

## DATA Analytics on STROKE

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### **Request**

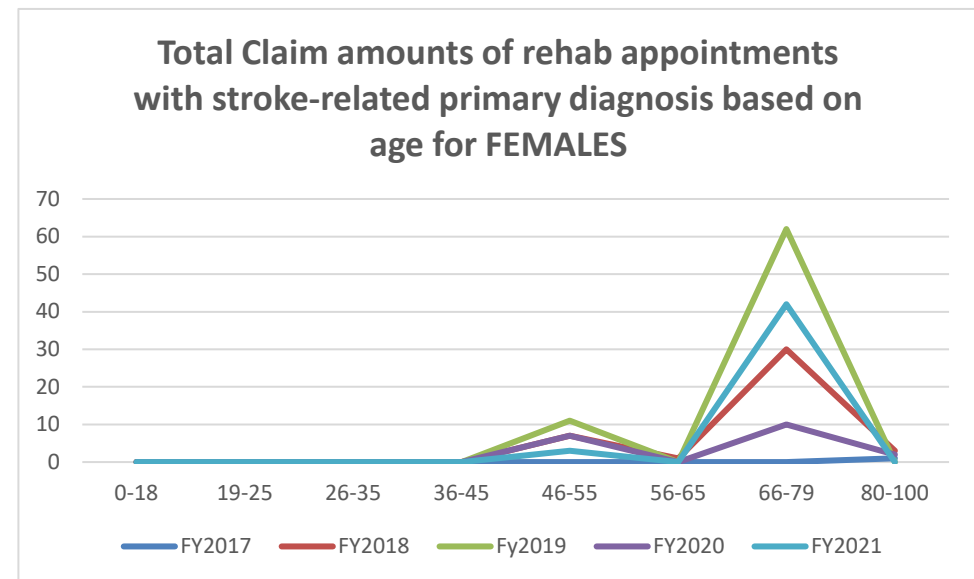
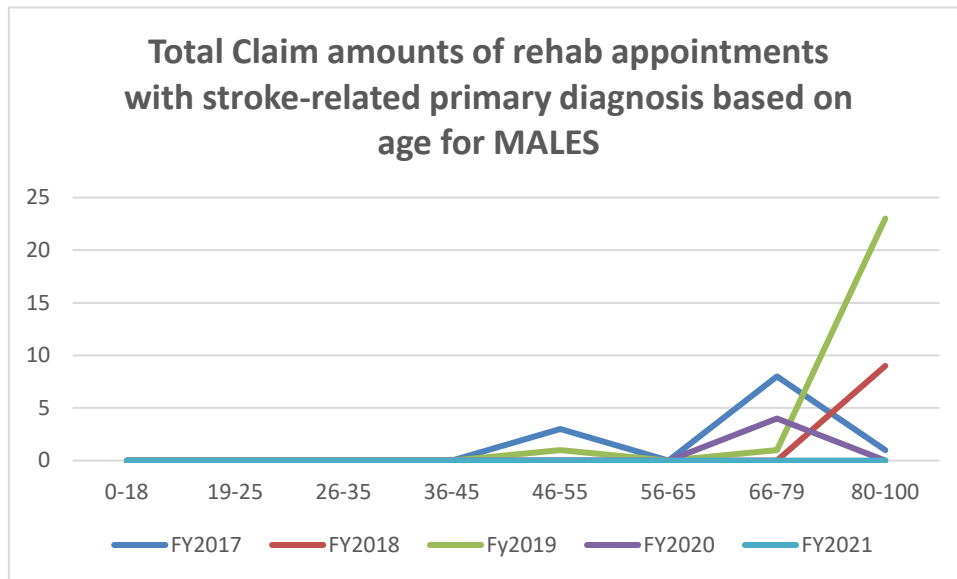
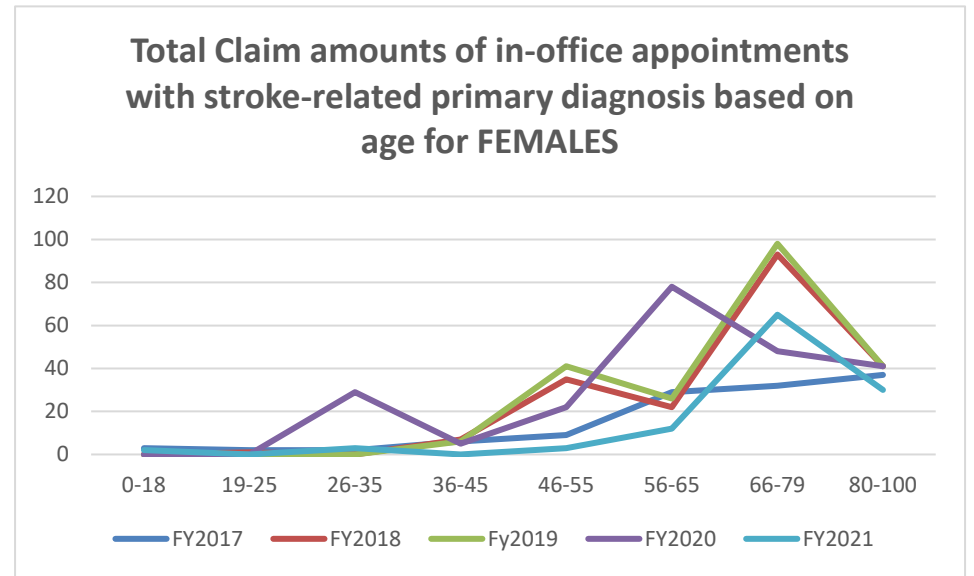
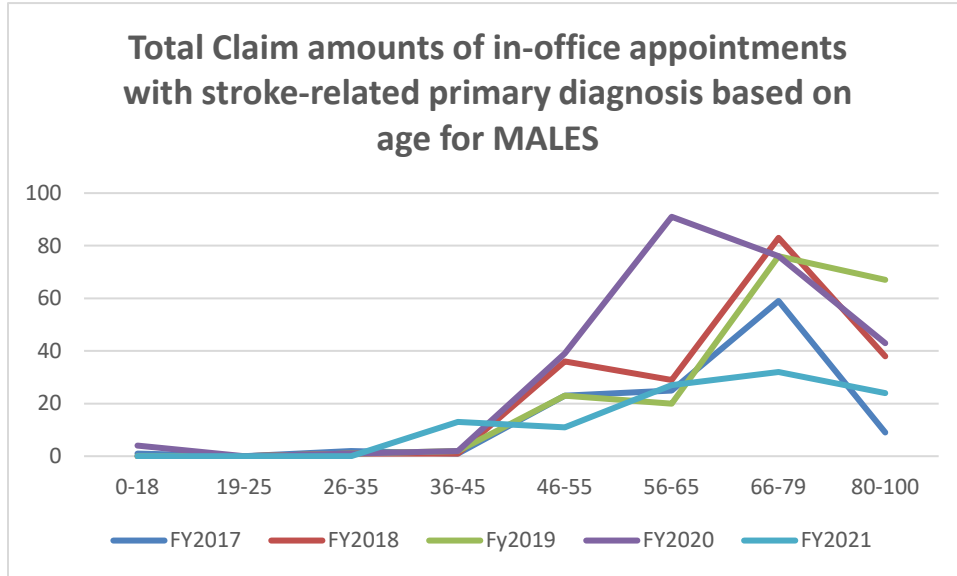
1. A request was submitted to provide information on strokes and stroke related rehab in the community.

### **Disclaimer**

1. The data is provided by the Bermuda Health Council and must be cited and authorized prior to publication or use. Bermuda Health Council does not make any guarantees or provide third party validation for the data sources.
2. The data provided is from claims submitted to the Health Council by insurers (excluding local non-subsidy hospital claims. Claims from overseas hospitals are included). The data is from health business submitting claims for the specified criteria outlined (i.e. conditions identified through diagnosis (ICD-9 or ICD-10) or procedure codes (CPT or local hospital charge codes)).
3. Fiscal year (FY) is from April 1st till March 31st. **FY21 is from April 2020-January 2021 (Excludes claims from one insurer).**
4. Insurers included are: BF&M, CG, Argus, GEHI, HIP and FTC
5. Subsidy includes claims from: Youth, Age, Indigent

**Data**

**General data**



**FY2017**

**Table 1. The following numbers are claim amounts of in-office appointments with the primary diagnosis related to stroke bases on age and sex.**

AGE RANGE	TOTAL			LOCAL			OVERSEAS		
	Sex			Sex			Sex		
	Unspecified	Male	Female	Unspecified	Male	Female	Unspecified	Male	Female
0-18	0	1	3	0	1	0	0	0	3
19-25	0	0	2	0	0	2	0	0	0
26-35	0	2	2	0	1	1	0	1	1
36-45	0	1	6	0	1	3	0	0	3
46-55	0	23	9	0	20	5	0	3	4
56-65	0	25	29	0	19	23	0	6	6
66-79	1	59	32	1	45	24	0	14	8
80-100	0	9	37	0	5	16	0	4	21
<b>TOTAL</b>	<b>1</b>	<b>120</b>	<b>120</b>	<b>1</b>	<b>92</b>	<b>74</b>	<b>0</b>	<b>28</b>	<b>46</b>

**Table 2. The following list the procedure code description related to the numbers of in-office claims with the primary diagnosis related to stroke.**

PROCEDURE	DESCRIPTION	FREQ.
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	13
99211	Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician or other qualified health care professional. Usually, the presenting problem(s) are minimal.	20
99212	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. When using time for code selection, 10-19 minutes of total time is spent on the date of the encounter.	79
99213	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low	66

	level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.	
99214	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.	3
99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: An expanded problem focused interval history; An expanded problem focused examination; Medical decision making of moderate complexity. Counselling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Typically, 25 minutes are spent at the bedside and on the patient's hospital floor or unit.	40
99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: A detailed interval history; A detailed examination; Medical decision making of high complexity. Counselling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Typically, 35 minutes are spent at the bedside and on the patient's hospital floor or unit.	22

**Table 3. The following list the primary diagnosis code description related to the numbers of in-office claims with the primary diagnosis related to stroke.**

PRIMARY DIAGNOSIS	DESCRIPTION	FREQ.
3623	Retinal vascular occlusion, unspecified	1
434	Occlusion of cerebral arteries	10
43411	Cerebral embolism with cerebral infarction	7
43491	Cerebral artery occlusion, unspecified with cerebral infarction	25
4350	Basilar artery syndrome	1

4359	Unspecified transient cerebral ischemia	24
436	Acute but ill-defined cerebrovascular disease	126
I63.511	CEREB INFARCT UNS OCCL/STEN RT MCA	1
I63.9	CEREBRAL INFARCTION UNSPECIFIED	5
I630	Cerebral infarction due to thrombosis of precerebral arteries	1
I6340	Cerebral infarction due to embolism of unspecified cerebral artery	1
I63419	Cerebral infarction due to embolism of unspecified middle cerebral artery.	7
I6350	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	2
I63511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery	3
I638	Other cerebral infarction	1
I639	Cerebral infarction, unspecified.	28

**Table 4. The following numbers are claim amounts of Rehab related office appointments with the primary diagnosis related to stroke bases on age and sex.**

AGE RANGE	TOTAL		LOCAL		OVERSEAS	
	Sex		Sex		Sex	
	Male	Female	Male	Female	Male	Female
46-55	3	0	3	0	0	0
66-79	8	0	8	0	0	0
80-100	1	1	1	1	0	0
TOTAL	12	1	12	1	0	0

**Table 5. The following list the procedure code description related to the numbers of rehab office claims with the primary diagnosis related to stroke.**

PROCEDURE	DISCRIPTION	FREQ.
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	13

**Table 6. The following list the primary diagnosis code description related to the numbers of rehab office claims with the primary diagnosis related to stroke.**

PRIMARY DIAGNOSIS	DISCRIPTION	FREQ.
43491	Cerebral artery occlusion, unspecified with cerebral infarction	11
436	Acute but ill-defined cerebrovascular disease	2

**FY2018**

**Table 1. The following numbers are claim amounts of in-office appointments with the primary diagnosis related to stroke bases on age and sex.**

AGE RANGE	TOTAL		LOCAL		OVERSEAS	
	Sex		Sex		Sex	
	Male	Female	Male	Female	Male	Female
19-25	0	1	0	1	0	0
26-35	1	0	1	0	0	0
36-45	1	7	0	3	0	0
46-55	36	35	22	24	10	9
56-65	29	22	18	16	8	5
66-79	83	93	27	62	32	0
80-100	38	41	38	23	0	16
<b>TOTAL</b>	<b>188</b>	<b>199</b>	<b>106</b>	<b>129</b>	<b>50</b>	<b>30</b>

**Table 2. The following list the procedure code description related to the numbers of in-office claims with the primary diagnosis related to stroke.**

PROCEDURE	DESCRIPTION	FREQ.
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual	3
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	45
97124	Therapeutic procedure, 1 or more areas, each 15 minutes; massage, including effleurage, petrissage and/or tapotement (stroking, compression, percussion)	1
97164	Re-evaluation of physical therapy established plan of care, requiring these components: An examination including a review of history and use of standardized tests and measures is required; and Revised plan of care using a standardized patient assessment instrument and/or measurable assessment of functional outcome Typically, 20 minutes are spent face-to-face with the patient and/or family.	1
99211	Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician or other qualified health care professional. Usually, the presenting problem(s) are minimal.	33

99212	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. When using time for code selection, 10-19 minutes of total time is spent on the date of the encounter.	106
99213	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.	69
99214	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.	13
99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: An expanded problem focused interval history; An expanded problem focused examination; Medical decision making of moderate complexity. Counselling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Typically, 25 minutes are spent at the bedside and on the patient's hospital floor or unit.	83
99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: A detailed interval history; A detailed examination; Medical decision making of high complexity. Counselling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Typically, 35 minutes are spent at the bedside and on the patient's hospital floor or unit.	33

**Table 3. The following list the primary diagnosis code description related to the numbers of in-office claims with the primary diagnosis related to stroke.**

PRIMARY DIAGNOSIS	DESCRIPTION	FREQ.
433.21	Occlusion and stenosis of vertebral artery with cerebral infarction	1
434.01	Cerebral infarction due to thrombosis of unspecified cerebral artery	3



434.1	Cerebral embolism	1
434.11	Cerebral embolism with cerebral infarction	11
434.91	Cerebral artery occlusion, unspecified with cerebral infarction	49
43491	Cerebral artery occlusion, unspecified with cerebral infarction	3
435	Transient cerebral ischemia.	4
435.1	Vertebral artery syndrome	1
435.8	Other specified transient cerebral ischemia	1
435.9	Unspecified transient cerebral ischemia	17
4359	Unspecified transient cerebral ischemia	10
436	Acute but ill-defined cerebrovascular disease	164
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	2
I63.51	Cerebral infarction due to unspecified occlusion or stenosis of middle cerebral artery	10
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery.	9
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	5
I63.8	Other cerebral infarction	2
I63.9	CEREBRAL INFARCTION UNSPECIFIED	52
I6350	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	14
I639	Cerebral infarction, unspecified.	28

**Table 4. The following numbers are claim amounts of Rehab related office appointments with the primary diagnosis related to stroke bases on age and sex.**

AGE RANGE	TOTAL		LOCAL		OVERSEAS	
	Sex		Sex		Sex	
	Male	Female	Male	Female	Male	Female
46-55	0	7	0	7	0	0
56-65	0	1	0	1	0	0

66-79	0	30	0	29	0	0
80-100	9	3	9	0	0	3
TOTAL	9	41	9	37	0	3

**Table 5. The following list the procedure code description related to the numbers of rehab office claims with the primary diagnosis related to stroke.**

PROCEDURE	DESCRIPTION	FREQ.
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual	3
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	45
97124	Therapeutic procedure, 1 or more areas, each 15 minutes; massage, including effleurage, petrissage and/or tapotement (stroking, compression, percussion)	1
97164	Re-evaluation of physical therapy established plan of care, requiring these components: An examination including a review of history and use of standardized tests and measures is required; and Revised plan of care using a standardized patient assessment instrument and/or measurable assessment of functional outcome Typically, 20 minutes are spent face-to-face with the patient and/or family.	1

**Table 6. The following list the primary diagnosis code description related to the numbers of rehab office claims with the primary diagnosis related to stroke.**

PRIMARY DIAGNOSIS	DESCRIPTION	FREQ.
434.01	Cerebral infarction due to thrombosis of unspecified cerebral artery	1
434.91	Cerebral artery occlusion, unspecified with cerebral infarction	36
436	Acute but ill-defined cerebrovascular disease	10

163.9	CEREBRAL INFARCTION UNSPECIFIED	3
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**FY2019**

**Table 1. The following numbers are claim amounts of in-office appointments with the primary diagnosis related to stroke bases on age and sex.**

AGE RANGE	TOTAL		LOCAL		OVERSEAS	
	Sex		Sex		Sex	
	Male	Female	Male	Female	Male	Female
26-35	1	0	1	0	0	0
36-45	2	6	1	3	1	1
46-55	23	41	11	29	12	12
56-65	20	26	13	18	7	8
66-79	76	98	42	90	31	5
80-100	67	41	56	20	8	21
<b>TOTAL</b>	<b>189</b>	<b>212</b>	<b>124</b>	<b>160</b>	<b>59</b>	<b>47</b>

**Table 2. The following list the procedure code description related to the numbers of in-office claims with the primary diagnosis related to stroke.**

PROCEDURE	DESCRIPTION	FREQ.
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	53
97124	Therapeutic procedure, 1 or more areas, each 15 minutes; massage, including effleurage, petrissage and/or tapotement (stroking, compression, percussion)	6
97140	Manual therapy techniques (e.g., mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes	16
97164	Re-evaluation of physical therapy established plan of care, requiring these components: An examination including a review of history and use of standardized tests and measures is required; and Revised plan of care using a standardized patient assessment instrument and/or measurable assessment of functional outcome Typically, 20 minutes are spent face-to-face with the patient and/or family.	1

97165	Occupational therapy evaluation, low complexity, requiring these components: An occupational profile and medical and therapy history, which includes a brief history including review of medical and/or therapy records relating to the presenting problem; An assessment(s) that identifies 1-3 performance deficits (i.e., relating to physical, cognitive, or psychosocial skills) that result in activity limitations and/or participation restrictions; and Clinical decision making of low complexity, which includes an analysis of the occupational profile, analysis of data from problem-focused assessment(s), and consideration of a limited number of treatment options. Patient presents with no comorbidities that affect occupational performance. Modification of tasks or assistance (eg, physical or verbal) with assessment(s) is not necessary to enable completion of evaluation component. Typically, 30 minutes are spent face-to-face with the patient and/or family.	13
97530	Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes	13
97799	Unlisted physical medicine/rehabilitation service or procedure	8
99211	Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician or other qualified health care professional. Usually, the presenting problem(s) are minimal.	18
99212	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. When using time for code selection, 10-19 minutes of total time is spent on the date of the encounter.	91
99213	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.	82
99214	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.	14
99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: An expanded problem focused interval history; An expanded problem focused examination; Medical decision making of moderate complexity. Counselling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Typically, 25 minutes are spent at the bedside and on the patient's hospital floor or unit.	72

Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: A detailed interval history; A detailed examination; Medical decision making of high complexity. Counselling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Typically, 35 minutes are spent at the bedside and on the patient's hospital floor or unit.

**Table 3. The following list the primary diagnosis code description related to the numbers of in-office claims with the primary diagnosis related to stroke.**

PRIMARY DIAGNOSIS	DESCRIPTION	FREQ.
434	Occlusion of cerebral arteries	1
434	Occlusion of cerebral arteries	9
434	Occlusion of cerebral arteries	4
434.01	Cerebral infarction due to thrombosis of unspecified cerebral artery	2
434.1	Cerebral embolism	1
434.11	Cerebral embolism with cerebral infarction	7
434.9	Unspecified occlusion	9
434.91	Cerebral artery occlusion, unspecified with cerebral infarction	62
435.8	Other specified transient cerebral ischemia	1
435.9	Unspecified transient cerebral ischemia	13
436	Acute but ill-defined cerebrovascular disease	202
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery.	4
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	14
I63.412	Cerebral infarction due to embolism of left middle cerebral artery.	12
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	1
I63.511	CEREB INFARCT UNS OCCL/STEN RT MCA	16
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	2
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery.	11

**Table 4. The following numbers are claim amounts of Rehab related office appointments with the primary diagnosis related to stroke bases on age and sex.**

AGE RANGE	TOTAL		LOCAL		NON-SPECIFIED IF LOCAL OR OVERSEAS	
	Sex Male	Female	Sex Male	Female	Sex Male	Female
46-55	1	11	1	11	0	0
66-79	2	62	2	59	0	3
80-100	23	0	22	0	1	0
TOTAL	26	73	25	70	1	3

**Table 5. The following list the procedure code description related to the numbers of rehab office claims with the primary diagnosis related to stroke.**

PROCEDURE	DESCRIPTION	FREQ.
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	53
97124	Therapeutic procedure, 1 or more areas, each 15 minutes; massage, including effleurage, petrissage and/or tapotement (stroking, compression, percussion)	6
97140	Manual therapy techniques (e.g., mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes	16
97164	Re-evaluation of physical therapy established plan of care, requiring these components: An examination including a review of history and use of standardized tests and measures is required; and Revised plan of care using a standardized patient assessment instrument and/or measurable assessment of functional outcome Typically, 20 minutes are spent face-to-face with the patient and/or family.	1
97165	Occupational therapy evaluation, low complexity, requiring these components: An occupational profile and medical and therapy history, which includes a brief history including review of medical and/or therapy records relating to the presenting problem; An assessment(s) that identifies 1-3 performance deficits (i.e., relating to physical,	13

cognitive, or psychosocial skills) that result in activity limitations and/or participation restrictions; and Clinical decision making of low complexity, which includes an analysis of the occupational profile, analysis of data from problem-focused assessment(s), and consideration of a limited number of treatment options. Patient presents with no comorbidities that affect occupational performance. Modification of tasks or assistance (e.g., physical or verbal) with assessment(s) is not necessary to enable completion of evaluation component. Typically, 30 minutes are spent face-to-face with the patient and/or family.

97530	Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes	13
97799	Unlisted physical medicine/rehabilitation service or procedure	8

**Table 6. The following list the primary diagnosis code description related to the numbers of rehab office claims with the primary diagnosis related to stroke.**

PRIMARY DIAGNOSIS	DESCRIPTION	FREQ.
434	Occlusion of cerebral arteries	1
434.0	Occlusion of cerebral arteries	9
434.01	Cerebral infarction due to thrombosis of unspecified cerebral artery	1
434.9	Unspecified occlusion	9
434.91	Cerebral artery occlusion, unspecified with cerebral infarction	47
436	Acute but ill-defined cerebrovascular disease	43

**FY2020**

**Table 1. The following numbers are claim amounts of in-office appointments with the primary diagnosis related to stroke bases on age and sex.**

AGE RANGE	TOTAL		LOCAL		OVERSEAS	
	Sex		Sex		Sex	
	Male	Female	Male	Female	Male	Female
0-18	4	0	0	0	4	0
26-35	1	29	0	4	1	25
36-45	2	5	0	5	2	0
46-55	39	22	14	16	25	6
56-65	91	78	35	18	56	60
66-79	76	48	32	43	44	5
80-100	43	41	26	40	17	1
TOTAL	256	223	107	126	149	97

**Table 2. The following list the procedure code description related to the numbers of in-office claims with the primary diagnosis related to stroke.**

PROCEDURE	DESCRIPTION	FREQ.
92507	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	3
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; massage, including effleurage, petrissage and/or tapotement (stroking, compression, percussion)	5
97124	Manual therapy techniques (e.g., mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes	2
97140	Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes	20
97530	Unlisted physical medicine/rehabilitation service or procedure	1



97799	Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician or other qualified health care professional. Usually, the presenting problem(s) are minimal.	2
99211	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. When using time for code selection, 10-19 minutes of total time is spent on the date of the encounter.	27
99212	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.	96
99213	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.	98
99214	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: An expanded problem focused interval history; An expanded problem focused examination; Medical decision making of moderate complexity. Counselling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Typically, 25 minutes are spent at the bedside and on the patient's hospital floor or unit.	8
99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: A detailed interval history; A detailed examination; Medical decision making of high complexity. Counselling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Typically, 35 minutes are spent at the bedside and on the patient's hospital floor or unit.	164
99233	subsequent hospital care	98

**Table 3. The following list the primary diagnosis code description related to the numbers of in-office claims with the primary diagnosis related to stroke.**

PRIMARY DIAGNOSIS	DESCRIPTION	FREQ.
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434	Occlusion of cerebral arteries	4
434	Occlusion of cerebral arteries	3
434.01	Cerebral infarction due to thrombosis of unspecified cerebral artery	1
434.11	Cerebral embolism with cerebral infarction	2
434.91	Cerebral artery occlusion, unspecified with cerebral infarction	49
435.9	Unspecified transient cerebral ischemia	26
436	Acute but ill-defined cerebrovascular disease	167
437.7	Transient global amnesia	1
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery.	1
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery	1
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery.	1
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery	1
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery	1
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery.	2
I63.41	Cerebral infarction due to embolism of middle cerebral artery.	1
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	1
I63.412	Cerebral infarction due to embolism of left middle cerebral artery.	14
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries	4
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery.	3
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery.	3
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery.	1
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	30
I63.511	CEREB INFARCT UNS OCCL/STEN RT MCA	23
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	66
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery.	3
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery i	16
I63.8	Other cerebral infarction	14
I63.9	CEREBRAL INFARCTION UNSPECIFIED	85

**Table 4. The following numbers are claim amounts of Rehab related office appointments with the primary diagnosis related to stroke bases on age and sex.**

AGE RANGE	TOTAL		LOCAL		OVERSEAS	
	Sex		Sex		Sex	
	Male	Female	Male	Female	Male	Female
46-55	0	7	0	7	0	0
66-79	4	10	4	9	0	1
80-100	0	2	0	2	0	0
TOTAL	4	19	4	18	0	1

**Table 5. The following list the procedure code description related to the numbers of rehab office claims with the primary diagnosis related to stroke.**

PROCEDURE	DESCRIPTION	FREQ.
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual	3
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	5
97124	Therapeutic procedure, 1 or more areas, each 15 minutes; massage, including effleurage, petrissage and/or tapotement (stroking, compression, percussion)	2
97140	Manual therapy techniques (e.g., mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes	20
97530	Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes	1
97799	Unlisted physical medicine/rehabilitation service or procedure	2

**Table 6. The following list the primary diagnosis code description related to the numbers of rehab office claims with the primary diagnosis related to stroke.**

PRIMARY DIAGNOSIS	DESCRIPTION	FREQ.
434	Occlusion of cerebral arteries	2
434.91	Cerebral artery occlusion, unspecified with cerebral infarction	22
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery.	1
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	3
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	1
I63.9	CEREBRAL INFARCTION UNSPECIFIED	4

**FY2021**

**Table 1. The following numbers are claim amounts of in-office appointments with the primary diagnosis related to stroke bases on age and sex.**

AGE RANGE	TOTAL		LOCAL		OVERSEAS	
	Sex Male	Female	Sex Male	Female	Sex Male	Female
0-18	0	2	0	0	0	2
26-35	0	3	0	0	0	3
36-45	13	0	0	0	13	0
46-55	11	3	8	3	3	0
56-65	27	12	13	7	14	5
66-79	32	65	20	62	12	3
80-100	24	30	24	28	0	2
TOTAL	107	115	65	100	42	15

**Table 2. The following list the procedure code description related to the numbers of in-office claims with the primary diagnosis related to stroke.**

PROCEDURE	DESCRIPTION	FREQ.
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual	3
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	5
97140	Manual therapy techniques (e.g., mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes	9
97530	Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes	20
97799	Unlisted physical medicine/rehabilitation service or procedure	20
99211	Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician or other qualified health care professional. Usually, the presenting problem(s) are minimal.	18
99212	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. When using time for code selection, 10-19 minutes of total time is spent on the date of the encounter.	71
99213	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.	72
99214	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.	4
99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: An expanded problem focused interval history; An expanded problem focused examination; Medical decision making of moderate complexity. Counselling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Typically, 25 minutes are spent at the bedside and on the patient's hospital floor or unit.	55

Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: A detailed interval history; A detailed examination; Medical decision making of high complexity. Counselling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Typically, 35 minutes are spent at the bedside and on the patient's hospital floor or unit.

**Table 3. The following list the primary diagnosis code description related to the numbers of in-office claims with the primary diagnosis related to stroke.**

PRIMARY DIAGNOSIS	DESCRIPTION	FREQ.
434	Occlusion of cerebral arteries	5
434.91	Cerebral artery occlusion, unspecified with cerebral infarction	32
435.9	Unspecified transient cerebral ischemia	14
436	Acute but ill-defined cerebrovascular disease	51
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery.	2
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery	1
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	4
I63.412	Cerebral infarction due to embolism of left middle cerebral artery.	4
I63.441	Cerebral infarction due to embolism of right cerebellar artery.	2
I63.442	Cerebral infarction due to embolism of left cerebellar artery.	3
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	48
I63.51	Cerebral infarction due to unspecified occlusion or stenosis of middle cerebral artery	7
I63.511	CEREB INFARCT UNS OCCL/STEN RT MCA	14
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	12
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery	1
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	2

I63.8	Other cerebral infarction	1
I63.9	CEREBRAL INFARCTION UNSPECIFIED	100

**Table 4. The following numbers are claim amounts of Rehab related office appointments with the primary diagnosis related to stroke bases on age and sex.**

AGE RANGE	TOTAL		LOCAL		OVERSEAS	
	Sex Male	Female	Sex Male	Female	Sex Male	Female
46-55	0	3	0	3	0	0
66-79	0	42	0	42	0	0

**Table 5. The following list the procedure code description related to the numbers of rehab office claims with the primary diagnosis related to stroke.**

PROCEDURE	DESCRIPTION	FREQ.
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual	3
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	5
97140	Manual therapy techniques (e.g., mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes	9
97530	Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes	20
97799	Unlisted physical medicine/rehabilitation service or procedure	20

**Table 6. The following list the primary diagnosis code description related to the numbers of rehab office claims with the primary diagnosis related to stroke.**

PRIMARY DIAGNOSIS	DESCRIPTION	FREQ.
434.91	Cerebral artery occlusion, unspecified with cerebral infarction	24
436	Acute but ill-defined cerebrovascular disease	20

163.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	9
163.9	CEREBRAL INFARCTION UNSPECIFIED	4