. HBSR Registration Number : ☐☐☐☐☐☐☐
3. Registration at Reporting Institution : Out Patient ☐ In Patient ☐

3.1 Name of Source of Registration : ..... Code ☐☐☐

3.2 Name of Department / Unit / Physician : ..... Code ☐☐☐

3.3 Hospital Registration Number : ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

4. Full Name : ....
   (Title) (First) (Middle) (Last)
5. Place of residence *(place of usual residence where the patient has been residing for the past 1 year) :*

5.1 Urban Areas *(Town / Cities)*

House No. .....

Road / Street Name .....

Area / Locality .....

Ward / Corporation / Division .....

.....

Name of the City / Town .....

Name of District *(in capitals)* .....

Telephone No. : Off .....

Mobile No. 1. .....

Mobile No. 2. .....

5.2 Non-Urban Areas *(Town / Cities)*

House No. and Ward .....

Name of Gram Panchayat / Village etc. .....

.....

Name of Sub-Unit of District *(Taluk/ Tehsil/ Other)*

.....

Name of PHC / Sub-Centre .....

Postal Pin Code ☐☐☐☐☐☐

Res. : .....

Email : .....

5.3 Other address :

Address : .....

District : .....

Pin Code : ☐☐☐☐☐☐

Telephone No.: : 1..... 2..... 3.....

6. Duration of stay [at the place of usual residence (*in years*)] : ☐☐
7. Age (*in years*) : ☐☐ Date of Birth: ☐☐ ☐☐ ☐☐
8. Sex : Male ☐ Female ☐ Others ☐ .....
9. Number of languages spoken *(multiple options can be chosen)*

Assamese	☐	Bengali	☐	Gujarati	☐	Hindi	☐	Kannada	☐	Kashmiri	☐	Malayalam	☐
Marathi	☐	Oriya	☐	Punjabi	☐	Sanskrit	☐	Sindhi	☐	Tamil	☐	Telugu	☐
Urdu	☐	English	☐	Konkani	☐	Bhutia	☐	Manipuri	☐	Mizo	☐	Nepali	☐
Lepcha	☐	Rajasthani	☐	Others, specify								Unknown	☐

10. Cultural group *

* Only for North East HBSRs

Ahom	☐	Aimol	☐	Anal	☐	Boro	☐	Bhutias	☐	Bru	☐
Chakma	☐	Chamars	☐	Chiru	☐	Chothe	☐	Deuri	☐	Gangte	☐
Hmar	☐	Kachari	☐	Koet	☐	Khongsai	☐	Koch	☐	Kompurum	☐
Kuki	☐	Lam kang	☐	Lengmei	☐	Lepchas	☐	Mao	☐	Mara	☐
Maram	☐	Maria	☐	Maring	☐	Meitei	☐	Miri	☐	Mishimi	☐
Mishing	☐	Mizo	☐	Monsang	☐	Moran	☐	Moyon	☐	Nepalese	☐
Paite	☐	Paomei	☐	Pawih	☐	Rabha	☐	Raj Bangshi	☐	Rongmei	☐
Simte	☐	Tangkhul	☐	Tarao	☐	Teli	☐	Thangal	☐	Waiphei	☐
Zemei	☐	Zou	☐	Dimcha	☐	BishnuPriya	☐	Naga	☐	Adi	☐
Bramhin	☐	Jogi	☐	Kalita	☐	Kayastha	☐	Koibarta	☐	Marwari	☐
Muttock	☐	Nocte	☐	Tea-tribe	☐	Tiwa/Lalung	☐	Monpa	☐	Sherdukpen	☐
Aka	☐	Miji	☐	Nyishi	☐	Galo	☐	Tagin	☐	Hill Miri	☐
Apatani	☐	Khampti	☐	Tangsa	☐	Wangcho	☐	Singpho	☐	Unknown	☐

Other, *Specify* ☐

II. DIAGNOSIS OF STROKE

11.1 Patient last known or seen well : Date ☐☐ ☐☐ ☐☐ Time: ☐☐ : ☐☐ am/pm

11.2 Date of onset of this episode of stroke : Date ☐☐ ☐☐ ☐☐ Time: ☐☐ : ☐☐ am/pm

11.3 Is it a wake-up stroke ?*(symptoms of stroke first noticed on waking up from sleep)* Yes ☐ No ☐

11.4 Symptoms noticed at onset : Weakness / paresis of limbs ☐ Dysphasia / aphasia ☐
Altered level of consciousness ☐ Others, specify.....

11.5 Date of recognition of first stroke symptoms / signs by medical professional : Date ☐☐ ☐☐ ☐☐ Time : ☐☐ : ☐☐ am/pm

11.6 From where did the patient come to reach the reporting hospital for treatment of their stroke?

Home ☐
Other place of stroke onset ☐
Outpatient healthcare setting ☐
Inpatient health care setting ☐
Other departments within reporting hospital ☐
Others, specify .....
Unknown ☐

11.7 Date and time of arrival at the Reporting Institution : Date ☐☐ ☐☐ ☐☐ Time: ☐☐ : ☐☐ am/pm

12. Date of diagnosis of stroke at the Reporting Institution : Date ☐☐ ☐☐ ☐☐

13. Diagnosis or history of recent TIA? Yes ☐ No ☐ Date ☐☐ ☐☐ ☐☐

14. Clinical information

14.1 Clinical findings at the Reporting Institution :

Unilateral or bilateral motor impairment (including lack of coordination) ☐
Aphasia/dysphasia *(non-fluent speech)* ☐
Forced gaze *(conjugate deviation)* ☐
Ataxia ☐
None ☐
Unilateral or bilateral sensory impairment ☐
Hemianopia *(half-sided impairment of visual fields)* ☐
Apraxia ☐
Neglect ☐

14.2 Other clinical features :

Dizziness, vertigo	☐	Localized headache	☐
Blurred vision of both eyes	☐	Diplopia	☐
Dysarthria *(slurred speech)*	☐	Impaired cognitive function *(including confusion)*	☐
Impaired consciousness	☐	Seizures	☐
Dysphagia	☐		

15.1 Stroke severity score at admission at Reporting Institution *(Record score for individual scale)* :

Level of consciousness(0-3)	☐
LOC Questions(0-2)	☐
LOC Commands(0-2)	☐
Best gaze(0-2)	☐
Visual fields(0-3)	☐
Facial palsy(0-3)	☐
Motor arm	
Left (0-4)	☐
Right (0-4)	☐
Motor leg	
Left (0-4)	☐
Right (0-4)	☐
Limb ataxia(0-2)	☐
Sensory(0-2)	☐
Best language(0-3)	☐
Dysarthria(0-2)	☐
Extinction and inattention(0-2)	☐
NIHSS Score (0-42)	☐☐

15.2 Status of the person prior to occurrence of stroke *(pre morbid modified Rankin scale)* :

Symptoms	Score
Patient doesn't have any symptoms (0)	☐
Patient is able to carry out all usual duties and activities without any assistance (1)	☐
Patient can look after own affairs without assistance (2)	☐
Patient requires some assistance in doing activities and can walk by himself or herself without any support (3)	☐
Patient needs assistance for walking and attending own needs (4)	☐
Patient is bedridden/incontinent and requires constant care (5)	☐

16. Diagnostic procedure

	Yes	No	Unknown	Imaging Date	
First CT brain	☐	☐	☐	☐☐ ☐☐ ☐☐	Time: ☐☐:☐☐ am/pm
Imaging findings :					
MRI-brain	☐	☐	☐	☐☐ ☐☐ ☐☐	Time: ☐☐:☐☐ am/pm
Imaging findings :					
CT-Angio	☐	☐	☐	☐☐ ☐☐ ☐☐	Time: ☐☐:☐☐ am/pm
Imaging findings :					

MR-Angio ☐ ☐ ☐ ☐☐ ☐☐ ☐☐ Time: ☐☐:☐☐ am/pm

Imaging findings : .....

CT-Perfusion / MR - Perfusion ☐ ☐ ☐ ☐☐ ☐☐ ☐☐ Time: ☐☐:☐☐ am/pm

Imaging findings : .....

Carotid ultrasound ☐ ☐ ☐ ☐☐ ☐☐ ☐☐

ECG ☐ ☐ ☐ ☐☐ ☐☐ ☐☐

Transthoracic echocardiogram (TTE) ☐ ☐ ☐ ☐☐ ☐☐ ☐☐

Transesopagheal Echo, Holter ☐ ☐ ☐ ☐☐ ☐☐ ☐☐

Others, specify .....

17. CT/MRI imaging done at the Reporting Institution :

Yes ☐ No ☐ Date ☐☐ ☐☐ ☐☐ Time :☐☐:☐☐ am/pm

Imaging findings : .....

17.1 Imaging time at the Reporting Institution *(time of registration to imaging time at Reporting Institution)* :

0-45 min ☐ ≥45 min to 3 hours ☐ >3 to ≤ 6 hours ☐ > 6 hours to ≤ 24 hours ☐ >24 hours ☐

18. Basis of diagnosis *(select all applicable)* :

Clinical ☐ CT ☐ MRI ☐ Others, specify.....

19. Type of stroke :

Ischemic ☐ Intracerebral haemorrhage ☐ Subarachnoid haemorrhage ☐ Venous ☐

Undetermined ☐

20. TOAST CRITERIA *(for acute ischemic stroke)* :

Large-artery atherosclerosis ☐

Cardioembolism

i. Rheumatic valvular ☐

ii. Non - Rheumatic valvular ☐

iii. Non - valvular ☐

iv. CAD ☐

Small-artery occlusion *(lacune)* ☐

Stroke of other determined etiology ☐

Stroke of undetermined etiology

i. Patient extensively evaluated ☐

ii. Patient not evaluated ☐

iii. Patient with two competing etiologies ☐

21.1 Type of Intracerebral haemorrhage : Primary ☐ Secondary ☐

21.2 Type of Circulation of Stroke : Anterior Circulation Stroke ☐ Posterior Circulation Stroke ☐

22. Final diagnosis *(in words)* : First Ever ☐ Recurrent ☐

First Ever / Recurrent .....

Type of stroke .....

Territory affected .....

Etiology .....

Risk Factor and co-morbidities .....

.....

23. ICD-10 description :..... ICD -10 code: ☐☐.☐

III. RISK FACTORS AND CO-MORBID CONDITIONS

24. Underlying diseases or co-morbid conditions :	Yes	No	Unknown	Duration *(completed months)*	Newly detected at admission
Previous Stroke	☐	☐	☐	☐☐☐	☐
Previous Transient Ischemic Attack *(anytime in the past)*	☐	☐	☐	☐☐☐	☐
Hypertension	☐	☐	☐	☐☐☐	☐
Diabetes Mellitus	☐	☐	☐	☐☐☐	☐
Atrial Fibrillation	☐	☐	☐	☐☐☐	☐
Carotid stenosis	☐	☐	☐	☐☐☐	☐
Myocardial Infarction	☐	☐	☐	☐☐☐	☐
Ischemic Heart Disease *(other than Atherosclerotic MI)*	☐	☐	☐	☐☐☐	☐
Valvular Heart Disease					
1. Rheumatic Heart Disease	☐	☐	☐	☐☐☐	☐
2. Non Rheumatic Heart Disease	☐	☐	☐	☐☐☐	☐
Valve Prosthesis	☐	☐	☐	☐☐☐	☐
Heart Failure	☐	☐	☐	☐☐☐	☐
Peripheral Arterial Disease	☐	☐	☐	☐☐☐	☐
Chronic Kidney Disease	☐	☐	☐	☐☐☐	☐
Anemia	☐	☐	☐	☐☐☐	☐
Haemoglobin : ☐ g/dl or ☐ mmol/L					
Hypercholesterolemia	☐	☐	☐	☐☐☐	☐
Hyper homocysteinenemia	☐	☐	☐	☐☐☐	☐

Other :

1……

2……

3……

25. Other risks / conditions *(current or history of)* :	Yes	No	Unknown
Family history of stroke	☐	☐	☐
Tobacco smoking	☐	☐	☐
Smokeless tobacco use	☐	☐	☐
Alcohol use	☐	☐	☐
Drug abuse or addiction	☐	☐	☐
Pregnancy or within 6 weeks after a delivery or termination of pregnancy	☐	☐	☐
Hormone replacement therapy / Hormonal drug use	☐	☐	☐
Migraine	☐	☐	☐
Sickle Cell disease	☐	☐	☐
HIV infection	☐	☐	☐
CNS TB	☐	☐	☐

Height ..... cm

Weight ..... kg

BMI ..... Underweight ☐ Normal ☐ Overweight ☐ Obese ☐

Others, specify……...

IV. TREATMENT DETAILS

26. Treatment status before onset of stroke :

	Yes	No	Unknown	Duration in months
Antiplatelets, specify	☐	☐	☐	☐☐☐
Antihypertensive drugs	☐	☐	☐	☐☐☐
Lipid lowering drugs	☐	☐	☐	☐☐☐
Antidiabetic agents	☐	☐	☐	☐☐☐
Others…….....				

26.1 Medications taken for this episode of stroke, prior to admission to the Reporting Institution :

Yes ☐ No ☐ Unknown ☐

If 'Yes' in Q. 26.1. Answer Q. 26.2 to Q. 26.7 :

26.2 Antiplatelet

Yes ☐ No ☐

Aspirin ☐
Aspirin/ Dipyridamole ☐
Clopidogrel ☐
Others…… ☐

26.3 Anticoagulant

Yes ☐ No ☐

Heparin IV ☐
Full dose LMW heparin ☐
Warfarin ☐
Newer oral anticoagulant ☐
Others…… ☐

26.4 Thrombolytic treatment

Yes ☐ No ☐

IV tPA ☐
IA tPA ☐
Mechanical Thrombectomy ☐
Others…… ☐

26.5 Antidiabetics

Yes ☐ No ☐

26.6 Antihypertensives

Yes ☐ No ☐

26.7 Lipid lowering agents /Statins

Yes ☐ No ☐

27. Thrombolytic treatment at Reporting Institution

27.1 Was Thrombolytic treatment given? Yes ☐ No ☐

IV tPA ☐ IA tPA ☐ Mechanical thrombectomy ☐
Others, specify…… Unknown ☐

27.2 Time of initiating thrombolytic treatment after symptom onset

Date : ☐☐ ☐☐ ☐☐ Time : ☐☐ : ☐☐ am/pm

27.3 Reasons for not receiving Thrombolysis	Yes	No	Unknown
Delay in arrival to hospital	☐	☐	☐
Delay in the imaging time	☐	☐	☐
Diabetes mellitus with h/o previous ischemic stroke	☐	☐	☐
Onset of symptoms unknown to decide on treatment initiation	☐	☐	☐
SBP > 185 or DBP > 110 mmHg	☐	☐	☐
Glucose < 50 or > 400 mg/dl	☐	☐	☐
Stroke severity – NIHSS ≥ 22	☐	☐	☐
Suspicion of subarachnoid haemorrhage	☐	☐	☐
CT findings of major infarct signs - > 50 % involvement of MCA territory	☐	☐	☐
Seizure at onset	☐	☐	☐
Recent surgery / trauma *(≤14 days)*	☐	☐	☐
Recent intracranial or spinal surgery, head trauma*(<3 months)*	☐	☐	☐
History of intracranial hemorrhage/brain aneurysm / vascular malformation / brain tumor	☐	☐	☐

Active internal bleeding *(within last 3 weeks)* ☐ ☐ ☐

Platelets <100,000/PTT> 40 sec after heparin use / PT > 15 or INR > 1.7 / known bleeding diathesis ☐ ☐ ☐

Left heart thrombus ☐ ☐ ☐

Increased risk of bleeding ☐ ☐ ☐

Severe comorbid diseases or condition ☐ ☐ ☐

Stroke – rapidly improving ☐ ☐ ☐

Medicine not available ☐ ☐ ☐

Patient could not afford medicine ☐ ☐ ☐

Others, specify……

27.4 CT done after 24 hours after Thrombolysis : Yes ☐ No ☐ Unknown ☐

27.5 Patient developed complications due to Thrombolysis :

None ☐

Asymptomatic Intracerebral haemorrhage *(ICH)* within 36 hours ☐

Symptomatic ICH within 36 hours of thrombolysis ☐

Life threatening, serious systemic hemorrhage within 36 hours of thrombolysis ☐

Other serious complications.....

28. Other pharmacologic treatment

28.1 Name the medications received and time of initiation after stroke onset while in hospital :

	Yes	No	Unknown	If yes, when was it initiated after stroke onset? Within 24 hrs.	24- 48 hrs.	After 48 hrs
Antiplatelets	☐	☐	☐	☐	☐	☐
If yes, specify name….....						
Anticoagulants	☐	☐	☐	☐	☐	☐
Antihypertensive drugs	☐	☐	☐	☐	☐	☐
Lipid lowering drugs	☐	☐	☐	☐	☐	☐
Antidiabetic agents	☐	☐	☐	☐	☐	☐

29. Surgical / interventional treatment

	Yes	No	Time of intervention after stroke onset *(in hours)*
Hemicraniectomy	☐	☐	☐☐
Suboccipital craniectomy	☐	☐	☐☐
Hematoma evacuation	☐	☐	☐☐
Carotid artery endarterectomy	☐	☐	☐☐ *(in days)*
Carotid stenting	☐	☐	☐☐ *(in days)*
Endovascular coiling / clipping	☐	☐	☐☐

Any other……..

30. Non- medical test / management :

30.1 Swallowing Test :

Has the ability to swallow been tested within 24 hours of admission to Reporting Institution ?

Yes ☐ No ☐ Not examined due to patient's state ☐ Don't know ☐

30.2 Did patient have dysphagia ? Yes ☐ No ☐

30.3 If patient had dysphagia, whether he/ she was put on nasogastric tube feeds? Yes ☐ No ☐

30.4 Did the patient receive any of the following therapies while in hospital?	Yes	No	Unknown	Explain
Swallowing management	☐	☐	☐	.....
Occupational therapy	☐	☐	☐	.....
Physiotherapy	☐	☐	☐	.....
Speech therapy	☐	☐	☐	.....
Bladder care	☐	☐	☐	.....
Deep vein thrombosis prophylaxis	☐	☐	☐	.....

31. Course during hospital stay

31.1 Did the patient deteriorate during hospitalisation ?

Developed new stroke event ☐ Complications developed during hospitalisation ☐ No ☐

31.2 If option 1, what is the type of stroke?

Ischemic ☐ Intracerebral haemorrhage ☐ Subarachnoid haemorrhage ☐ Venous ☐

Undetermined ☐

31.3 Final diagnosis of new stroke event :

.....

.....

31.4 ICD-10 description :..... ICD -10 code: I ☐☐.☐

31.5 Date of new stroke event : ☐☐ ☐☐ ☐☐

31.6 If option 2, what are the complications during hospitalisation?	Yes	No	Unknown
Intracerebral hemorrhage due to antithrombotic therapy	☐	☐	☐
Progression of current stroke *(in terms of expansion / extension of stroke)*	☐	☐	☐
Cardiac event, specify……..	☐	☐	☐
Seizures	☐	☐	☐
Pneumonia	☐	☐	☐
Urinary Tract Infection	☐	☐	☐
Decubitus ulcer	☐	☐	☐
Deep Venous Thrombosis	☐	☐	☐
Pulmonary Embolism	☐	☐	☐
Fall	☐	☐	☐
Renal Failure	☐	☐	☐
Post stroke depression	☐	☐	☐
Any other psychiatric illness	☐	☐	☐

Others, specify .....

V. DISCHARGE INFORMATION

32. Date of discharge : ☐☐ ☐☐ ☐☐

33. How many days was the patient admitted in the hospital? ☐☐☐

34. Vital status at discharge : Alive ☐ Dead ☐ Unknown ☐

35. Functional Status at discharge *(modified Rankin scale at discharge)*

Symptoms	Score
Patient doesn't have any symptoms (0)	☐
Patient is able to carry out all usual duties and activities without any assistance (1)	☐
Patient can look after own affairs without assistance (2)	☐
Patient requires some assistance in doing activities and can walk by himself or herself without any support (3)	☐
Patient needs assistance for walking and attending own needs (4)	☐
Patient is bedridden/incontinent and requires constant care (5)	☐
Patient is dead (6)	☐

36. Pharmacologic medication at discharge	Yes	No	Unknown
Antihypertensives	☐	☐	☐
Antiplatelets	☐	☐	☐
Anticoagulants	☐	☐	☐
Statins	☐	☐	☐
Antidiabetics	☐	☐	☐

Others .....

37. Counselling regarding management at discharge	Yes	No	Unknown
Counselling for regular follow up	☐	☐	☐
Counselling for compliance of medication	☐	☐	☐
Smoking cessation counselling	☐	☐	☐
Smokeless tobacco cessation counselling	☐	☐	☐
Counselling to abstain alcohol	☐	☐	☐
Counselling to abstain from drug abuse & addiction	☐	☐	☐
Advice on rehabilitation services advice	☐	☐	☐
Stroke education	☐	☐	☐

VI. FOLLOW UP

At day 28 after onset of stroke

38.1 Due date of follow-up : ☐☐ ☐☐ ☐☐

38.2 Actual date of follow-up : ☐☐ ☐☐ ☐☐

38.3 Method of follow-up :

- Hospital visit ☐
- By post ☐
- By telephone ☐
- By house visit ☐
- Others, specify.....
- Unknown ☐

39. Vital status : Alive ☐ Dead ☐ Unknown ☐

39.1 Any history of new stroke episode reported to other hospital?

Yes ☐ No ☐

40. Functional Status *(modified Rankin scale) (if vital status is alive)*

Symptoms	Score
Patient doesn't have any symptoms (0)	☐
Patient is able to carry out all usual duties and activities without any assistance (1)	☐
Patient can look after own affairs without assistance (2)	☐

At 3 months after onset of stroke

☐☐ ☐☐ ☐☐

☐☐ ☐☐ ☐☐

- Hospital visit ☐
- By post ☐
- By telephone ☐
- By house visit ☐
- Others, specify.....
- Unknown ☐

Alive ☐ Dead ☐ Unknown ☐

Yes ☐ No ☐

Symptoms	Score
Patient doesn't have any symptoms (0)	☐
Patient is able to carry out all usual duties and activities without any assistance (1)	☐
Patient can look after own affairs without assistance (2)	☐

Patient requires some assistance in doing activities and can walk by himself or herself without any support (3) ☐	Patient requires some assistance in doing activities and can walk by himself or herself without any support (3) ☐
Patient needs assistance for walking and attending own needs (4) ☐	Patient needs assistance for walking and attending own needs (4) ☐
Patient is bedridden/incontinent and requires constant care (5) ☐	Patient is bedridden/incontinent and requires constant care (5) ☐
Patient is dead (6) ☐	Patient is dead (6) ☐

VII. DETAILS OF DEATH

41. If dead, Date of death : ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐

42. Cause of Death information available :

Death Certificate *(MCCD)* ☐	Death Certificate *(MCCD)* ☐
Medical Records ☐	Medical Records ☐
Verbal autopsy ☐	Verbal autopsy ☐
Not available ☐	Not available ☐
Unknown ☐	Unknown ☐

43. Cause of death

Related to stroke ☐	Related to stroke ☐
Not related to stroke ☐	Not related to stroke ☐
Others, specify.....	Others, specify.....
Unknown ☐	Unknown ☐

43.1 Cause of death from MCCD

Immediate	Immediate .....
Antecedent cause	Antecedent cause .....
Underlying cause	Underlying cause .....
Other contributing conditions	Other contributing conditions .....
.....	.....

VIII. MATCHING WITH PBSR :

44. Matching with PBSR record :
Incidence Registration Number : ☐☐☐☐☐☐☐

45. Name of person completing the form : .....

46. Date of completion of form : ☐☐ ☐☐ ☐☐

Signature : .....

Date of data entry : ☐☐ ☐☐ ☐☐

** Mark within boxes with "✓" as indicated* ☑