Start-up Resource – NINDS Stroke CDE Recommendations

The National Institute of Neurological Disorders and Stroke (NINDS) and other Federal agencies and international organizations have the common mission of developing data standards for clinical research. Through the efforts of subject-specific working groups, topic-driven data elements have been created. The first set of Common Data Elements (CDEs) for Stroke was developed in 2010. A Stroke v2.0 CDE Working Group was convened in 2018 to perform a comprehensive review of the Stroke CDEs. The Stroke v2.0 CDEs were posted in summer 2020. The Core and Supplemental – Highly Recommended data elements to be used by an investigator when beginning a research study in this disease/disorder are listed in this resource document. All other recommendations are listed on the website and should be considered based on study type.

Each CDE or instrument could be classified according to the definitions below:

General Core: A data element that is required for all NINDS funded studies.

Disease Core: A data element that collects essential information applicable to any disease-specific study, including all therapeutic areas. The NINDS and its appointed working groups assign the disease "Core" classification based on the current clinical research best practices. In each case, the disease Core CDEs are a small subset of the available CDEs, where it is anticipated that investigators will need to collect the disease Core CDEs on any type of study. These are required for all disease-specific studies.

Disease Supplemental - Highly Recommended: A data element which is essential based on certain conditions or study types in clinical research studies. In most cases, these have been used and validated in the disease area. These data elements are strongly recommended for the specified disease condition, study type or design.

Disease Supplemental: A data element which is commonly collected in clinical research studies. Use depends upon the study design, protocol or type of research involved. These are recommended, but not required, for studies.

Disease Exploratory: A data element that requires further validation but may fill current gaps in the CDEs and/or substitute for an existing CDE once validation is complete. Such data elements show great promise but require further validation before they are ready for primetime use in clinical research studies. They are reasonable to use with the understanding that it has limited validation in the target group.

National Institute of Health (NIH)	
Resources:	NIH Toolbox
The NINDS also strongly encourages researchers	 Quality of Life in Neurological Disorders (Neuro-QOL)
to use these NIH developed materials for NINDS-sponsored research, when appropriate.	 Patient-Reported Outcomes Measurement Information System (PROMIS)
Utilization of these resources will enable greater consistency for NINDS-sponsored research	

Core CDEs for all NINDS Studies:*

studies. These tools are free of charge.

Domain/Sub-Domain	CDE Name	CDE ID	Study Type
Participant Characteristics; Demographics Participant History and Family History; General Health History	Birth date	C00007	All studies
Participant Characteristics; Demographics	Ethnicity USA category	C00020	All studies
Participant Characteristics; Demographics	Race USA category	C00030	All studies
Participant Characteristics; Demographics Disease/Injury Related Events; Classification	Birth sex assigned type	C58676	All studies
Participant Characteristics; Demographics	Gender identity type	C58677	All studies
Participant Characteristics; Demographics Participant History and Family History; General Health History	Medical history condition text	C00322	All studies
Participant Characteristics; Demographics Participant History and Family History; General Health History	Medical history condition SNOMED CT code	C00313	All studies

Core CDEs for Stroke Studies:

^{*} Note: Education year count C00015 is no longer a general Core CDE

Domain/Sub-Domain	CDE Name	CDE ID	Classification	Study Type
Participant History and Family History; General Health History	Ambulatory status	C14639	CORE	All stroke studies
Assessments and Examinations; Vital Signs and Other Body Measures	Blood pressure diastolic measurement	C01507	CORE	All stroke studies
Assessments and Examinations; Vital Signs and Other Body Measures	Blood pressure systolic measurement	C01565	CORE	All stroke studies
Assessments and Examinations; Vital Signs and Other Body Measures	Heart rate	C01521	CORE	All stroke studies
Assessments and Examinations; Vital Signs and Other Body Measures	Vital signs date and time	C01519	CORE	All stroke studies
Outcomes and End Points; Clinical Event End Points	Vital status	C04807	CORE	All stroke studies

Supplemental – Highly Recommended CDEs for Types of Stroke Studies:

Study Design: Randomized Clinical Trial				
Disease Stage: Acute		Disease Type		
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)	
C04804 Hospital discharge date and time	X	X	X	
C14213 Diagnosis principal discharge code	X	X	X	
C14627 Stroke initial residence or discharge destination type	X	X	X	
C60358 IV thrombolytic agent initiate status			Х	
C60359 IV thrombolytic agent initiate date and time			Х	
C14401 Intra-arterial (IA) procedure initiate indicator			Х	
C14402 Intra-arterial (IA) procedure type			Χ	
C14629 Anticoagulant agent in hospital indicator				
C14630 Anticoagulant agent in hospital type	Х	Х	Х	
C18984 Anticoagulant agent in hospital other text	Х	Х	Х	
C14631 Antiplatelet agent in hospital indicator	X			
C14632 Antiplatelet agent in hospital type	X			
C18985 Antiplatelet agent in hospital other text	X			
C58949 Medication stroke discharge prescribe category	X	Х		
C58950 Anticoagulant agent stroke discharge prescribe type	X	Х	Χ	
C58951 Anticoagulant agent stroke discharge prescribe other text	X	X	Χ	
C58952 Antiplatelet agent stroke discharge prescribe type	X			
C58953 Antiplatelet agent stroke discharge prescribe other text	X			
C58954 Antihypertensive agent stroke discharge prescribe type		X	Χ	
C58955 Antihypertensive agent stroke discharge prescribe other text		X	Χ	
C58956 Anti diabetic agent stroke discharge prescribe type			Χ	
C58957 Anti diabetic agent stroke discharge prescribe other text			Χ	
C58958 Lipid lower agent stroke discharge prescribe type	X	X	X	
C58959 Lipid lower agent stroke discharge prescribe other text	X	X	X	
C13750 Imaging study ID number	X	X	X	

Study Design: Randomized Clinical Trial			
Disease Stage: Acute			
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C02494 Imaging study date and time	Х	Χ	Χ
C13907 Imaging B-mode finding result			
C13908 Imaging echo pattern result			
C13909 Imaging plaque surface type			
C13910 Imaging plaque severity grade			
C13916 Imaging color flow angle measurement			
C13947 Imaging peak velocity measurement			
C13917 Imaging end diastolic velocity measurement			
C58871 Imaging signal indicator			
C13919 Imaging percent stenosis criterion type			
C14006 Imaging stenosis percentage value			
C13879 Imaging modality vessel imaging angiography type	Х	Χ	Χ
C58887 Follow-up care specialist type			
C54884 Vessel repair anatomic site	Х		
C54885 Subarachnoid hemorrhage ictus elapsed day count	Х		
C54889 Intervention surgical status	Х		
C54890 Intervention endovascular status	X		
C00714 Behavioral history assessment date and time			
C00710 Tobacco current use indicator	X	Χ	Χ
C00711 Tobacco prior use indicator	X	Χ	Χ
C06108 Tobacco smoke pack-year value	Х	Χ	Χ
C00705 Alcohol current use indicator	Х	Χ	Х
C58944 Alcohol 30 day use indicator	Х	Х	Х
C00706 Alcohol prior use indicator	X	X	Χ
C00730 Alcohol use frequency	Х	Х	Х
C58936 Drug or substance current illicit or recreational use indicator	X	Χ	Χ
C58937 Drug or substance illicit or recreational use category	Х	Х	Х

Study Design: Randomized Clinical Trial			
Disease Stage: Acute		Disease Type	
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C58938 Drug or substance illicit or recreational use other text			
C15624 Pregnancy indicator	Х	Х	Х
C15629 Postpartum indicator	X	X	Χ
C00315 Medical history global assessment indicator	X	Х	Χ
C06005 Data collected date and time		X	Χ
C10556 Pregnant ever indicator		X	Х
C11065 Gravida maternal value		X	Χ
C10558 Delivery or pregnancy termination last date and time		X	Х
C10559 Spontaneous miscarriage count		Х	Х
C14151 Pregnancy medical terminations count		Х	Х
C11062 Maternal delivery age value		Х	Х
C11063 Parity maternal value		Х	Х
C11066 Pregnancy or delivery risk factor type		X	Х
C18819 Pregnancy or delivery risk factor other text		Х	Х
C11067 Pregnancy or delivery risk factor indicator		X	Χ
C58820 Pregnancy or delivery risk factor status		Х	Χ
C58821 Pregnancy or delivery risk factor illness other text		Х	Х
C58823 Pregnancy or delivery risk factor fetal abnormal recognize in utero text		Х	Χ
C58824 Pregnancy or delivery risk factor maternal infection text		X	Χ
C59019 Birth weight measurement		X	Χ
C00001 Gestational age value		X	X
C12604 APGAR one minute score		X	Χ
C00724 APGAR five minute score		X	Χ
C00723 APGAR ten minute score		X	Χ
C11078 Delivery mode type		Х	Х
C18829 Delivery mode induced other text		X	Χ
C11079 Neonate delivery route type		Х	Х

Study Design: Randomized Clinical Trial				
Disease Stage: Acute		Disease Type		
	Subarachnoid hemorrhage	Intracerebral hemorrhage	Ischemic	
CDE ID/CDE Name	(SAH)	(ICH)	(ISC)	
C11081 Delivery caesarean timing status		X	X	
C11080 Delivery modality type		X	X	
C11083 Delivery extraction type		X	X	
C14191 Last known to be well date and time	X	X	Χ	
C14625 Hospital arrival date and time	X	X	Χ	
C05408 Hospital admission date and time				
C04814 Residence type				
C01001 Glasgow Coma Scale (GCS) - Motor response scale	X	X	X	
C01002 Glasgow Coma Scale (GCS) - Verbal response scale	X	X	X	
C01000 Glasgow Coma Scale (GCS) - Eye response scale	X	X	X	
C01016 Glasgow Coma Scale (GCS) - Total score	X	X	X	
C01539 Temperature measurement	X	X	Χ	
C01580 Temperature unit of measure	X	X	X	
C01535 Respiratory rate	X	X		
C01554 Oxygen saturation measurement	X	X		
C01522 Height measurement	X	X	X	
C01582 Height unit of measure	X	X	Χ	
C01541 Weight measurement	X	X	X	
C01581 Weight unit of measure	X	X	Χ	
C14219 Clinical stroke time-based definition indicator	X	X	Χ	
C14220 Clinical stroke tissue-based definition indicator	X	X	Χ	
C14221 Clinical stroke time-based definition type	X	X	Χ	
C14222 Clinical stroke tissue-based definition type	X	X	Χ	
C02411 Laterality type		X	Χ	

Study Design: Randomized Clinical Trial			
Disease Stage: Recovery	Disease Type		
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic
C04804 Hospital discharge date and time			
C14213 Diagnosis principal discharge code			
C14627 Stroke initial residence or discharge destination type	Х	Х	Х
C60358 IV thrombolytic agent initiate status			Х
C60359 IV thrombolytic agent initiate date and time			
C14401 Intra-arterial (IA) procedure initiate indicator	Х	Х	Х
C14402 Intra-arterial (IA) procedure type	Х	Х	Х
C14629 Anticoagulant agent in hospital indicator			
C14630 Anticoagulant agent in hospital type			
C18984 Anticoagulant agent in hospital other text			
C14631 Antiplatelet agent in hospital indicator			
C14632 Antiplatelet agent in hospital type			
C18985 Antiplatelet agent in hospital other text			
C58949 Medication stroke discharge prescribe category	X	X	Χ
C58950 Anticoagulant agent stroke discharge prescribe type			
C58951 Anticoagulant agent stroke discharge prescribe other text			
C58952 Antiplatelet agent stroke discharge prescribe type			
C58953 Antiplatelet agent stroke discharge prescribe other text			
C58954 Antihypertensive agent stroke discharge prescribe type			
C58955 Antihypertensive agent stroke discharge prescribe other text			
C58956 Anti diabetic agent stroke discharge prescribe type			
C58957 Anti diabetic agent stroke discharge prescribe other text			
C58958 Lipid lower agent stroke discharge prescribe type	X	X	Χ
C58959 Lipid lower agent stroke discharge prescribe other text	X	X	Χ
C13750 Imaging study ID number	X	X	Χ
C02494 Imaging study date and time	X	X	Χ
C13907 Imaging B-mode finding result			

Study Design: Randomized Clinical Trial			
Disease Stage: Recovery		Disease Type	
	Subarachnoid	Intracerebral	
	hemorrhage	hemorrhage	
CDE ID/CDE Name	(SAH)	(ICH)	Ischemic
C13908 Imaging echo pattern result			
C13909 Imaging plaque surface type			
C13910 Imaging plaque severity grade			
C13916 Imaging color flow angle measurement			
C13947 Imaging peak velocity measurement			
C13917 Imaging end diastolic velocity measurement			
C58871 Imaging signal indicator			
C13919 Imaging percent stenosis criterion type			
C14006 Imaging stenosis percentage value			
C13879 Imaging modality vessel imaging angiography type	X	Χ	Χ
C58887 Follow-up care specialist type			
C54884 Vessel repair anatomic site			
C54885 Subarachnoid hemorrhage ictus elapsed day count			
C54889 Intervention surgical status			
C54890 Intervention endovascular status			
C00714 Behavioral history assessment date and time	X	X	Χ
C00710 Tobacco current use indicator			
C00711 Tobacco prior use indicator	X	X	Χ
C06108 Tobacco smoke pack-year value			
C00705 Alcohol current use indicator			
C58944 Alcohol 30 day use indicator			
C00706 Alcohol prior use indicator			
C00730 Alcohol use frequency	Х	Х	Х
C58936 Drug or substance current illicit or recreational use indicator	X	Х	Х
C58937 Drug or substance illicit or recreational use category	Х	Х	Х
C58938 Drug or substance illicit or recreational use other text			
C15624 Pregnancy indicator		Х	Х

Study Design: Randomized Clinical Trial			
Disease Stage: Recovery		Disease Type	
CDE ID (CDE Name)	Subarachnoid hemorrhage	Intracerebral hemorrhage	lack and
CDE ID/CDE Name	(SAH)	(ICH)	Ischemic
C15629 Postpartum indicator		X	X
C00315 Medical history global assessment indicator		X	X
C06005 Data collected date and time		X	X
C10556 Pregnant ever indicator		X	X
C11065 Gravida maternal value		X	X
C10558 Delivery or pregnancy termination last date and time		X	X
C10559 Spontaneous miscarriage count		Х	X
C14151 Pregnancy medical terminations count		X	X
C11062 Maternal delivery age value		Х	X
C11063 Parity maternal value		X	X
C11066 Pregnancy or delivery risk factor type		X	X
C18819 Pregnancy or delivery risk factor other text		X	X
C11067 Pregnancy or delivery risk factor indicator		Х	X
C58820 Pregnancy or delivery risk factor status		Х	X
C58821 Pregnancy or delivery risk factor illness other text		Х	X
C58823 Pregnancy or delivery risk factor fetal abnormal recognize in utero text		Х	X
C58824 Pregnancy or delivery risk factor maternal infection text		Х	X
C59019 Birth weight measurement		Х	Χ
C00001 Gestational age value		X	X
C12604 APGAR one minute score		X	Χ
C00724 APGAR five minute score		X	Χ
C00723 APGAR ten minute score		X	Χ
C11078 Delivery mode type		X	Χ
C18829 Delivery mode induced other text		X	Χ
C11079 Neonate delivery route type		X	Χ
C11081 Delivery caesarean timing status		X	Χ
C11080 Delivery modality type		X	Χ

Study Design: Randomized Clinical Trial			
Disease Stage: Recovery		Disease Type	
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic
C11083 Delivery extraction type		X	Х
C14191 Last known to be well date and time	X	Х	Χ
C14625 Hospital arrival date and time			
C05408 Hospital admission date and time			
C04814 Residence type	X	X	Χ
C01001 Glasgow Coma Scale (GCS) - Motor response scale			
C01002 Glasgow Coma Scale (GCS) - Verbal response scale			
C01000 Glasgow Coma Scale (GCS) - Eye response scale			
C01016 Glasgow Coma Scale (GCS) - Total score			
C01539 Temperature measurement			
C01580 Temperature unit of measure			
C01535 Respiratory rate			
C01554 Oxygen saturation measurement			
C01522 Height measurement	X	X	Χ
C01582 Height unit of measure	X	X	Χ
C01541 Weight measurement	X	X	Χ
C01581 Weight unit of measure	X	X	Χ
C14219 Clinical stroke time-based definition indicator			
C14220 Clinical stroke tissue-based definition indicator	X	X	Χ
C14221 Clinical stroke time-based definition type			
C14222 Clinical stroke tissue-based definition type	X	X	Χ
C02411 Laterality type	X	X	Χ

Study Design: Randomized Clinical Trial			
Disease Stage: Primary Prevention		Disease Type	
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C04804 Hospital discharge date and time	Х	X	Х
C14213 Diagnosis principal discharge code	Х	Х	Х
C14627 Stroke initial residence or discharge destination type	Х	X	Χ
C60358 IV thrombolytic agent initiate status			
C60359 IV thrombolytic agent initiate date and time			
C14401 Intra-arterial (IA) procedure initiate indicator			
C14402 Intra-arterial (IA) procedure type			
C14629 Anticoagulant agent in hospital indicator			
C14630 Anticoagulant agent in hospital type			
C18984 Anticoagulant agent in hospital other text			
C14631 Antiplatelet agent in hospital indicator			
C14632 Antiplatelet agent in hospital type			
C18985 Antiplatelet agent in hospital other text			
C58949 Medication stroke discharge prescribe category			
C58950 Anticoagulant agent stroke discharge prescribe type			
C58951 Anticoagulant agent stroke discharge prescribe other text			
C58952 Antiplatelet agent stroke discharge prescribe type			
C58953 Antiplatelet agent stroke discharge prescribe other text			
C58954 Antihypertensive agent stroke discharge prescribe type		X	Χ
C58955 Antihypertensive agent stroke discharge prescribe other text		X	Χ
C58956 Anti diabetic agent stroke discharge prescribe type			Χ
C58957 Anti diabetic agent stroke discharge prescribe other text			Χ
C58958 Lipid lower agent stroke discharge prescribe type			Χ
C58959 Lipid lower agent stroke discharge prescribe other text			Χ
C13750 Imaging study ID number	Х	Х	Х
C02494 Imaging study date and time	X	X	Χ
C13907 Imaging B-mode finding result			Х

Study Design: Randomized Clinical Trial				
Disease Stage: Primary Prevention		Disease Type		
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)	
C13908 Imaging echo pattern result	, ,	, ,	X	
C13909 Imaging plaque surface type			Х	
C13910 Imaging plaque severity grade			Х	
C13916 Imaging color flow angle measurement			Х	
C13947 Imaging peak velocity measurement			Х	
C13917 Imaging end diastolic velocity measurement			Х	
C58871 Imaging signal indicator			Х	
C13919 Imaging percent stenosis criterion type			Х	
C14006 Imaging stenosis percentage value			Х	
C13879 Imaging modality vessel imaging angiography type	Х	Х	Х	
C58887 Follow-up care specialist type				
C54884 Vessel repair anatomic site				
C54885 Subarachnoid hemorrhage ictus elapsed day count				
C54889 Intervention surgical status				
C54890 Intervention endovascular status				
C00714 Behavioral history assessment date and time	X	X	Χ	
C00710 Tobacco current use indicator	Х	Χ	Χ	
C00711 Tobacco prior use indicator	X	X	Χ	
C06108 Tobacco smoke pack-year value	X	Χ	Χ	
C00705 Alcohol current use indicator	X	Χ	Χ	
C58944 Alcohol 30 day use indicator	Х	Χ	Χ	
C00706 Alcohol prior use indicator	X	Χ	Χ	
C00730 Alcohol use frequency	X	X	Χ	
C58936 Drug or substance current illicit or recreational use indicator	X	X	Χ	
C58937 Drug or substance illicit or recreational use category	X	Χ	Χ	
C58938 Drug or substance illicit or recreational use other text				
C15624 Pregnancy indicator	Х	Х	Х	

Study Design: Randomized Clinical Trial			
Disease Stage: Primary Prevention	Disease Type		
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C15629 Postpartum indicator	X	X	X
C00315 Medical history global assessment indicator	Х	Х	Х
C06005 Data collected date and time		Х	Х
C10556 Pregnant ever indicator		Х	Х
C11065 Gravida maternal value		Х	X
C10558 Delivery or pregnancy termination last date and time		Х	Х
C10559 Spontaneous miscarriage count		Х	Х
C14151 Pregnancy medical terminations count		Х	Х
C11062 Maternal delivery age value		Х	Х
C11063 Parity maternal value		Х	Х
C11066 Pregnancy or delivery risk factor type		Х	Х
C18819 Pregnancy or delivery risk factor other text		X	Χ
C11067 Pregnancy or delivery risk factor indicator		X	Χ
C58820 Pregnancy or delivery risk factor status		X	Χ
C58821 Pregnancy or delivery risk factor illness other text		X	Χ
C58823 Pregnancy or delivery risk factor fetal abnormal recognize in utero text		X	Χ
C58824 Pregnancy or delivery risk factor maternal infection text		X	Χ
C59019 Birth weight measurement		X	Χ
C00001 Gestational age value		X	Χ
C12604 APGAR one minute score		X	Χ
C00724 APGAR five minute score		X	Χ
C00723 APGAR ten minute score		X	Χ
C11078 Delivery mode type		X	X
C18829 Delivery mode induced other text		X	X
C11079 Neonate delivery route type		X	X
C11081 Delivery caesarean timing status		X	X
C11080 Delivery modality type		X	Χ

Study Design: Randomized Clinical Trial			
Disease Stage: Primary Prevention	Disease Type		
	Subarachnoid	Intracerebral	
	hemorrhage	hemorrhage	Ischemic
CDE ID/CDE Name	(SAH)	(ICH)	(ISC)
C11083 Delivery extraction type		X	Χ
C14191 Last known to be well date and time			
C14625 Hospital arrival date and time	X	X	Χ
C05408 Hospital admission date and time			
C04814 Residence type			
C01001 Glasgow Coma Scale (GCS) - Motor response scale			
C01002 Glasgow Coma Scale (GCS) - Verbal response scale			
C01000 Glasgow Coma Scale (GCS) - Eye response scale			
C01016 Glasgow Coma Scale (GCS) - Total score			
C01539 Temperature measurement			
C01580 Temperature unit of measure			
C01535 Respiratory rate			
C01554 Oxygen saturation measurement			
C01522 Height measurement	X	Χ	Χ
C01582 Height unit of measure	X	Χ	Χ
C01541 Weight measurement	X	X	Χ
C01581 Weight unit of measure	X	Χ	Χ
C14219 Clinical stroke time-based definition indicator	X	X	Χ
C14220 Clinical stroke tissue-based definition indicator	Х	Х	Х
C14221 Clinical stroke time-based definition type	X	Х	Х
C14222 Clinical stroke tissue-based definition type	Х	Х	Х
C02411 Laterality type			

Study Design: Randomized Clinical Trial				
Disease Stage: Secondary Prevention		Disease Type		
CDEID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)	
C04804 Hospital discharge date and time	X	X	X	
C14213 Diagnosis principal discharge code	X	Х	Х	
C14627 Stroke initial residence or discharge destination type	X	Х	Х	
C60358 IV thrombolytic agent initiate status				
C60359 IV thrombolytic agent initiate date and time				
C14401 Intra-arterial (IA) procedure initiate indicator				
C14402 Intra-arterial (IA) procedure type				
C14629 Anticoagulant agent in hospital indicator				
C14630 Anticoagulant agent in hospital type				
C18984 Anticoagulant agent in hospital other text				
C14631 Antiplatelet agent in hospital indicator	X			
C14632 Antiplatelet agent in hospital type	X			
C18985 Antiplatelet agent in hospital other text	X			
C58949 Medication stroke discharge prescribe category				
C58950 Anticoagulant agent stroke discharge prescribe type				
C58951 Anticoagulant agent stroke discharge prescribe other text				
C58952 Antiplatelet agent stroke discharge prescribe type	X			
C58953 Antiplatelet agent stroke discharge prescribe other text	X			
C58954 Antihypertensive agent stroke discharge prescribe type		X	Χ	
C58955 Antihypertensive agent stroke discharge prescribe other text		X	Χ	
C58956 Anti diabetic agent stroke discharge prescribe type			Χ	
C58957 Anti diabetic agent stroke discharge prescribe other text			Χ	
C58958 Lipid lower agent stroke discharge prescribe type		X	Χ	
C58959 Lipid lower agent stroke discharge prescribe other text		X	Χ	
C13750 Imaging study ID number	X	X	Χ	
C02494 Imaging study date and time	X	X	Χ	
C13907 Imaging B-mode finding result			Χ	

Study Design: Randomized Clinical Trial				
Disease Stage: Secondary Prevention		Disease Type		
CDEID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)	
C13908 Imaging echo pattern result	, ,	, ,	X	
C13909 Imaging plaque surface type			Х	
C13910 Imaging plaque severity grade			Х	
C13916 Imaging color flow angle measurement			Х	
C13947 Imaging peak velocity measurement			Х	
C13917 Imaging end diastolic velocity measurement			Х	
C58871 Imaging signal indicator			Х	
C13919 Imaging percent stenosis criterion type			Х	
C14006 Imaging stenosis percentage value			Х	
C13879 Imaging modality vessel imaging angiography type	Х	Х	Х	
C58887 Follow-up care specialist type				
C54884 Vessel repair anatomic site				
C54885 Subarachnoid hemorrhage ictus elapsed day count				
C54889 Intervention surgical status				
C54890 Intervention endovascular status				
C00714 Behavioral history assessment date and time	X	Χ	Χ	
C00710 Tobacco current use indicator	X	Χ	Χ	
C00711 Tobacco prior use indicator	X	Χ	Χ	
C06108 Tobacco smoke pack-year value	X	Χ	Χ	
C00705 Alcohol current use indicator	X	Χ	Χ	
C58944 Alcohol 30 day use indicator	X	Χ	Χ	
C00706 Alcohol prior use indicator	X	Χ	Χ	
C00730 Alcohol use frequency	X	X	X	
C58936 Drug or substance current illicit or recreational use indicator	X	X	Χ	
C58937 Drug or substance illicit or recreational use category	X	X	Χ	
C58938 Drug or substance illicit or recreational use other text				
C15624 Pregnancy indicator	X	Χ	Χ	

Study Design: Randomized Clinical Trial			
Disease Stage: Secondary Prevention	Disease Type		
CDEID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C15629 Postpartum indicator	X	X	X
C00315 Medical history global assessment indicator	X	X	X
C06005 Data collected date and time		X	X
C10556 Pregnant ever indicator		X	X
C11065 Gravida maternal value		X	X
C10558 Delivery or pregnancy termination last date and time		Х	Х
C10559 Spontaneous miscarriage count		Х	Х
C14151 Pregnancy medical terminations count		Х	Х
C11062 Maternal delivery age value		Х	Х
C11063 Parity maternal value		Х	Х
C11066 Pregnancy or delivery risk factor type		Х	Х
C18819 Pregnancy or delivery risk factor other text		Х	Х
C11067 Pregnancy or delivery risk factor indicator		Х	X
C58820 Pregnancy or delivery risk factor status		Х	X
C58821 Pregnancy or delivery risk factor illness other text		Х	Х
C58823 Pregnancy or delivery risk factor fetal abnormal recognize in utero text		Х	Х
C58824 Pregnancy or delivery risk factor maternal infection text		Х	Х
C59019 Birth weight measurement		Х	Х
C00001 Gestational age value		Х	Х
C12604 APGAR one minute score		Х	Х
C00724 APGAR five minute score		X	Χ
C00723 APGAR ten minute score		X	Χ
C11078 Delivery mode type		X	Х
C18829 Delivery mode induced other text		Х	Х
C11079 Neonate delivery route type		X	Х
C11081 Delivery caesarean timing status		X	Х
C11080 Delivery modality type		Х	Х

Study Design: Randomized Clinical Trial			
Disease Stage: Secondary Prevention	Disease Type		
	Subarachnoid	Intracerebral	
	hemorrhage	hemorrhage	Ischemic
CDEID/CDE Name	(SAH)	(ICH)	(ISC)
C11083 Delivery extraction type		X	Χ
C14191 Last known to be well date and time	X	X	Χ
C14625 Hospital arrival date and time	X	X	Χ
C05408 Hospital admission date and time			
C04814 Residence type			
C01001 Glasgow Coma Scale (GCS) - Motor response scale			
C01002 Glasgow Coma Scale (GCS) - Verbal response scale			
C01000 Glasgow Coma Scale (GCS) - Eye response scale			
C01016 Glasgow Coma Scale (GCS) - Total score			
C01539 Temperature measurement			
C01580 Temperature unit of measure			
C01535 Respiratory rate			
C01554 Oxygen saturation measurement			
C01522 Height measurement	X	X	Χ
C01582 Height unit of measure	X	X	Χ
C01541 Weight measurement	X	X	Χ
C01581 Weight unit of measure	X	X	Χ
C14219 Clinical stroke time-based definition indicator	X	X	Χ
C14220 Clinical stroke tissue-based definition indicator	Х	Х	Х
C14221 Clinical stroke time-based definition type	Х	Х	Х
C14222 Clinical stroke tissue-based definition type	X	X	Χ
C02411 Laterality type			

Study Design: Observational/Epi				
Disease Stage: Acute		Disease Type		
	Subarachnoid hemorrhage	Intracerebral hemorrhage	Ischemic	
CDE Name	(SAH)	(ICH)	(ISC)	
C04804 Hospital discharge date and time	Х	Х	Х	
C14213 Diagnosis principal discharge code	Х	Х	Х	
C14627 Stroke initial residence or discharge destination type	Х	Х	Χ	
C60358 IV thrombolytic agent initiate status		Х	Χ	
C60359 IV thrombolytic agent initiate date and time			Χ	
C14401 Intra-arterial (IA) procedure initiate indicator			Χ	
C14402 Intra-arterial (IA) procedure type			Х	
C14629 Anticoagulant agent in hospital indicator	Х	Х	Χ	
C14630 Anticoagulant agent in hospital type	X	Х	Х	
C18984 Anticoagulant agent in hospital other text	Х	Х	Х	
C14631 Antiplatelet agent in hospital indicator	Х	Х	Χ	
C14632 Antiplatelet agent in hospital type	Х	Х	Χ	
C18985 Antiplatelet agent in hospital other text	Х	Х	Χ	
C58949 Medication stroke discharge prescribe category	Х	Х	Χ	
C58950 Anticoagulant agent stroke discharge prescribe type	X	X	Χ	
C58951 Anticoagulant agent stroke discharge prescribe other text	Х	Х	Χ	
C58952 Antiplatelet agent stroke discharge prescribe type	X	X	Χ	
C58953 Antiplatelet agent stroke discharge prescribe other text	X	X	Χ	
C58954 Antihypertensive agent stroke discharge prescribe type		X	Χ	
C58955 Antihypertensive agent stroke discharge prescribe other text		X	Χ	
C58956 Anti diabetic agent stroke discharge prescribe type			Χ	
C58957 Anti diabetic agent stroke discharge prescribe other text			Χ	
C58958 Lipid lower agent stroke discharge prescribe type	X	X	Χ	
C58959 Lipid lower agent stroke discharge prescribe other text	X	X	Χ	
C13750 Imaging study ID number	Х	Х	Х	
C02494 Imaging study date and time	X	X	Χ	
C13907 Imaging B-mode finding result			Х	

Study Design: Observational/Epi			
Disease Stage: Acute		Disease Type	
	Subarachnoid hemorrhage	Intracerebral hemorrhage	Ischemic
CDE Name	(SAH)	(ICH)	(ISC)
C13908 Imaging echo pattern result		Ţ	X
C13909 Imaging plaque surface type			Х
C13910 Imaging plaque severity grade			Х
C13916 Imaging color flow angle measurement			Х
C13947 Imaging peak velocity measurement			Х
C13917 Imaging end diastolic velocity measurement			Х
C58871 Imaging signal indicator			Х
C13919 Imaging percent stenosis criterion type			Х
C14006 Imaging stenosis percentage value			Х
C13879 Imaging modality vessel imaging angiography type	Х	Х	Х
C58887 Follow-up care specialist type			
C54884 Vessel repair anatomic site	Х		
C54885 Subarachnoid hemorrhage ictus elapsed day count	Х		
C54889 Intervention surgical status	Х		
C54890 Intervention endovascular status	Х		
C00714 Behavioral history assessment date and time			
C00710 Tobacco current use indicator	Х	Х	Х
C00711 Tobacco prior use indicator	Х	X	Χ
C06108 Tobacco smoke pack-year value	X	X	Χ
C00705 Alcohol current use indicator	X	X	Χ
C58944 Alcohol 30 day use indicator	Х	X	Χ
C00706 Alcohol prior use indicator	X	Χ	Χ
C00730 Alcohol use frequency	X	Χ	Χ
C58936 Drug or substance current illicit or recreational use indicator			
C58937 Drug or substance illicit or recreational use category			
C58938 Drug or substance illicit or recreational use other text			
C15624 Pregnancy indicator		Х	Х

Study Design: Observational/Epi			
Disease Stage: Acute			
CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C15629 Postpartum indicator	(37111)	X	X
C00315 Medical history global assessment indicator		X	X
C06005 Data collected date and time		X	X
C10556 Pregnant ever indicator		Х	Х
C11065 Gravida maternal value		Х	Х
C10558 Delivery or pregnancy termination last date and time		Х	Х
C10559 Spontaneous miscarriage count		Х	Х
C14151 Pregnancy medical terminations count		Х	X
C11062 Maternal delivery age value		Х	X
C11063 Parity maternal value		Х	Х
C11066 Pregnancy or delivery risk factor type		Х	Х
C18819 Pregnancy or delivery risk factor other text		Х	Х
C11067 Pregnancy or delivery risk factor indicator		Х	Х
C58820 Pregnancy or delivery risk factor status		Х	Х
C58821 Pregnancy or delivery risk factor illness other text		Х	Χ
C58823 Pregnancy or delivery risk factor fetal abnormal recognize in utero text		Х	Χ
C58824 Pregnancy or delivery risk factor maternal infection text		Х	Χ
C59019 Birth weight measurement		X	Χ
C00001 Gestational age value		Х	Χ
C12604 APGAR one minute score		X	Χ
C00724 APGAR five minute score		X	Χ
C00723 APGAR ten minute score		X	Χ
C11078 Delivery mode type		X	Χ
C18829 Delivery mode induced other text		X	X
C11079 Neonate delivery route type		X	Χ
C11081 Delivery caesarean timing status		X	Χ
C11080 Delivery modality type		Х	Х

Study Design: Observational/Epi			
Disease Stage: Acute	Disease Type		
	Subarachnoid	Intracerebral	
	hemorrhage	hemorrhage	Ischemic
CDE Name	(SAH)	(ICH)	(ISC)
C11083 Delivery extraction type		X	Χ
C14191 Last known to be well date and time	X	X	Χ
C14625 Hospital arrival date and time	X	X	Χ
C05408 Hospital admission date and time			
C04814 Residence type			
C01001 Glasgow Coma Scale (GCS) - Motor response scale	X	X	Χ
C01002 Glasgow Coma Scale (GCS) - Verbal response scale	X	X	Χ
C01000 Glasgow Coma Scale (GCS) - Eye response scale	X	X	Χ
C01016 Glasgow Coma Scale (GCS) - Total score	X	X	Χ
C01539 Temperature measurement	X	X	Χ
C01580 Temperature unit of measure	X	X	Χ
C01535 Respiratory rate	X	X	
C01554 Oxygen saturation measurement	X	X	
C01522 Height measurement	X	X	Χ
C01582 Height unit of measure	X	X	Χ
C01541 Weight measurement	X	X	Χ
C01581 Weight unit of measure	X	X	Χ
C14219 Clinical stroke time-based definition indicator	Х	X	Χ
C14220 Clinical stroke tissue-based definition indicator	Х	Х	Х
C14221 Clinical stroke time-based definition type	X	Х	Х
C14222 Clinical stroke tissue-based definition type	X	X	Χ
C02411 Laterality type			Χ

Disease Stage: Recovery	Disease Type			
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)	
C04804 Hospital discharge date and time				
C14213 Diagnosis principal discharge code				
C14627 Stroke initial residence or discharge destination type	X	Χ	Χ	
C60358 IV thrombolytic agent initiate status				
C60359 IV thrombolytic agent initiate date and time				
C14401 Intra-arterial (IA) procedure initiate indicator				
C14402 Intra-arterial (IA) procedure type				
C14629 Anticoagulant agent in hospital indicator				
C14630 Anticoagulant agent in hospital type				
C18984 Anticoagulant agent in hospital other text				
C14631 Antiplatelet agent in hospital indicator				
C14632 Antiplatelet agent in hospital type				
C18985 Antiplatelet agent in hospital other text				
C58949 Medication stroke discharge prescribe category				
C58950 Anticoagulant agent stroke discharge prescribe type				
C58951 Anticoagulant agent stroke discharge prescribe other text				
C58952 Antiplatelet agent stroke discharge prescribe type				
C58953 Antiplatelet agent stroke discharge prescribe other text				
C58954 Antihypertensive agent stroke discharge prescribe type				
C58955 Antihypertensive agent stroke discharge prescribe other text				
C58956 Anti diabetic agent stroke discharge prescribe type				
C58957 Anti diabetic agent stroke discharge prescribe other text				
C58958 Lipid lower agent stroke discharge prescribe type	X	Х	Х	
C58959 Lipid lower agent stroke discharge prescribe other text	X	Х	Х	
C13750 Imaging study ID number	X	Х	Х	
C02494 Imaging study date and time	Х	Х	Х	
C13907 Imaging B-mode finding result				

Study Design: Observational/Epi			
Disease Stage: Recovery		Disease Type	
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C13908 Imaging echo pattern result	, ,	(- /	(/
C13909 Imaging plaque surface type			
C13910 Imaging plaque severity grade			
C13916 Imaging color flow angle measurement			
C13947 Imaging peak velocity measurement			
C13917 Imaging end diastolic velocity measurement			
C58871 Imaging signal indicator			
C13919 Imaging percent stenosis criterion type			
C14006 Imaging stenosis percentage value			
C13879 Imaging modality vessel imaging angiography type	X	Х	Х
C58887 Follow-up care specialist type	Х	Х	Х
C54884 Vessel repair anatomic site			
C54885 Subarachnoid hemorrhage ictus elapsed day count			
C54889 Intervention surgical status			
C54890 Intervention endovascular status			
C00714 Behavioral history assessment date and time			
C00710 Tobacco current use indicator			
C00711 Tobacco prior use indicator			
C06108 Tobacco smoke pack-year value			
C00705 Alcohol current use indicator			
C58944 Alcohol 30 day use indicator			
C00706 Alcohol prior use indicator			
C00730 Alcohol use frequency			
C58936 Drug or substance current illicit or recreational use indicator			
C58937 Drug or substance illicit or recreational use category			
C58938 Drug or substance illicit or recreational use other text			
C15624 Pregnancy indicator		X	Χ

Study Design: Observational/Epi			
Disease Stage: Recovery	Disease Type		
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C15629 Postpartum indicator		Х	Х
C00315 Medical history global assessment indicator		Х	Х
C06005 Data collected date and time		X	Χ
C10556 Pregnant ever indicator		X	Χ
C11065 Gravida maternal value		X	Х
C10558 Delivery or pregnancy termination last date and time		X	Χ
C10559 Spontaneous miscarriage count		X	Х
C14151 Pregnancy medical terminations count		X	Χ
C11062 Maternal delivery age value		X	Х
C11063 Parity maternal value		X	Χ
C11066 Pregnancy or delivery risk factor type		X	Χ
C18819 Pregnancy or delivery risk factor other text		X	Χ
C11067 Pregnancy or delivery risk factor indicator		X	Χ
C58820 Pregnancy or delivery risk factor status		X	Χ
C58821 Pregnancy or delivery risk factor illness other text		Χ	Χ
C58823 Pregnancy or delivery risk factor fetal abnormal recognize in utero text		X	Χ
C58824 Pregnancy or delivery risk factor maternal infection text		Χ	Χ
C59019 Birth weight measurement		X	X
C00001 Gestational age value		Χ	Χ
C12604 APGAR one minute score		X	Χ
C00724 APGAR five minute score		Χ	Χ
C00723 APGAR ten minute score		X	Χ
C11078 Delivery mode type		X	X
C18829 Delivery mode induced other text		X	Χ
C11079 Neonate delivery route type		X	Χ
C11081 Delivery caesarean timing status		X	Χ
C11080 Delivery modality type		X	Χ

Study Design: Observational/Epi				
Disease Stage: Recovery		Disease Type		
	Subarachnoid	Intracerebral		
	hemorrhage	hemorrhage	Ischemic	
CDE ID/CDE Name	(SAH)	(ICH)	(ISC)	
C11083 Delivery extraction type		X	Χ	
C14191 Last known to be well date and time				
C14625 Hospital arrival date and time				
C05408 Hospital admission date and time				
C04814 Residence type	X	X	Χ	
C01001 Glasgow Coma Scale (GCS) - Motor response scale				
C01002 Glasgow Coma Scale (GCS) - Verbal response scale				
C01000 Glasgow Coma Scale (GCS) - Eye response scale				
C01016 Glasgow Coma Scale (GCS) - Total score				
C01539 Temperature measurement				
C01580 Temperature unit of measure				
C01535 Respiratory rate				
C01554 Oxygen saturation measurement				
C01522 Height measurement				
C01582 Height unit of measure				
C01541 Weight measurement				
C01581 Weight unit of measure				
C14219 Clinical stroke time-based definition indicator				
C14220 Clinical stroke tissue-based definition indicator				
C14221 Clinical stroke time-based definition type				
C14222 Clinical stroke tissue-based definition type				
C02411 Laterality type	X	X	Χ	

Study Design: Observational/Epi				
Disease Stage: Primary Prevention		Disease Type		
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)	
C04804 Hospital discharge date and time	X	X	X	
C14213 Diagnosis principal discharge code	Х	Х	Х	
C14627 Stroke initial residence or discharge destination type	X	Х	Х	
C60358 IV thrombolytic agent initiate status				
C60359 IV thrombolytic agent initiate date and time				
C14401 Intra-arterial (IA) procedure initiate indicator				
C14402 Intra-arterial (IA) procedure type				
C14629 Anticoagulant agent in hospital indicator				
C14630 Anticoagulant agent in hospital type				
C18984 Anticoagulant agent in hospital other text				
C14631 Antiplatelet agent in hospital indicator				
C14632 Antiplatelet agent in hospital type				
C18985 Antiplatelet agent in hospital other text				
C58949 Medication stroke discharge prescribe category				
C58950 Anticoagulant agent stroke discharge prescribe type				
C58951 Anticoagulant agent stroke discharge prescribe other text				
C58952 Antiplatelet agent stroke discharge prescribe type				
C58953 Antiplatelet agent stroke discharge prescribe other text				
C58954 Antihypertensive agent stroke discharge prescribe type		X	Χ	
C58955 Antihypertensive agent stroke discharge prescribe other text		X	Χ	
C58956 Anti diabetic agent stroke discharge prescribe type			Χ	
C58957 Anti diabetic agent stroke discharge prescribe other text			Χ	
C58958 Lipid lower agent stroke discharge prescribe type			X	
C58959 Lipid lower agent stroke discharge prescribe other text			Χ	
C13750 Imaging study ID number	X	X	X	
C02494 Imaging study date and time	X	X	X	
C13907 Imaging B-mode finding result			X	

Study Design: Observational/Epi			
Disease Stage: Primary Prevention		Disease Type	
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C13908 Imaging echo pattern result			X
C13909 Imaging plaque surface type			Х
C13910 Imaging plaque severity grade			Х
C13916 Imaging color flow angle measurement			Х
C13947 Imaging peak velocity measurement			Х
C13917 Imaging end diastolic velocity measurement			Х
C58871 Imaging signal indicator			Х
C13919 Imaging percent stenosis criterion type			Х
C14006 Imaging stenosis percentage value			Х
C13879 Imaging modality vessel imaging angiography type	Х	X	Х
C58887 Follow-up care specialist type			
C54884 Vessel repair anatomic site			
C54885 Subarachnoid hemorrhage ictus elapsed day count			
C54889 Intervention surgical status			
C54890 Intervention endovascular status			
C00714 Behavioral history assessment date and time			
C00710 Tobacco current use indicator	X	X	Х
C00711 Tobacco prior use indicator	X	X	X
C06108 Tobacco smoke pack-year value	X	X	Χ
C00705 Alcohol current use indicator	X	X	Χ
C58944 Alcohol 30 day use indicator	X	X	Χ
C00706 Alcohol prior use indicator	Х	Х	Х
C00730 Alcohol use frequency	Х	X	Χ
C58936 Drug or substance current illicit or recreational use indicator	Х	X	Χ
C58937 Drug or substance illicit or recreational use category	Х	Х	Х
C58938 Drug or substance illicit or recreational use other text	Х	X	
C15624 Pregnancy indicator	Х	X	Х

Study Design: Observational/Epi			
Disease Stage: Primary Prevention	Disease Type		
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C15629 Postpartum indicator	Х	Х	Х
C00315 Medical history global assessment indicator	Х	Х	Х
C06005 Data collected date and time		X	Х
C10556 Pregnant ever indicator		X	Х
C11065 Gravida maternal value		X	Х
C10558 Delivery or pregnancy termination last date and time		X	Х
C10559 Spontaneous miscarriage count		X	Х
C14151 Pregnancy medical terminations count		Х	Х
C11062 Maternal delivery age value		X	Χ
C11063 Parity maternal value		X	Х
C11066 Pregnancy or delivery risk factor type		X	Χ
C18819 Pregnancy or delivery risk factor other text		X	Χ
C11067 Pregnancy or delivery risk factor indicator		X	Χ
C58820 Pregnancy or delivery risk factor status		X	Χ
C58821 Pregnancy or delivery risk factor illness other text		X	Χ
C58823 Pregnancy or delivery risk factor fetal abnormal recognize in utero text		X	Χ
C58824 Pregnancy or delivery risk factor maternal infection text		X	Χ
C59019 Birth weight measurement		X	Χ
C00001 Gestational age value		X	X
C12604 APGAR one minute score		X	X
C00724 APGAR five minute score		X	X
C00723 APGAR ten minute score		X	X
C11078 Delivery mode type		X	X
C18829 Delivery mode induced other text		X	X
C11079 Neonate delivery route type		X	X
C11081 Delivery caesarean timing status		Х	X
C11080 Delivery modality type		X	Х

Study Design: Observational/Epi				
Disease Stage: Primary Prevention		Disease Type		
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)	
C11083 Delivery extraction type	(5/11.7)	X	X	
C14191 Last known to be well date and time	X	X		
C14625 Hospital arrival date and time	X	X	X	
C05408 Hospital admission date and time				
C04814 Residence type				
C01001 Glasgow Coma Scale (GCS) - Motor response scale				
C01002 Glasgow Coma Scale (GCS) - Verbal response scale				
C01000 Glasgow Coma Scale (GCS) - Eye response scale				
C01016 Glasgow Coma Scale (GCS) - Total score				
C01539 Temperature measurement				
C01580 Temperature unit of measure				
C01535 Respiratory rate				
C01554 Oxygen saturation measurement				
C01522 Height measurement	X	X	X	
C01582 Height unit of measure	X	X	Χ	
C01541 Weight measurement	X	X	X	
C01581 Weight unit of measure	X	X	Χ	
C14219 Clinical stroke time-based definition indicator	X	X	Χ	
C14220 Clinical stroke tissue-based definition indicator	X	X	Χ	
C14221 Clinical stroke time-based definition type	X	X	Χ	
C14222 Clinical stroke tissue-based definition type	X	X	X	
C02411 Laterality type				

Study Design: Observational/Epi			
Disease Stage: Secondary Prevention		Disease Type	
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C04804 Hospital discharge date and time	Х	X	Х
C14213 Diagnosis principal discharge code	Х	Х	Х
C14627 Stroke initial residence or discharge destination type	Х	Х	Х
C60358 IV thrombolytic agent initiate status			
C60359 IV thrombolytic agent initiate date and time			
C14401 Intra-arterial (IA) procedure initiate indicator			
C14402 Intra-arterial (IA) procedure type			
C14629 Anticoagulant agent in hospital indicator			
C14630 Anticoagulant agent in hospital type			
C18984 Anticoagulant agent in hospital other text			
C14631 Antiplatelet agent in hospital indicator	Х		
C14632 Antiplatelet agent in hospital type	Х		
C18985 Antiplatelet agent in hospital other text	Х		
C58949 Medication stroke discharge prescribe category	Х	Х	Х
C58950 Anticoagulant agent stroke discharge prescribe type			
C58951 Anticoagulant agent stroke discharge prescribe other text			
C58952 Antiplatelet agent stroke discharge prescribe type	X		
C58953 Antiplatelet agent stroke discharge prescribe other text	X		
C58954 Antihypertensive agent stroke discharge prescribe type		X	Х
C58955 Antihypertensive agent stroke discharge prescribe other text		X	Χ
C58956 Anti diabetic agent stroke discharge prescribe type			Χ
C58957 Anti diabetic agent stroke discharge prescribe other text			Х
C58958 Lipid lower agent stroke discharge prescribe type		X	Χ
C58959 Lipid lower agent stroke discharge prescribe other text		X	Χ
C13750 Imaging study ID number	Х	Х	Х
C02494 Imaging study date and time	Х	X	Χ
C13907 Imaging B-mode finding result			Х

Study Design: Observational/Epi			
Disease Stage: Secondary Prevention		Disease Type	
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C13908 Imaging echo pattern result			Х
C13909 Imaging plaque surface type			Х
C13910 Imaging plaque severity grade			Х
C13916 Imaging color flow angle measurement			Х
C13947 Imaging peak velocity measurement			Х
C13917 Imaging end diastolic velocity measurement			Χ
C58871 Imaging signal indicator			Х
C13919 Imaging percent stenosis criterion type			Х
C14006 Imaging stenosis percentage value			Х
C13879 Imaging modality vessel imaging angiography type	X	X	Х
C58887 Follow-up care specialist type			
C54884 Vessel repair anatomic site			
C54885 Subarachnoid hemorrhage ictus elapsed day count			
C54889 Intervention surgical status			
C54890 Intervention endovascular status			
C00714 Behavioral history assessment date and time			
C00710 Tobacco current use indicator	X	X	Х
C00711 Tobacco prior use indicator	X	X	Х
C06108 Tobacco smoke pack-year value	X	X	Х
C00705 Alcohol current use indicator	X	X	Х
C58944 Alcohol 30 day use indicator	X	X	Χ
C00706 Alcohol prior use indicator	Х	Х	Х
C00730 Alcohol use frequency	Х	X	Χ
C58936 Drug or substance current illicit or recreational use indicator	Х	X	Х
C58937 Drug or substance illicit or recreational use category	Х	Х	Х
C58938 Drug or substance illicit or recreational use other text	Х	X	
C15624 Pregnancy indicator	Х	X	Х

Study Design: Observational/Epi			
Disease Stage: Secondary Prevention	Disease Type		
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C15629 Postpartum indicator	Х	Х	Х
C00315 Medical history global assessment indicator	Х	X	Х
C06005 Data collected date and time		X	Х
C10556 Pregnant ever indicator		Х	Х
C11065 Gravida maternal value		X	Х
C10558 Delivery or pregnancy termination last date and time		X	Х
C10559 Spontaneous miscarriage count		X	Х
C14151 Pregnancy medical terminations count		X	Х
C11062 Maternal delivery age value		X	Х
C11063 Parity maternal value		X	Х
C11066 Pregnancy or delivery risk factor type		X	Х
C18819 Pregnancy or delivery risk factor other text		X	Х
C11067 Pregnancy or delivery risk factor indicator		X	Х
C58820 Pregnancy or delivery risk factor status		X	Х
C58821 Pregnancy or delivery risk factor illness other text		X	Х
C58823 Pregnancy or delivery risk factor fetal abnormal recognize in utero text		X	Χ
C58824 Pregnancy or delivery risk factor maternal infection text		X	Х
C59019 Birth weight measurement		X	Χ
C00001 Gestational age value		X	Х
C12604 APGAR one minute score		X	Χ
C00724 APGAR five minute score		X	Χ
C00723 APGAR ten minute score		X	Х
C11078 Delivery mode type		X	Χ
C18829 Delivery mode induced other text		X	Χ
C11079 Neonate delivery route type		X	Χ
C11081 Delivery caesarean timing status		X	Χ
C11080 Delivery modality type		X	Х

Study Design: Observational/Epi			
Disease Stage: Secondary Prevention	Disease Type		
CDE ID/CDE Name	Subarachnoid hemorrhage (SAH)	Intracerebral hemorrhage (ICH)	Ischemic (ISC)
C11083 Delivery extraction type		X	Χ
C14191 Last known to be well date and time	X	X	
C14625 Hospital arrival date and time	X	X	X
C05408 Hospital admission date and time			
C04814 Residence type			
C01001 Glasgow Coma Scale (GCS) - Motor response scale			
C01002 Glasgow Coma Scale (GCS) - Verbal response scale			
C01000 Glasgow Coma Scale (GCS) - Eye response scale			
C01016 Glasgow Coma Scale (GCS) - Total score			
C01539 Temperature measurement			
C01580 Temperature unit of measure			
C01535 Respiratory rate			
C01554 Oxygen saturation measurement			
C01522 Height measurement	X	X	Χ
C01582 Height unit of measure	X	X	Χ
C01541 Weight measurement	X	X	Χ
C01581 Weight unit of measure	X	X	Χ
C14219 Clinical stroke time-based definition indicator	X	X	Χ
C14220 Clinical stroke tissue-based definition indicator	X	X	Χ
C14221 Clinical stroke time-based definition type	Х	X	Χ
C14222 Clinical stroke tissue-based definition type	X	X	Χ
C02411 Laterality type			

Supplemental - Highly Recommended CDEs for Stroke Studies Collecting Biospecimens

CDE ID/CDE Name
C01701 Lab specimen collection date and time
C58718 Tobacco last consumed date and time
C54743 Specimen biologic source type
C58720 Collection time mortality status indicator
C01712 Lab specimen type
C54746 Specimen not collected reason
C54748 Specimen baseline collection indicator
C55323 Specimen normal control collected indicator
C58873 Blood collection method category
C58724 Specimen hemolyzed indicator
C58735 Needle gauge size type
C54753 Specimen collection tube type
C58407 Blood collection tube volume value
C58737 Blood collection tube number
C54749 Cerebrospinal fluid collection method type
C54751 Cerebrospinal fluid collection anatomic site
C58738 CSF/serum simultaneous collection indicator
C01705 Lab test name
C58739 CSF/plasma simultaneous collection indicator
C58740 Specimen collection grossly bloody indicator
C58741 Specimen shipped indicator
C58742 Shipping conditions type
C58744 Specimen ambient light protection indicator
C58745 Specimen cooler than room temperature indicator
C56123 Specimen centrifugation performed indicator
C58746 Specimen centrifugation date and time
C55003 Specimen centrifugation revolutions per minute value
C55004 Specimen centrifugation temperature value

CDE ID/CDE Name
C55005 Specimen centrifugation duration
C58747 Specimen freezing date and time
C57923 Blood collection tube additive type
C55009 Specimen storage temperature value
C58426 Biomarker specimen collected aliquot number
C58427 Biomarker specimen collected aliqiot volume value
C58751 Specimen expiration date
C58752 Specimen expiration not applicable indicator
C58753 Specimen analysis date and time
C55325 Specimen convalescent collected indicator
C55327 Specimen serial collected indicator
C55329 Specimen storage barcode system used indicator
C55338 Specimen freeze thaw cycle prior biomarker assay number
C55340 Specimen selective inhibitor used indicator
C55341 Specimen selective inhibitor used type
C55746 Specimen surround dry ice shipment indicator
C55747 Specimen insulate shipment box indicator

Supplemental - Highly Recommended CDEs for Stroke Pediatric Studies

CDE ID/CDE Name
C14257 Childhood stroke type
C14258 Perinatal stroke type
C58913 Perinatal arterial ischemic stroke type

Instruments:

General Core for all Studies:

Investigators should review the FDA's "Guidance for Industry: Suicidal Ideation and Behavior: Prospective Assessment of Occurrence in Clinical Trials" for the most up-to-date information about suicidal ideation and behavior. One scale that FDA suggests is the Columbia Suicide Severity Rating Scale (C-SSRS) (available at Columbia Suicide Severity Rating Scale Website).

Disease Core for Stroke Studies:

• National Institutes of Health Stroke Scale (NIHSS) (Ischemic Stroke only)

Supplemental – Highly Recommended for Stroke Studies:

The following instruments are Supplemental – Highly Recommended depending on study design, stage and type of stroke:

- Boston Naming Test (BNT) 30-item version
- Delis-Kaplan Executive Function System (D-KEFS)
- EuroQoL-5 Dimension Questionnaire (EQ-5D)
- Fugl-Meyer Assessment
- Glasgow Coma Scale (GCS)
- Modified Rankin Scale (mRS)
- Montreal Cognitive Assessment (MoCA)
- National Institutes of Health Stroke Scale (NIHSS)
- Patient Health Questionnaire 9 (PHQ-9) Depression Scale
- Patient-Reported Outcomes Measurement Information System (PROMIS)
- Pediatric Stroke Outcomes Measure (PSOM) Short Neuro Exam (SNE) Child Version (Children Aged 2 Year and Older) or Infant Version (Infants Term Birth to Two Years)
- PROMIS Item Bank v1.2 Global Health
- PROMIS-29
- Quality of Life in Neurological Disorders (Neuro-QOL)
- Questionnaire for Verifying Stroke-Free Status (QVSFS)
- Stroke and Aphasia Quality of Life-39 (SAQOL-39)
- Walking Speed
- Western Aphasia Battery Revised

For the complete list of NINDS CDE recommendations for Stroke, please see the <u>NINDS CDE website</u> .						