香港糖尿科護士協會
Association of Hong Kong Diabetes Nurses

18th AHKDN Annual Symposium
and Annual General Meeting

Nursing Roles in Bridging



Coordination Stroke Care

Mr. Yu Chung Tsang, Mick
RN, MBA, FHKAN (Medicine-Neurology)
Nurse Consultant (Stroke)
United Christian Hospital
Kowloon East Cluster

Global Burden of Stroke

Review

International Journal of Stroke WSO

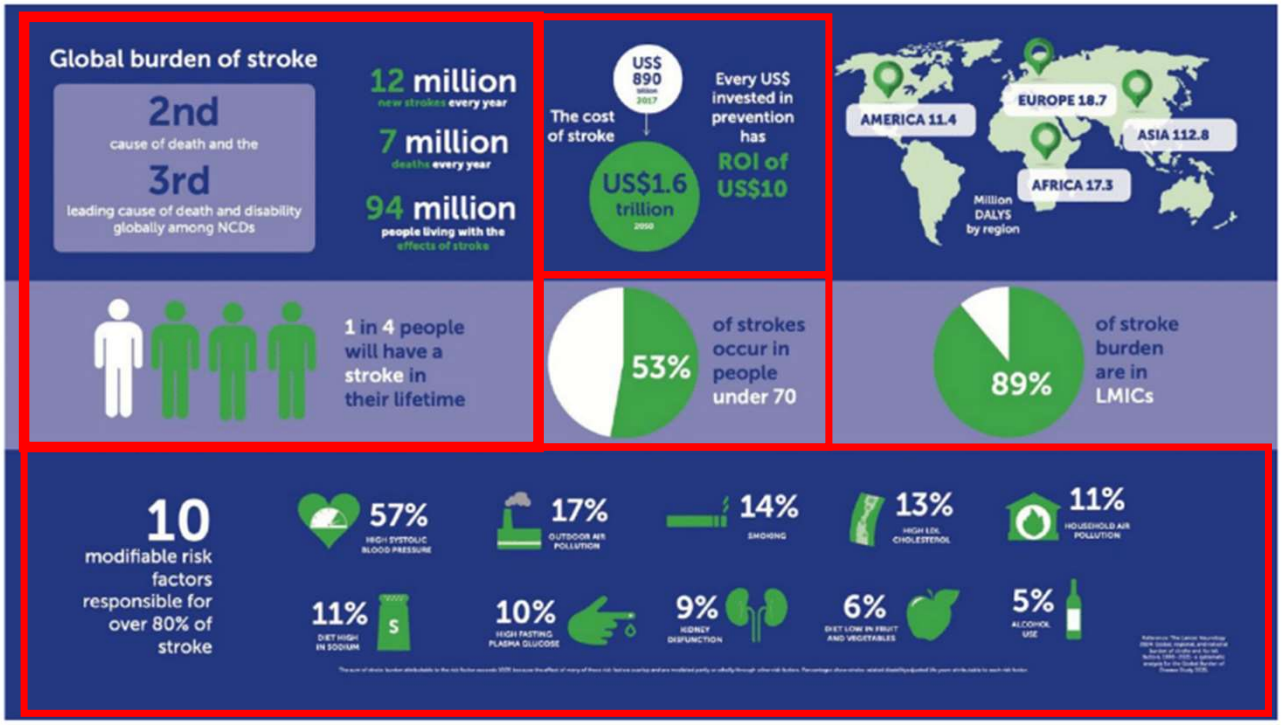
World Stroke Organization: Global Stroke Fact Sheet 2025

International Journal of Stroke
2025, Vol. 20(2) 132–144
© 2025 World Stroke Organization
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/17474930241308142
journals.sagepub.com/home/wso
Sage

Valery L Feigin[1], Michael Brainin[2], Bo Norrving[3], Sheila O Martins[4], Jeyaraj Pandian[5], Patrice Lindsay[6], Maria F Grupper[7] and Ilari Rautalin[1,8]

How about Global Burden of DM ??





Global Burden of DM

Global Type 2 Diabetes Burden (2024 Data) (Genitsaridi et al., 2025)

- **Prevalence:** 11.1% of adults aged 20–79 years (1 in 9 adults) — 589M worldwide.
- **Projections:** Expected to rise to 853M by 2050 (12.96% prevalence).
- **Undiagnosed:** 43% globally (~ 252M people).

Hong Kong Type 2 Diabetes Burden (2024 Data)

(International Diabetes Federation, 2025; Centre for Health Protection, 2025a)

- **Prevalence:** 8.2% adults 20–79 years and ~ 706,000 adults in 2024.
- **Projections:** Expected to rise to ~762,900 by 2050
- **Undiagnosed:** 52.2 % (~ 382,800 people)

DM & Stroke

Type 2 diabetes and stroke risk- key insights

- High fasting glucose associated with ~18% of global ischemic stroke burden in 2021 (Dong et al., 2025; GBD 2021, 2024).
- Early-onset type 2 diabetes (diagnosed before age 55) increases stroke risk up to 4.6 times (Molnár et al., 2025).
- Increases stroke risk 1.5–3 times in primarily ischaemic stroke (Mosenzon et al., 2023; GBD 2021, 2024).
- In Chinese / East Asian populations, increases stroke risk 1.35 to 2.3 times — stronger in middle-aged adults and women; prediabetes adds ~1.2 times risk (Bai et al., 2024; Bragg et al., 2016).
- Ischaemic stroke was associated with an average annual medical cost of USD $17,976 (Lui et al., 2025).
- Top 3-4 most expensive diabetes-related complications (Lui et al., 2025).
- In HK, ~17% of young stroke patients (aged 18–55) have comorbid diabetes (HKUMed, 2022).

Stroke Burden in Hong Kong

Number of registered deaths by leading cause of death, 2001 - 2024

Cause of death	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1. Malignant neoplasms (ICD-10: C00-C97)	14316	14209	14354	14594	14871	14805	15108	14717	14867	15075
2. Pneumonia (ICD-10: J12-J18)	8004	8292	8032	8437	9271	9365	9832	10501	11334	11395
3. Diseases of heart (ICD-10: I00-I09, I11, I13, I20-I51)	6190	6201	6138	6088	6096	6561	6595	6791	7258	6594
4. Cerebrovascular diseases (ICD-10: I60-I69)	3259	3224	3124	3016	2970	3165	3126	3057	3048	2911

(Centre for Health Protection,2025a)
https://www.chp.gov.hk/en/statistics/data/10/27/380.html

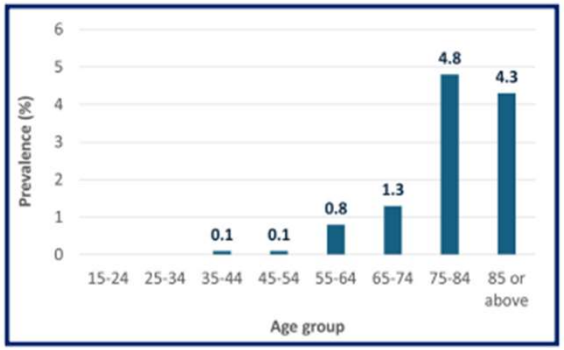


Figure 2: Prevalence of doctor-diagnosed stroke among persons aged 15 or above by age group

~1% persons aged >15 reported doctor-diagnosed stroke, ~62,900 people

(Centre for Health Protection,2025)

Incidence (Young Stroke, 18-55):

Increased >30%

from 2001 to 2021(41.8 to 59.7 per 100,000)

(The University of Hong Kong [HKUMed], 2022)

Stroke Burden in Hong Kong

港聞 / 社會新聞

姊弟戀25年臨老再起考驗　少夫照顧中風妻壓力大：想過勒死她

撰文：關卓波
出版：2017-06-14 09:00　更新：2025-02-12 00:06



健康通｜長期照顧中風者儼如“看不見盡頭”“夾心人”壓力不容忽視

分享到：

2023-11-08 00:00 | 稿件來源：香港新聞網　【字號：大 中 小】

香港新聞網11月8日電（記者 黃璇） 忙忙碌碌是港人寫照，十年前，中風患者黃敬熙也是終日營營役役、不分日夜辛苦賺錢。然而，50歲那年突如其來的中風，似乎令一切都停擺。黃敬熙坦言，確診中風後，在醫院度過的第一個星期，是他人生的最黑暗時期，“都說風雨同路，對我來講簡直是一場黑雨。”









Existing Health Policy for Stroke


国家卫生健康委百万减残工程专家委员会

国家卫生健康委百万减残工程专家委员会2024年工作要点

一、年度目标



Deepen reform of the healthcare system

- Enhance public healthcare services, including taking forward the work on setting up Stroke Centres and Integrated Cardiovascular Diseases Centres
- Shorten the waiting time for stable new case bookings in the specialty of Surgery by about 10 weeks
- Enhance the overall ophthalmology service and set up a new high-capacity ambulatory cataract surgery centre
- Enhance the preventive screening and care services of family medicine clinics, increase their service capacity, and regularise their current extended service hours progressively
- Launch the Chronic Disease Co-care Platform to conduct hepatitis B screening on a pilot basis
- Commence the operation of The Chinese Medicine Hospital of Hong Kong in phases and publish the Chinese Medicine Development Blueprint within this year
- Promote mental health by rolling out measures covering prevention, identification, intervention and treatment




The Hong Kong Special Administrative Region of the People's Republic of China

The Chief Executive's 2025 Policy Address

2025.9.17

Existing Health Policy for Stroke

The Hong Kong Special Administrative Region of the People's Republic of China

The Chief Executive's 2025 Policy Address

2025.9.17

HAS Link 協力Link

Cover Story | Feature | People | The Inside Stories of Hong Kong's Hospitals | What's N

'Green Channel' admission secures golden hour for stroke treatment

Ms Cheng, in her 20s, experienced a terrifying day in May 2024 when she fell off a horse during practice. "I did not feel unwell initially, but after class, I started vomiting and losing consciousness." She was admitted to Pok Oi Hospital (POH) by ambulance. Similarly, Mr Cheung, 51, suffered hemiplegia and confusion at work in November 2025, and was sent to Queen Mary Hospital (QMH) by ambulance. Both were diagnosed with stroke.

Ms Cheng and Mr Cheung were admitted via the 'Green Channel' at Tuen Mun Hospital (TMH) and QMH respectively. Dr **Kelvin Tsoi Lap-kiu**, Consultant in Medicine & Geriatrics at TMH, recalls that after initial assessment at POH's Accident & Emergency (A&E) Department, colleagues suspected Ms Cheng had a stroke and referred her to the New Territories West Cluster Integrated Acute Stroke Care Team. A cerebral angiogram confirmed that she had large vessel occlusion in brainstem. The stroke team notified TMH's IA thrombectomy team via HA Chat and immediately transferred her to TMH.



The Government of the Hong Kong Special Administrative Region

Press Releases

GovHK 香港政府一站通 | 繁體版 | 简体版

Fire Services Department and Hospital Authority to la | GO

Fire Services Department and Hospital Authority to launch Pre-hospital Stroke Diversion Scheme

The following is issued on behalf of the Hospital Authority:

The Fire Services Department (FSD) and the Hospital Authority (HA) announced today (December 12) that the Pre-hospital Stroke Diversion Scheme (Primary Diversion Scheme) will be launched starting from 8.30am on December 15 in the New Territories East Cluster (NTEC) and the New Territories West Cluster (NTWC) of the HA.

Since 2021, the HA and the FSD have collaborated to implement the Pre-hospital Stroke Notification mechanism on a territory-wide basis. The FSD's ambulance personnel will perform a pre-hospital stroke assessment before patients arrive at the hospital, utilising standardised medical evaluations to determine if the patient exhibits suspected acute stroke symptoms. In case a patient is assessed as requiring notification, the ambulance personnel will immediately call the Accident and Emergency Department (AED) of the public hospital concerned, enabling the hospital's stroke team to make advance arrangements for examination and treatment.

HA aims to expand stroke coverage scheme

2026-03-11 HKT 17:49 Share this story

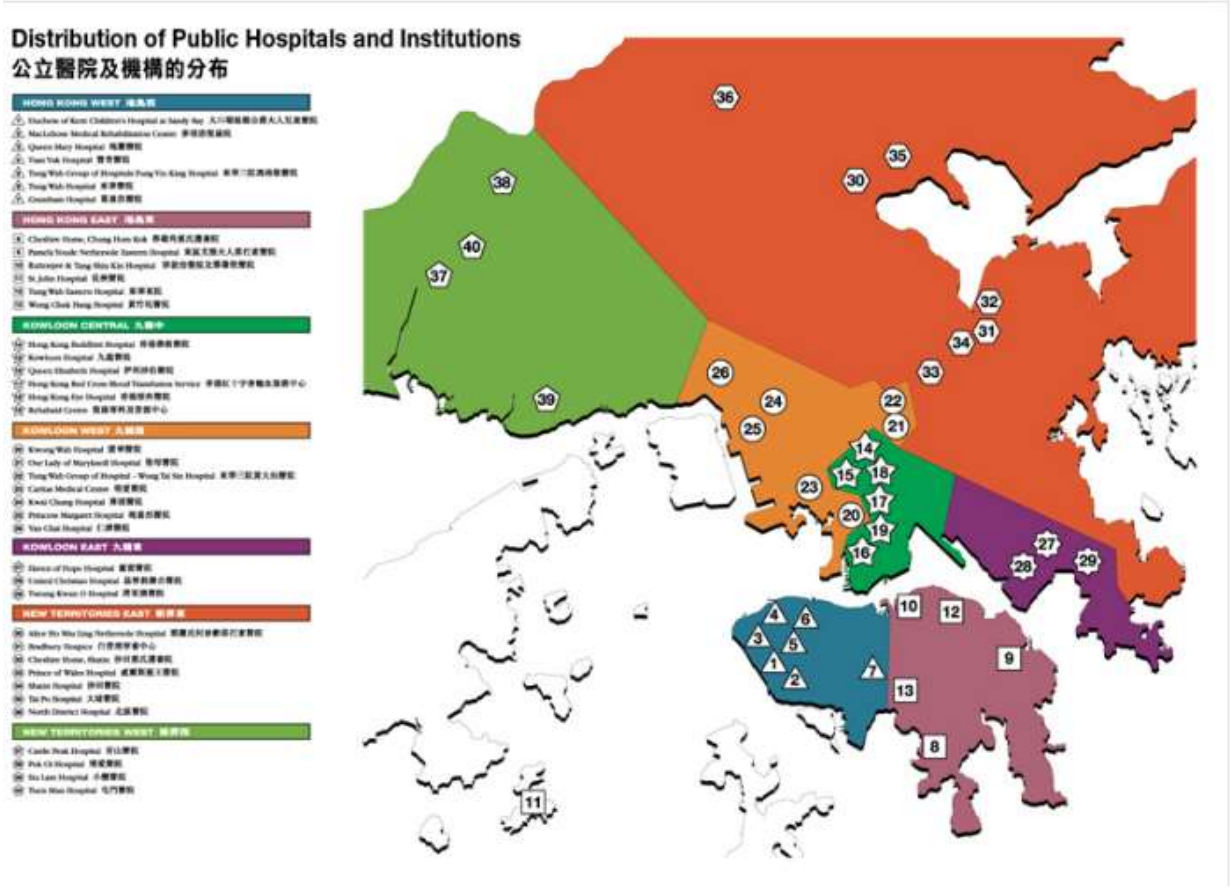


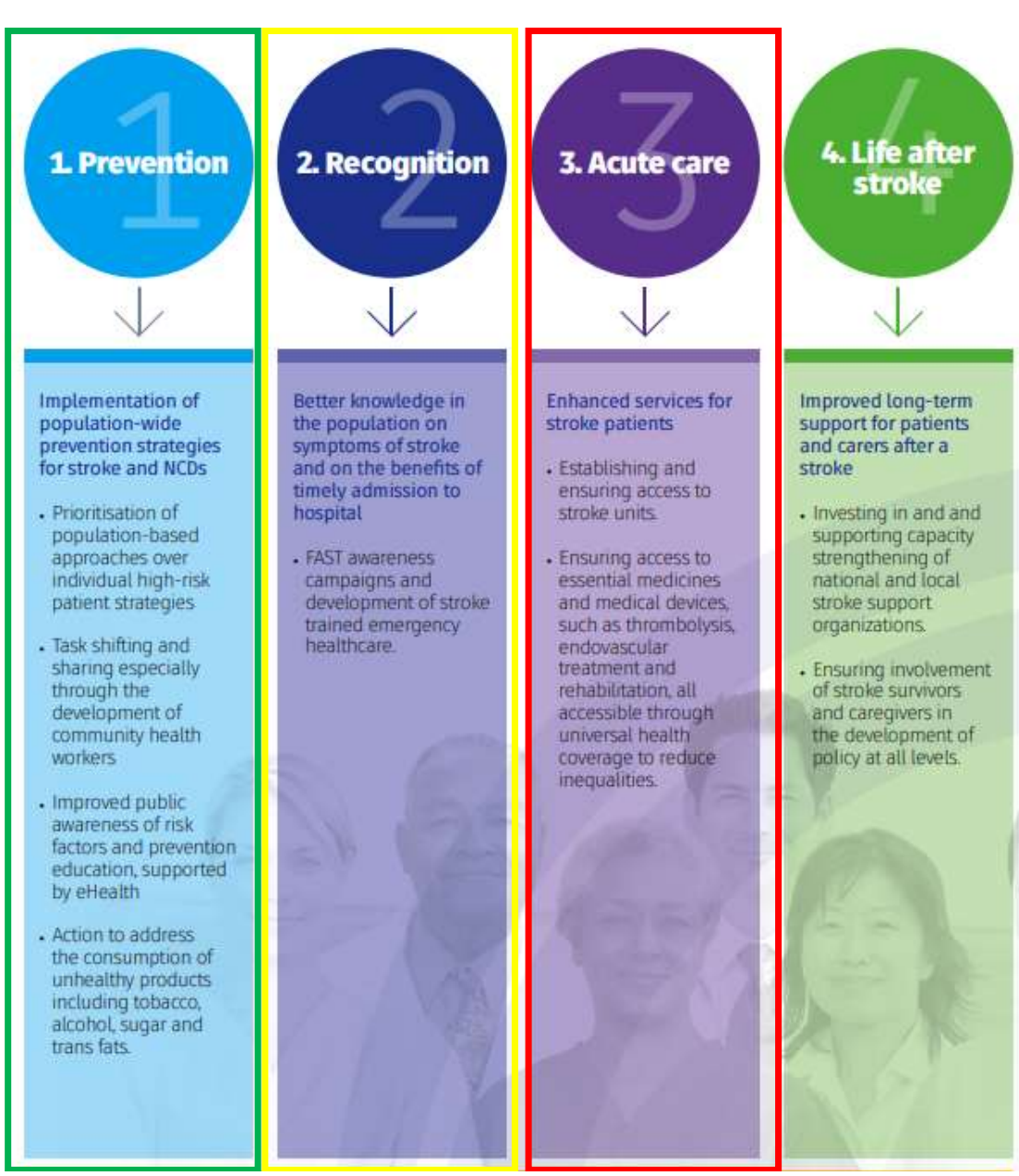
Stroke Service in Hospital Authority

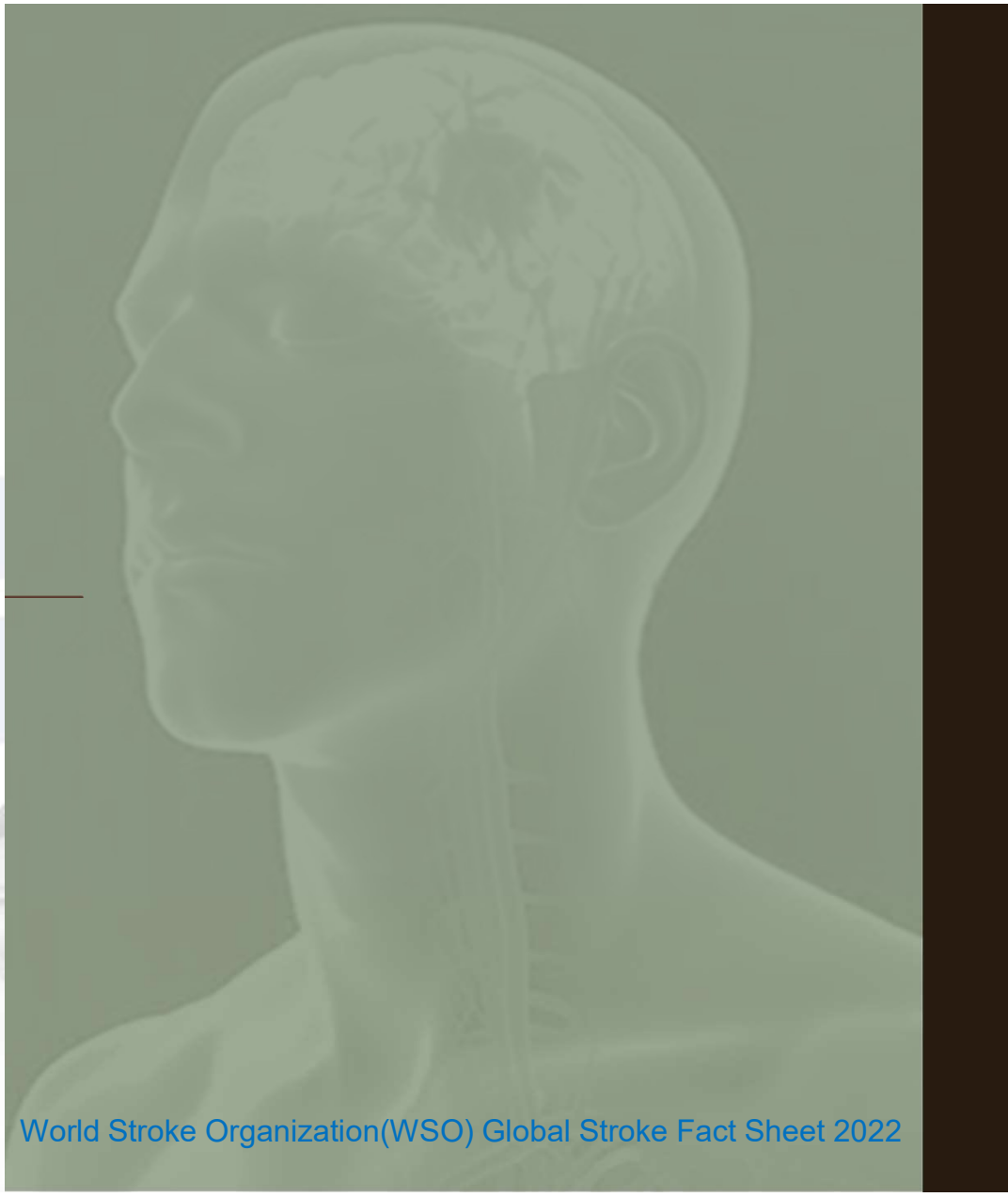












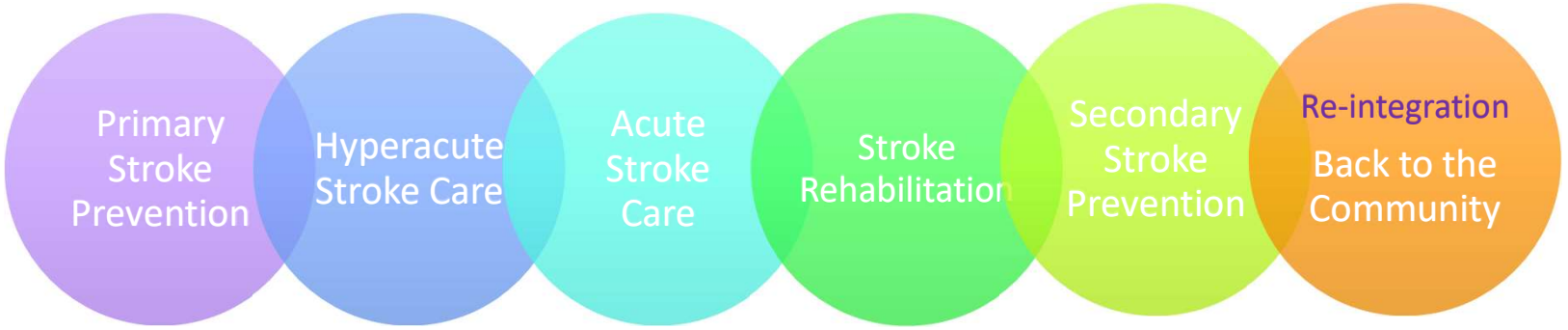
World Stroke Organization(WSO) Global Stroke Fact Sheet 2022

Stroke Patient Journey

Comprehensive Overview of Nursing and Interdisciplinary Care of the Acute Ischemic Stroke Patient

A Scientific Statement From the American Heart Association

Stroke. 2009;40:2911-2944



NURSES play a pivotal role in all phases of care of the stroke patient.

NURSES are often responsible for the coordination of care throughout the continuum



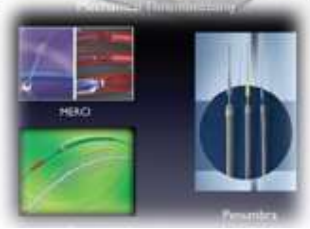
















Service Gaps & Challenges of Stroke Services in Hong Kong

Up



Stroke population increased by **52%** from 2009 to 2019



Young stroke (aged 18 to 55) increased by **30%** from 2001 to 2021

Complexity



3 hours







Demands



Acute Reperfusion therapy



Post-stroke care & support

Outcomes



Establishing Stroke Emergency Green Channel



Implementing primary diversion of LVO patients



Collaboration with various aspects of stakeholders

Data & Audit





Implementing smart initiatives in Stroke Care



Stroke Centre Accreditation

Training & Development



Promoting Evidence-Based Practices



Expanding and upskilling the stroke nursing workforce

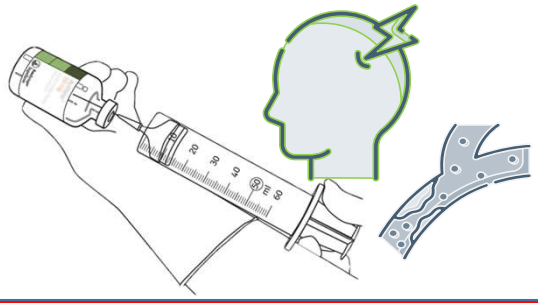


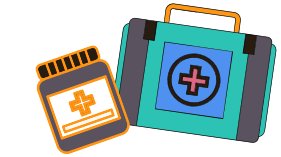
KEC Stroke Patient Journey

Primary Stroke Prevention → Hyper-acute Stroke Care → Acute Stroke Care → Stroke Rehabilitation → Secondary Stroke Prevention → Reintegration to Community

Pre-hospital/AED → Inpatient → Post Discharge → Community

Pre-hospital/AED	Inpatient	Post Discharge	Community
Primary Stroke Prevention Promote Healthy Lifestyle	Multidisciplinary Team Stroke Care Model	Seamless Model Secondary Stroke Prevention Programme	Patient Support Group - 風中之友
Pre-hospital Stroke Notification	Emergency Stroke Life-Support Care	IMSN Model Stroke Nurse Clinic	Integrated Discharge Support Programme
TIA Rapid Screening 24/7 Hyperacute Stroke Management	Integrated Chinese-Western Medicine Programme	Risk Factors Stratification Lifestyle Modification	Geriatric Day Hospital
	Inpatient Stroke Rehabilitation Training		Collaborates with NGOs and District Health Centres
	Multidisciplinary Team Approach Early Discharge Planning		









Prevention, Recognition, Early Treatment, Seamless Stroke Rehabilitation, Reintegration





Any advanced Nursing Practice in Stroke Care????









Any Primary
Stroke Prevention
in HK ~1980's??





Primary Stroke Prevention



















緊記「談笑用兵」判別中風先兆
Act F.A.S.T. and Spot a Stroke!

萬一中風 驅「風」要爭分奪秒!
Every Second Matters in Stroke!



















中風年輕化　中風科團隊教你聞「風」識辨 | 醫言九龍東 | 無綫新聞 TVB News

去年本港兩度發出十號風球，不少市民感受到超強颱風的威力。然而，有一股「風」，更能瞬間奪走一個人的活動和說話能力。在香港，每年更有約三千人因這一股「風」而喪命，它就是...

news.tvb.com

談笑用兵你要知

急救中風莫遲疑

談 笑 用 兵



住院病人如有以上症狀

請立即通知醫護人員







Absolutely
No!!





June 08, 2004; 62 (11) ARTICLES

Guideline
Transient
A Guideline fo
Association

Walter N. Kernan, B
Karen L. Furie, Don
DeJuran Richardso

partment

k and
study):

中風」診所
服務2000人

明年首季陸續提供

張德輝說，

名醫生、一名

診所每年共

先提供服務

伊利沙伯醫院內科副顧問醫生方

說，該院每年有300名小中風病人。

風病人經由急症科、腦科、中風科等

人員組成的跨專業團隊評估分流，高

高血壓、發病時間長、病徵嚴重等高

病人，會被安排入院，至於低風險病人

轉介至優先診所接受門診。

九龍中醫院聯網總監鮑志漢表示，

研究顯示，低風險中風病人發病後30

內，再中風風險約0%至2.2%，高風

為3.2至7.7%。他指出，開設短暫性

血中風診所，可讓高風險人士接受適

療，並減少低風險患者住院需要，改

受中風科護士和腦科醫生門診，預計

可為500人提供護理服務。

性中風診所，病人離開急症室後兩星期內可優先到診所跟進，預計每年服務2000人，減少他們再中風的風險。但有醫院「聘請不到醫生」，服務要靠內部調配，伊利沙伯醫院則計劃在今年第四季率先提供服務。 明報記者 談誦言 阮穎嘉

短暫腦缺血 一成再中風

本港每年有逾2萬人因中風住院，佔內科病人比例10%，本港每年約有2100名小中風患者，但醫管局沒有統一機制處理小中風病人。醫管局2012/13年度工作計劃建議4間聯網的龍頭醫院，包括瑪麗、威爾斯、伊利沙伯和聯合醫院，開設短暫腦缺血性中風診所，優先處理小中風病人。伊利沙伯醫院今年第四季會率先提供服

判斷風險提供適切治療

張德輝說由於現時腦科醫生、放射

人手不夠，即使「有錢也未必請到人」，4間醫院未必能在明年首季一齊推出服務，各醫院要視乎人手開展服務。聯合醫

在非辦公時間出現小中風，希望急症室能提供中風病床，觀察病人數小時，再轉介予中風診所跟進。

ABCD2 Score and the subsequent stroke risk after TIA

ABCD2 Score and the Subsequent Stroke Risk after TIA

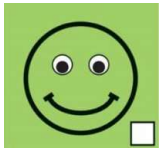
Risk Factors	Points	Score
Age ≥ 60 years old	1	
Blood Pressure: SBP≥140mmHg OR DBP≥90mmHg	1	
Clinical features of TIA (choose one)		
Speech impairment alone	1	
Unilateral limb weakness ± speech impairment	2	
Duration of symptoms		
Duration < 10 minutes	0	
Duration 10-59 minutes	1	
Duration ≥ 60 minutes	2	
Diabetes Mellitus	1	
Total ABCD² Score	0-7	

Total scores ranged from 0 (The lowest risk) to 7 (The highest risk)

Stroke risk at 2 days, 7 days, and 90 days:

- **Scores 0 – 3: Low risk**

2 days stroke Prevalence 1.00%
7 days stroke Prevalence 1.20%
90 days stroke Prevalence 3.10%



- **Scores 4 – 5: Moderate risk**

2 days stroke Prevalence 4.10%
7 days stroke Prevalence 5.90%
90 days stroke Prevalence 9.80%



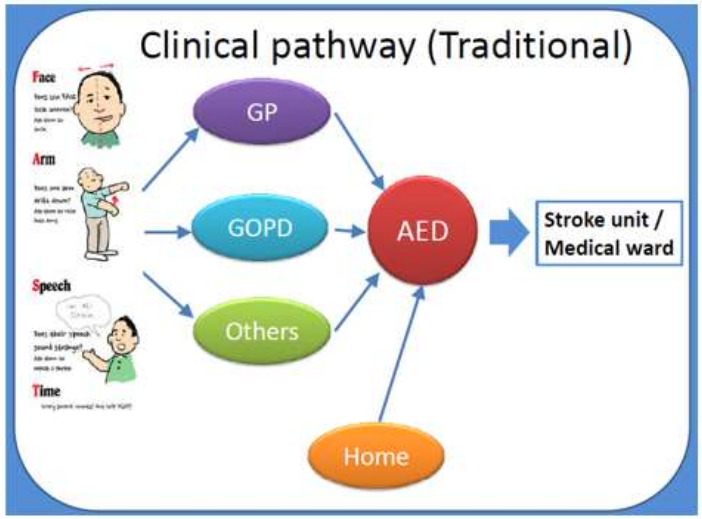
- **Scores 6 – 7: High risk**

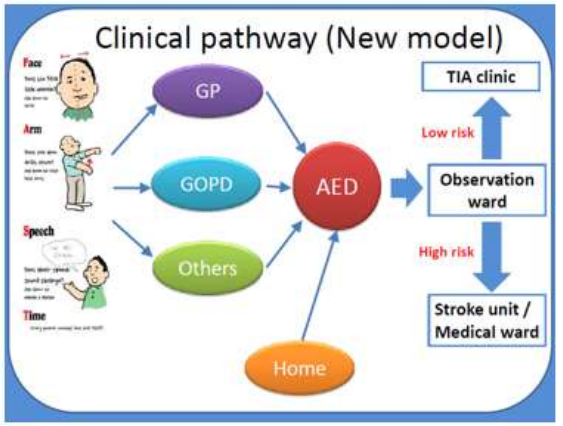
2 days stroke Prevalence 8.10%
7 days stroke Prevalence 12.00%
90 days stroke Prevalence 18.00%

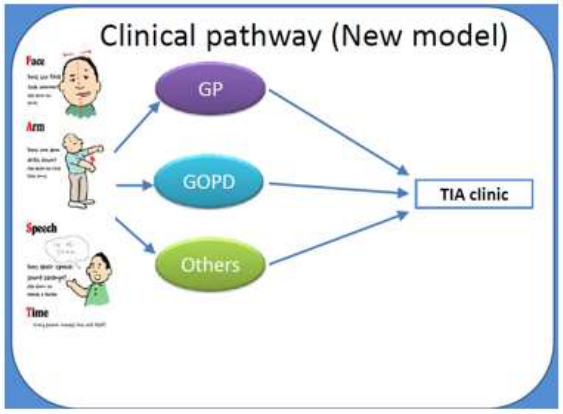


Johnston SC, Rothwell PM, Nguyen-Huynh MN, Giles MF, Elkins JS, Bernstein AL, Stephen, Sidney. **Validation and refinement of scores to predict very early stroke risk after transient ischaemic attack** *Lancet* **2007;369:283-92**

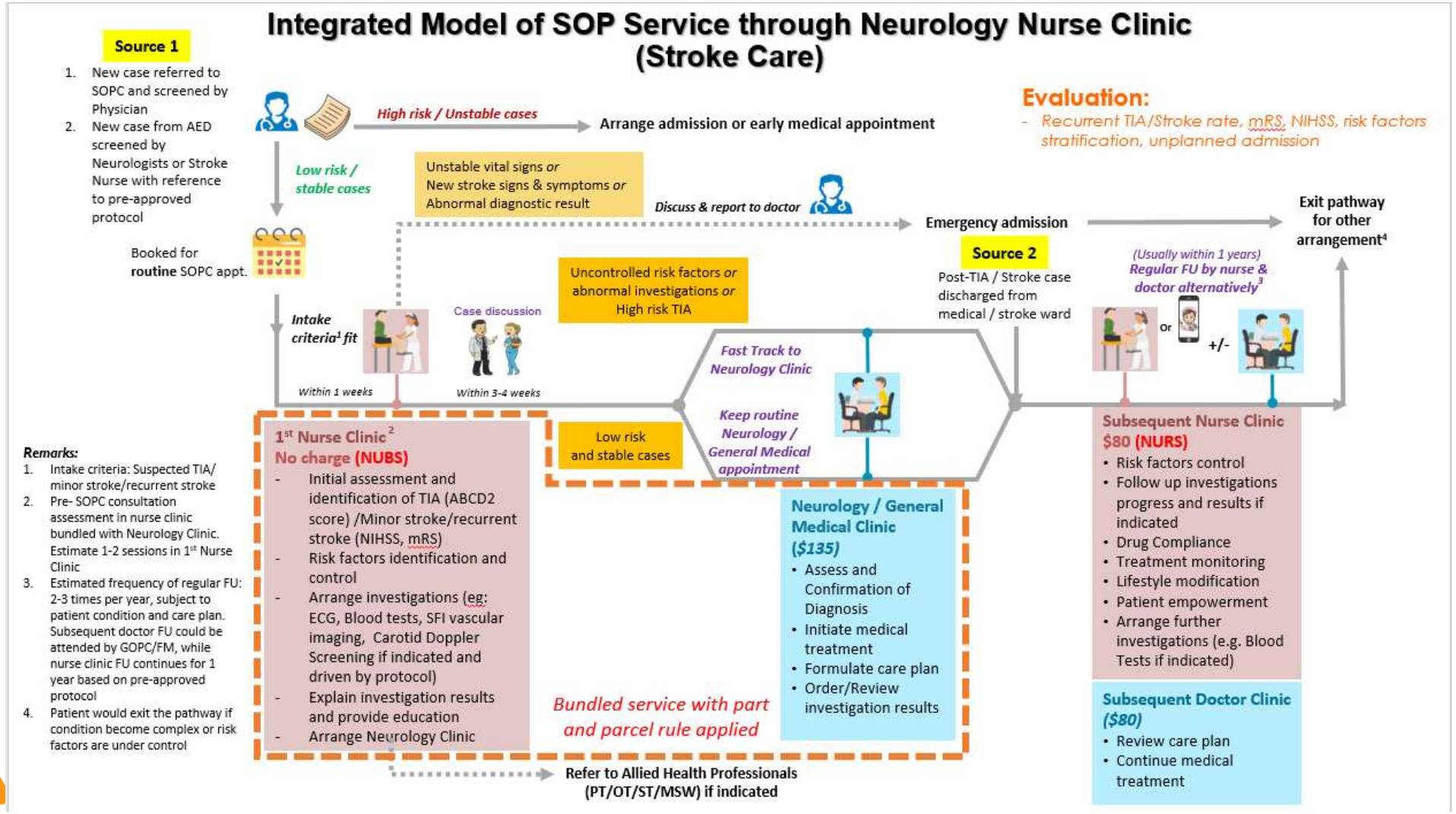
Transient Ischaemic Attack Nurse Clinic







Integrated Model of SOP Service through Neurology Nurse Clinic (Stroke Care)



FAST
CLINIC

Atrial Fibrillation
Anticoagulation for Stroke
Prevention







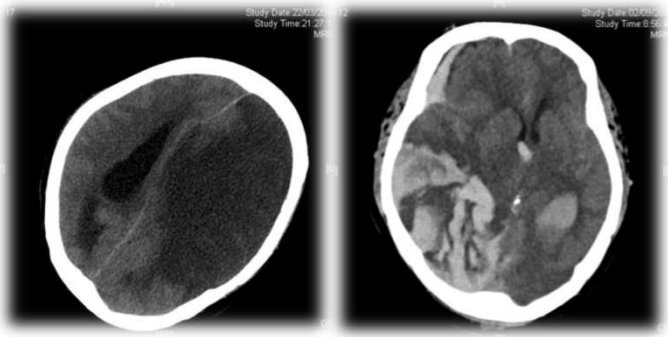
Absolutely NO Again!!!!







Stroke Patient Journey (Past)







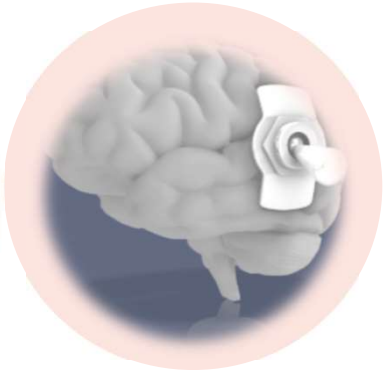






Time is Brain: Time Loss is Brain Loss







Stroke : Time lost is brain lost



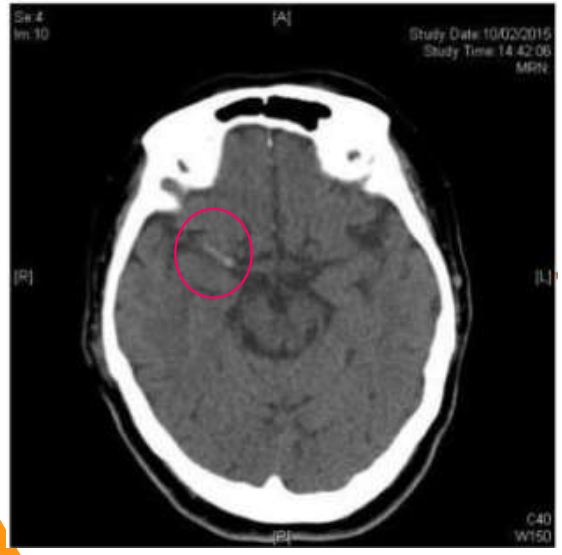


Estimated Pace of Neural Circuitry Loss in Typical Large Vessel, Supratentorial Acute Ischemic Stroke

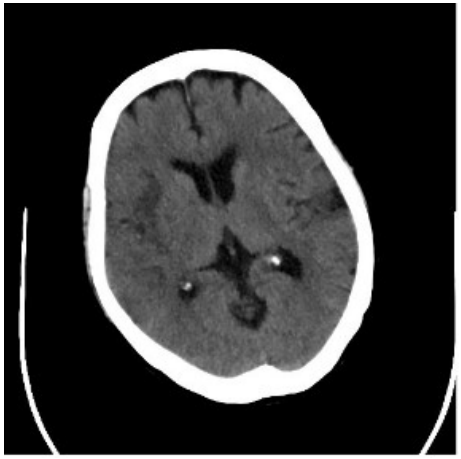
	Neurons Lost	Synapses Lost	Myelinated Fibers Lost	Accelerated Aging
Per Stroke	1.2 billion	8.3 trillion	7140 km/4470 miles	36 y
Per Hour	120 million	830 billion	714 km/447 miles	3.6 y
Per Minute	1.9 million	14 billion	12 km/7.5 miles	3.1 wk
Per Second	32 000	230 million	200 meters/218 yards	8.7 h

Saver JL.. Stroke 2006; 37: 263-6

Time is Brain: Time Loss is Brain Loss



With Reperfusion



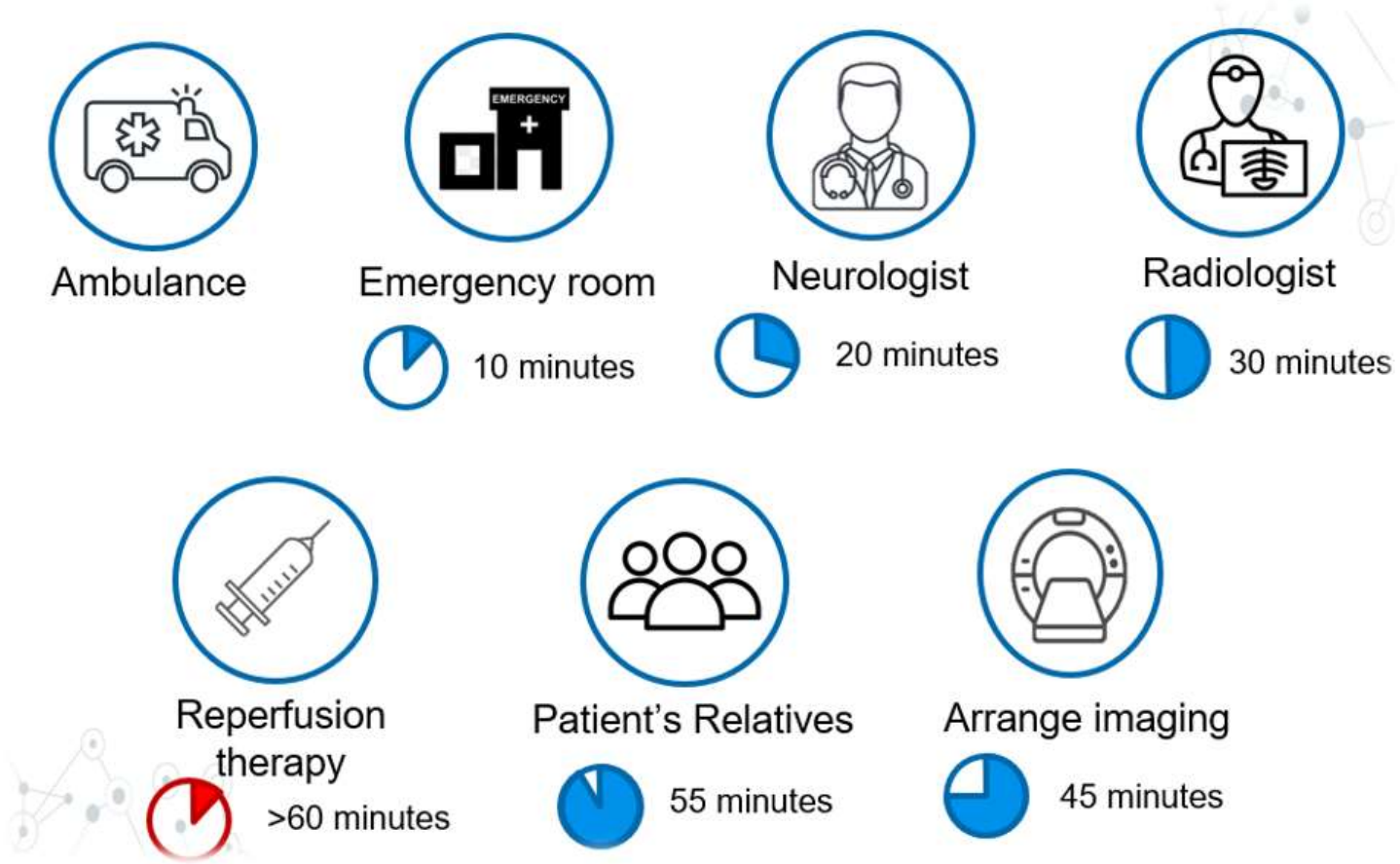


Without Reperfusion

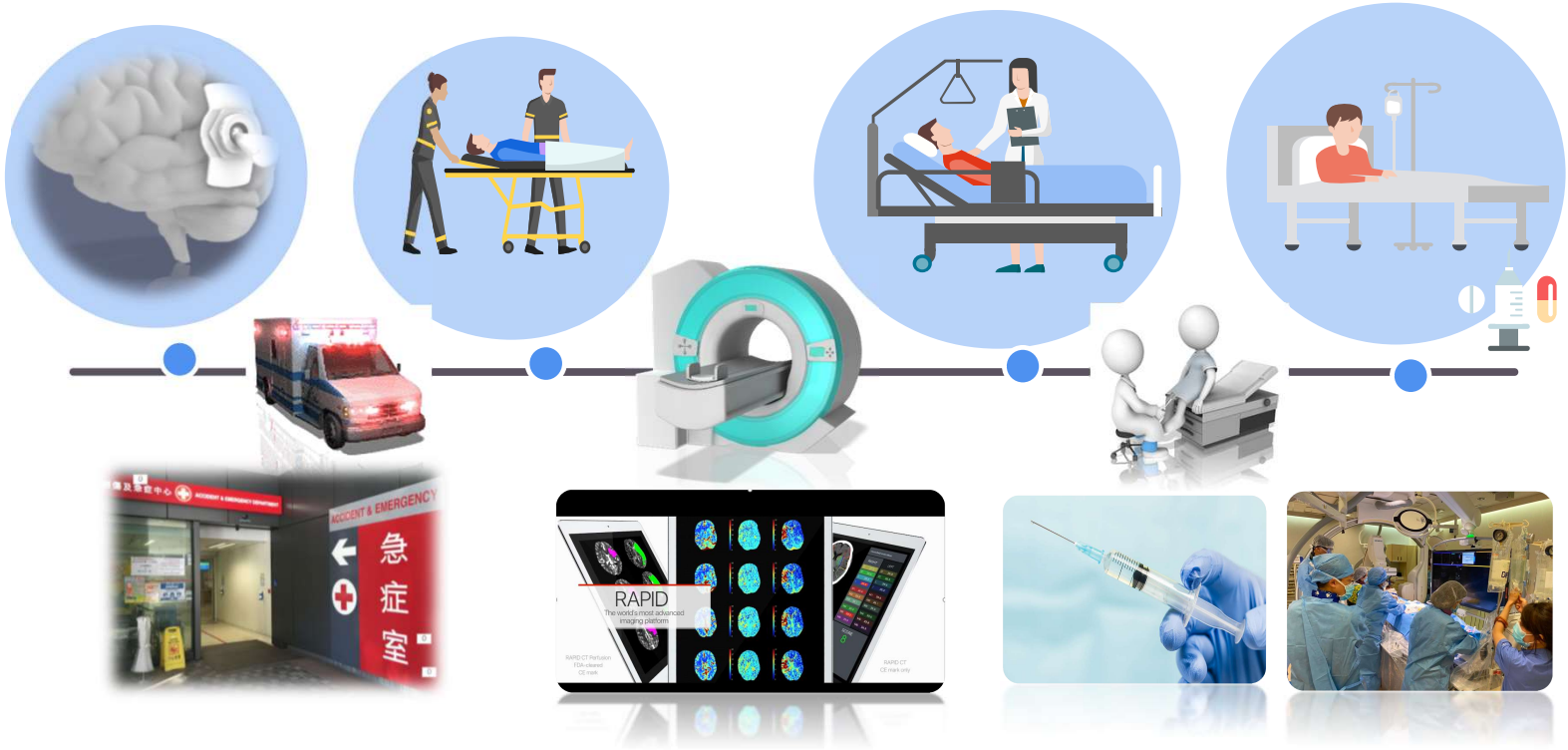




Previous Linear Workflow of IV-Thrombolysis



Reperfusion Therapy for Acute Ischaemic Stroke Patient



- Pre-Hospital Identification & Notification of Stroke Patient
- CT Brain + CTA/P Coupling
- Perform CT Brain +/- CTA/P
- RAPID AI to confirm LVO
- Calculate Cerebral Blood Flow
- Shorten DTN / DTG Time
- IV-rtPA
- Intra-Arterial Mechanical Thrombectomy (IAMT)

Pre-Hospital Identification and Notification of Stroke Patient
PREACT 院前中風通報機制









Reperfusion Therapy for Acute Ischaemic Stroke Patient



- Pre-Hospital Identification and Notification of Stroke Patient
- CT Brain + CTA/P Coupling
- Perform CT Brain +/- CTA/P
- RAPID AI to confirm LVO
- Calculate Cerebral Blood Flow

UCH Triage Workflow for CT Brain/ CTA Coupling for Acute Ischaemic Stroke Patient

Stroke team activation in AED for
- ✓ Acute Stroke, including pre-hospital stroke notification
- ✓ Onset time <6 hours*
- ✓ Good pre-morbid status

- ✓ Onset time <6 hours*
- ✓ NIHSS≥6, **AND**
- ✓ Premorbid mRS 0-2 **AND**
- ✓ Any one of the following cortical signs +ve
  - ✧ V – Visual eye gaze / Visual Loss
  - ✧ A – Aphasic
  - ✧ N – Neglect

NO

Back to Assessment of Eligibility for IV Thrombolysis

YES

- ✧ Coordinate communications with Neurologist and Neurosurgeon as protocol-driven care by stroke nurse
- ✧ Book plain CT Brain, CTA +/- CTP** by AED Physician
- ✧ Sign consent by AED Physician
- ✧ Inform CT Radiographer
- ✧ Prepare IV access*** by AED Nurse
- ✧ Check and sign the checklist for CTA by Stroke Nurse or Neurologist

* For those extended hours cases e.g., Young and severe stroke, Basilar Artery Occlusion case will be considered

Reperfusion Therapy for Acute Ischaemic Stroke Patient

AHA/ASA Guideline

Guidelines for the Early Management of Patients With Acute Ischemic Stroke: 2019 Update to the 2018 Guidelines for the Early Management of Acute Ischemic Stroke

A Guideline for Healthcare Professionals From the American Heart Association/American Stroke Association

IV thrombolysis	IA (EVT) mechanical thrombectomy



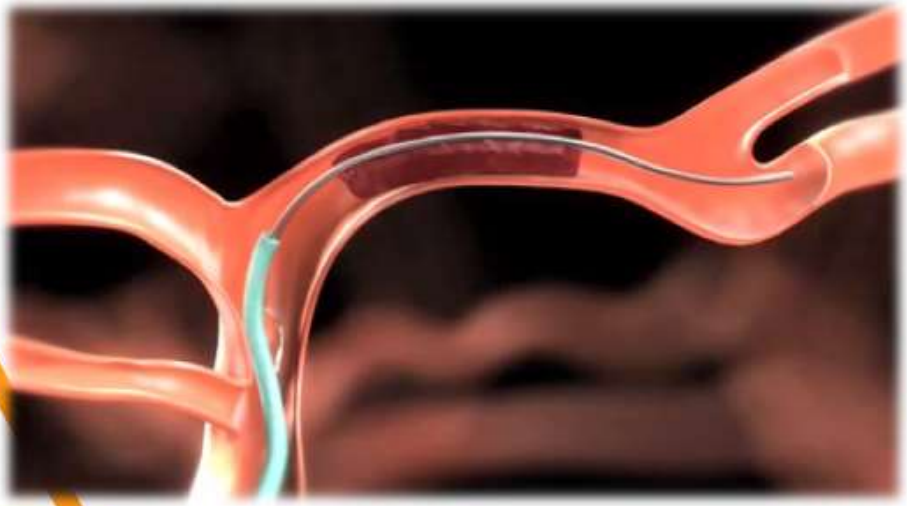


Neurovascular Intervention

- Terminology
  - IA Thrombectomy
  - Endovascular Thrombectomy - EVT
  - Mechanical Thrombectomy – MT













Reperfusion Therapy for Acute Ischaemic Stroke Patient in Hong Kong Hospital Authority

CLUSTER	HOSPITAL	24/7 IV SERVICE	24/7 IA service
HKWC	QMH	√	√
HKEC	PYNEH	√	√
	RH	√	Transfer to PYNEH
KWC	PMH	√	√
	CMC	√	Transfer to PMH
	YCH	√	Transfer to PMH
	NLT	Drip and ship to PMH	Transfer to PMH
KCC	QEH	√	√
	KWH	√	√
KEC	UCH	√	Transfer to QEH
	TKO	√	Transfer to KWH
NTWC	TMH	√	√
	POH	√	Transfer to TMH
	TSWH	Transfer to TMH	Transfer to TMH
NTEC	PWH	√	√
	NDH	√	Transfer to PWH
	AHNH	√	Transfer to PWH


伊院初級醫生出錯 令病人中風
8,392
治療 病人暈
家屬指
病人量
【新增短片】
病人的家屬指
無案出院，目
今早到立法會
年約75歲的
。徐太翌日
院，徐太
合，5月3日
出現腰痛
醫生就話：『阿太，我
太說，聯合5月4日早上再聯絡她，重申徐生可以出院，
，左邊身痛到無力。我去同當值護士講，但態度就好惡劣。等咗3個鐘醫生
，但連行去床邊睇下都無，淨係企喺病房走廊聘我講佢嘅情況，醫生就話佢
事，話自己係專業嘅，判斷無錯，仲叫我有咩不滿就去搵政府，我真係好無
。」


Be Fast if BEFAST
B E F A S T
Vertigo Loss of balance
Eyegaze Loss of vision
Drooping Facial asymmetry
Unilateral weakness
Speech difficulties
Time to call help
Call Stroke Team XXXXXXX
if suspected stroke
九龍東醫院聯網
KOWLOON EAST CLUSTER
KEC Acute Reperfusion Therapy for Acute Ischemic Stroke
Acute Reperfusion Therapy Triage:
Clinical presentation of acute stroke
Onset time ≤ 6 hours***
Age ≥ 18 years
Good premorbid functional status
Acute Reperfusion Therapy Hotline:
UCH: 5215 3570 or TKOH: 53602921
Immediate actions after call initiation:
Monitor Neuro Observation
Close monitor BP/P, SaO2
Check Haemoglucostix stat x 1
Set up IV access x 2
Take full leads ECG stat x 1 + continuous cardiac monitoring
Eligible for Acute Reperfusion Therapy
Inform AED for case transferal: UCH: 5215 4125 or TKOH 22080288
Urgent transfer patient to AED by ambulance (P1) and inform
UCH Stroke Team: 5215 3570 or
TKOH Stroke Team: 53602921 when leaving from HHH
***Endovascular Stroke Therapy Service hours: Weekday (Exclude PH / SH) 0800-2000
Enquiry:
Mr. Yu Chung Tsang Mick, KEC Nurse Consultant (Stroke) Tel: 52156783/52156983
Ms. Wan Kin Sze, KEC Associate Nurse Consultant (Stroke) Tel: 63872431


談笑用兵你要知
急救中風莫遲疑
談 笑 用 兵
住院病人如有以上症狀
請立即通知醫護人員
In-hospital Acute Stroke
Opportunity to Optimize Hyperocute Stroke Care

Expected Behavioral Change

With reference to ACLS



Start ABC
Cardiac *Resuscitation*



Suspected Acute Stroke



Call Doctor

Wait

Start Brain
Resuscitation



Concept of Brain Resuscitation





Suspected Acute Stroke

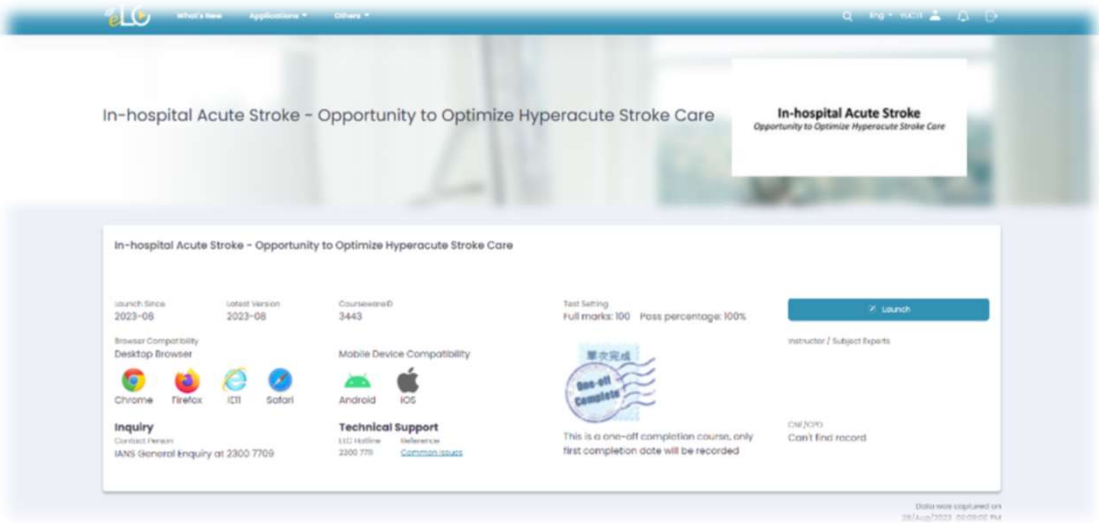
Start CBA
Brain *Resuscitation*

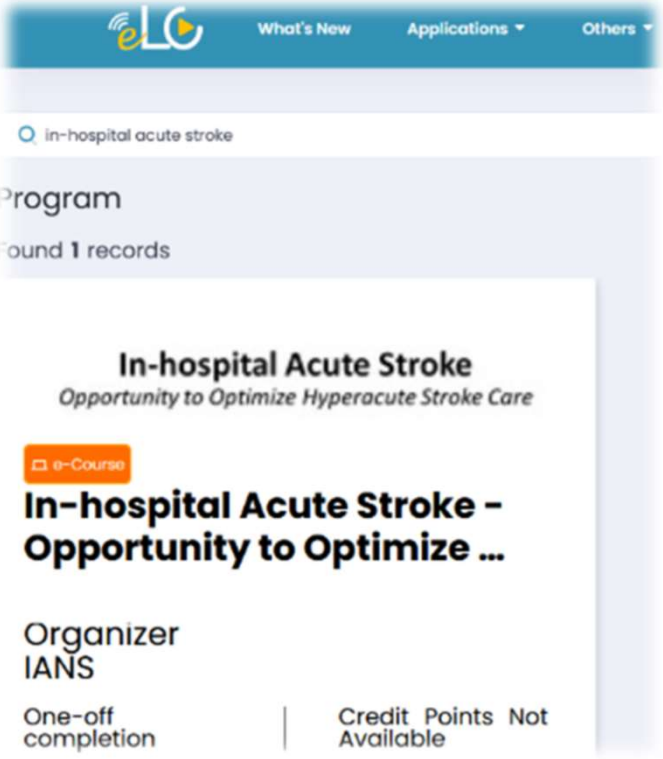
C= Clarify Onset Time
B= Brain Imaging
A= Alert Stroke Team



Time is Brain

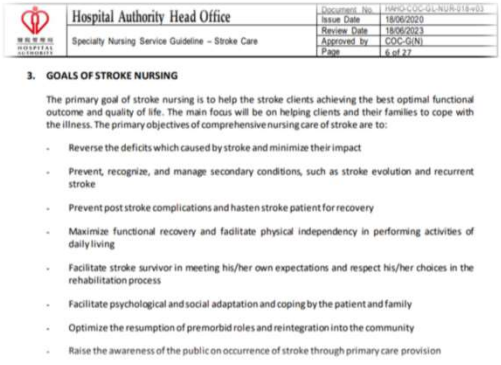
Newly Developed E-courseware for Enhancement of In-patient Stroke





Course Link:

https://elc.home/e-course-info-page/F937900001001



Hospital Authority Head Office

Specialty Nursing Service Guideline – Stroke Care

Document No.	HAHO-COC-GL-NUR-018+03
Issue Date	18/06/2020
Review Date	18/06/2023
Approved by	COC-G(N)
Page	6 of 27

3. GOALS OF STROKE NURSING

The primary goal of stroke nursing is to help the stroke clients achieving the best optimal functional outcome and quality of life. The main focus will be on helping clients and their families to cope with the illness. The primary objectives of comprehensive nursing care of stroke are to:

- Reverse the deficits which caused by stroke and minimize their impact
- Prevent, recognize, and manage secondary conditions, such as stroke evolution and recurrent stroke
- Prevent post stroke complications and hasten stroke patient for recovery
- Maximize functional recovery and facilitate physical independency in performing activities of daily living
- Facilitate stroke survivor in meeting his/her own expectations and respect his/her choices in the rehabilitation process
- Facilitate psychological and social adaptation and coping by the patient and family
- Optimize the resumption of premorbid roles and reintegration into the community
- Raise the awareness of the public on occurrence of stroke through primary care provision

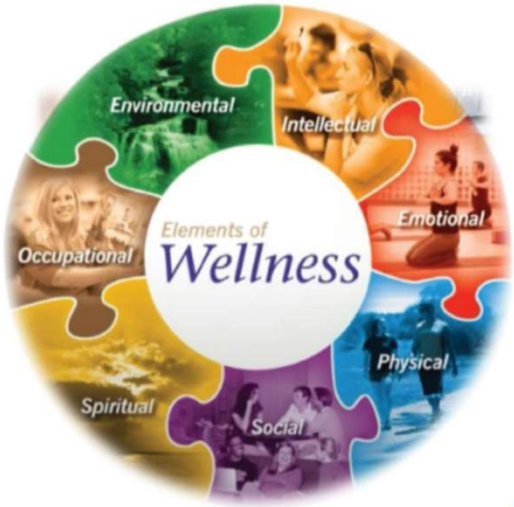
Guidelines & Protocols

EBP in Stroke Care Nursing

Integrated Chinese-Western Medicine Programme

Holistic Stroke Care

Interdisciplinary Team Approach









Stroke Rehabilitation

















Re-Integration
















APSC2025
Advancing Stroke Care:
Global and Local Challenges
The Asia Pacific
Stroke Conference 2025


APSC


Asia Pacific Stroke Conference 2023






Asia Pacific Stroke Conference 2023
Session 15
Asia-Pacific Stroke
Nursing Workshop
APSC 2023


Perform CT Brain +/- CTA/P
RAPID AI to confirm LVO
Calculate Cerebral Blood
Flow


Asia Pacific Stroke Conference 2023
Session 15

12-7-2023
醫社「聯合」攜手「風」中同行》
26-7-2023
《聯合機械臂關節置換手術》
13-9-2023
《聯合護老有計》



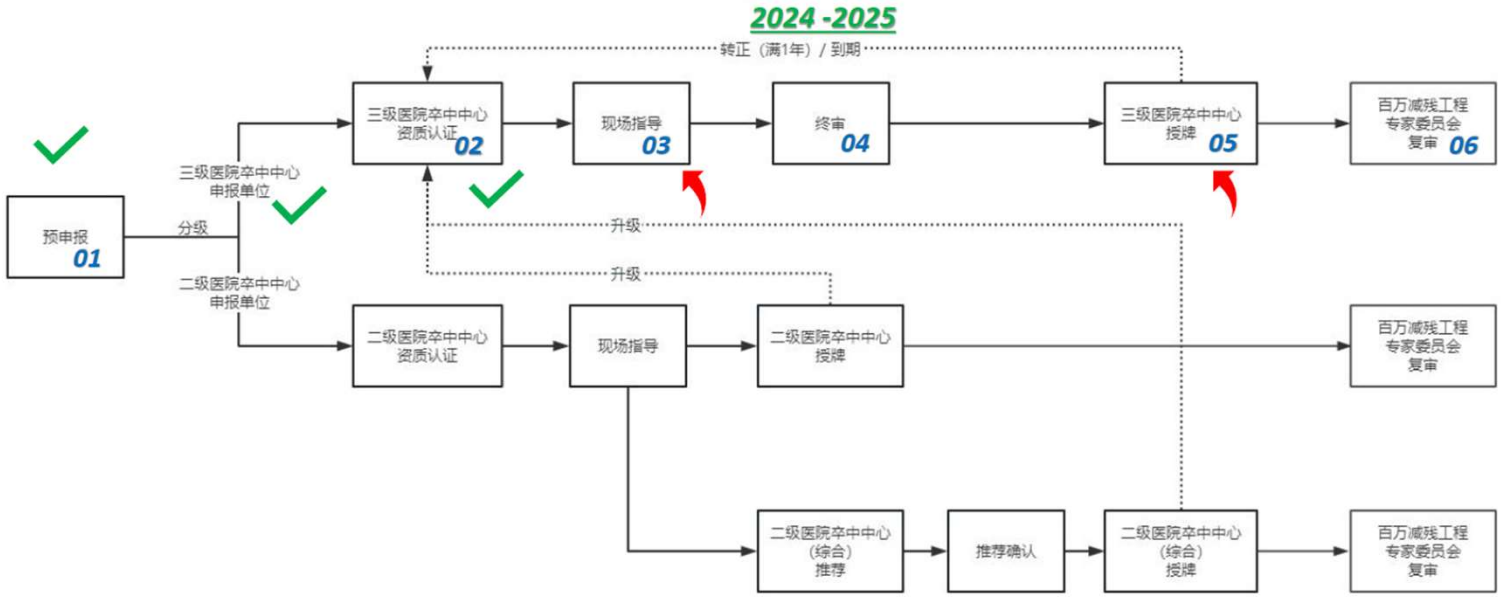


2023-07-27
《聯心合醫》「中風」突襲！？聯合醫院跨專業團隊伴風中同行
https://www.youtube.com/watch?v=s7TloTh3Bpw
https://www.thinkhk.com/article/2023-07/27/61002.html

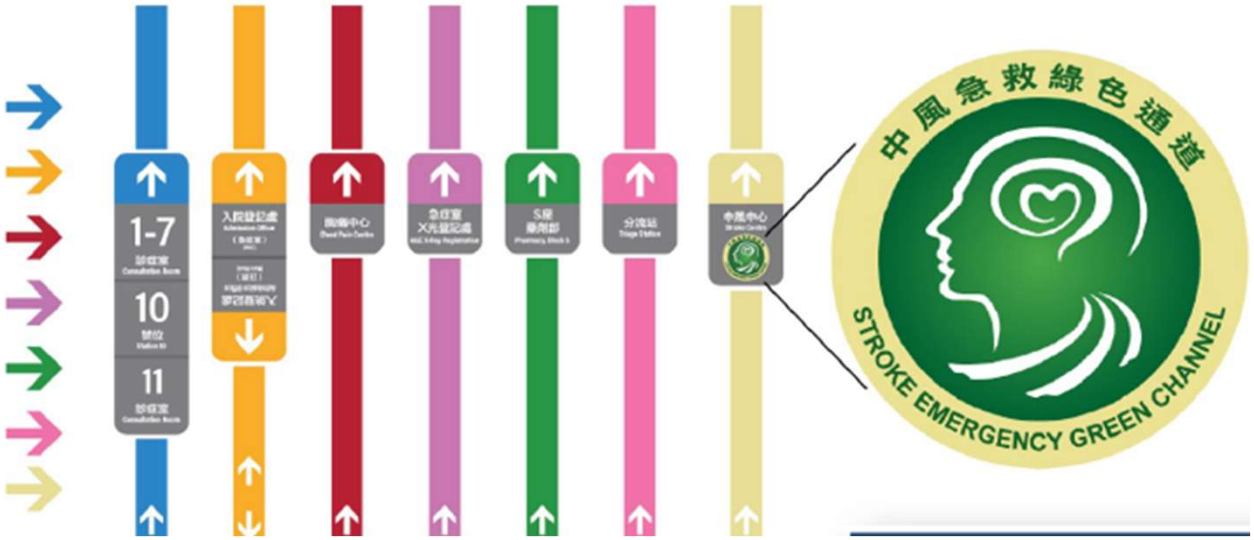

THE WAY
FORWARD

National Stroke Centre Accreditation

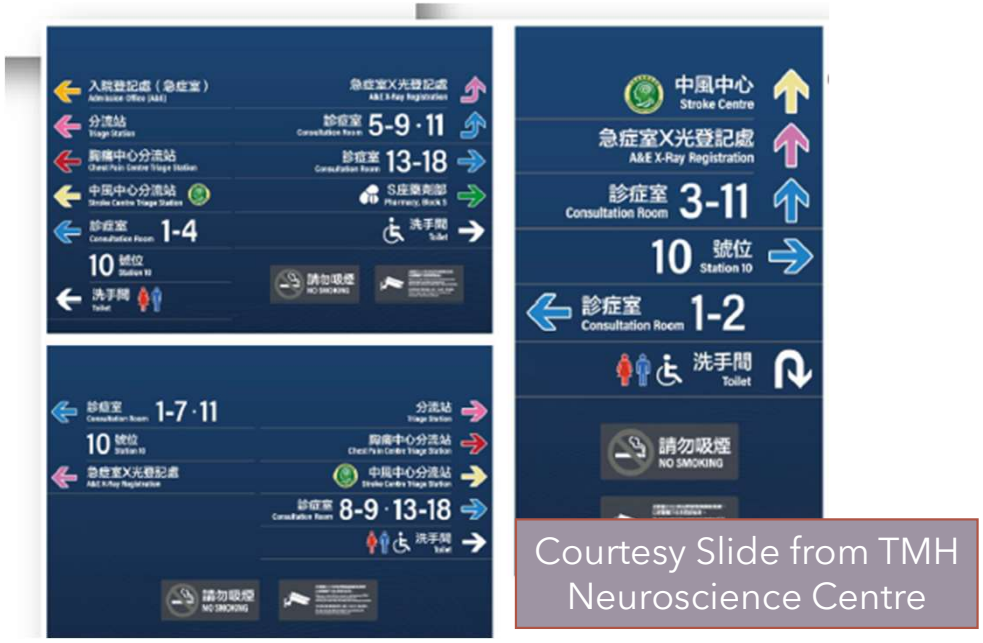




Courtesy Slide from TMH Neuroscience Centre







Courtesy Slide from TMH Neuroscience Centre

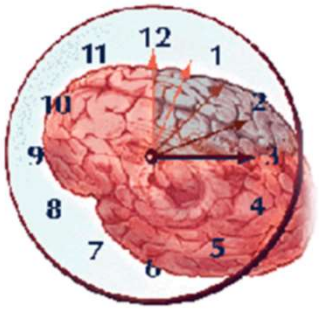
2. 卒中急診綠色通道建設

3 Entrances	AED compounds	CT suites	2/F and C2 ward
AED Ambulance loading area 			
Entrance from Light rail station 			
Entrance from Taxi station 			

Courtesy Slide from TMH Neuroscience Centre



Green Channel
綠色通道





Time is Brain: Time loss is Brain Loss



AI

Primary Diversion

Smart Stroke Care

Dreamssss



Better Communication

Better Preparation

Better Outcomes

Smart Stroke Communication System Workflow - For UCH Patient

Acute ischemic patient
(from AED, In-patient, from CR hospital)



TPA call activated
UCH stroke nurse perform clinical assessment and enter patient data into system



If case is potential IA candidate

HA Chat **Patient clinical information**

Smart Stroke Communication system will automatically deliver HA Chat messages to IA thrombectomy team members (including QEH stroke nurse, CT room coordinator, on-call IA interventionists, angio-suite coordinator)



If case Eligible for IA Thrombectomy

Alert QEH intervention Team



HA Chat **IA proceeds**

IA Team members (including QEH stroke nurse, on-call interventionists, angio-suite coordinator, HDU coordinator) will receive message in HA Chat



HA Chat
"Ambulance Near QEH" Alert



QEH Intervention Suite

All-in-one communication/ data entry system proposal



Potential Acute Stroke
IV/IA candidate



Via A&E



Pre-hospital notification by ambulance man



By Stroke nurse:

- NIHSS
- Other contraindications

HA Chat



In-patient





Stroke Nurse is the Key-Coordinator Stroke Assessment



Other Stroke case: Fill in data in the same platform



- By Nurse/MO
- Onset time
- GCS
- Limbs power
- Cortical signs
- Pre-Morbid status: e.g. mRS



From other Hospital

'Green Channel' admission secures golden hour for stroke treatment

Ms Cheng, in her 20s, experienced a terrifying day in May 2024 when she fell off a horse during practice. "I did not feel unwell initially, but after class, I started vomiting and losing consciousness." She was admitted to Pok Oi Hospital (POH) by ambulance. Similarly, Mr Cheung, 51, suffered hemiplegia and confusion at work in November 2025, and was sent to Queen Mary Hospital (QMH) by ambulance. Both were diagnosed with stroke.

Ms Cheng and Mr Cheung were admitted via the 'Green Channel' at Tuen Mun Hospital (TMH) and QMH respectively. Dr **Kelvin Tsoi Lap-kiu**, Consultant in Medicine & Geriatrics at TMH, recalls that after initial assessment at POH's Accident & Emergency (A&E) Department, colleagues suspected Ms Cheng had a stroke and referred her to the New Territories West Cluster Integrated Acute Stroke Care Team. A cerebral angiogram confirmed that she had large vessel occlusion in brainstem. The stroke team notified TMH's IA thrombectomy team via HA Chat and immediately transferred her to TMH.



The TMH team performed mechanical thrombectomy on Ms Cheng and removed the blood clot to restore blood flow. Dr Tsoi notes that Ms Cheng had a severe brainstem stroke, who initially required a walker after surgery, but could walk independently after two weeks.

Patient calls it miracle

Dr **Chi Man-sum**, Associate Consultant in the Department of Medicine at QMH, says that Mr Cheung's condition was moderate to severe upon admission, but fortunately received timely intravenous thrombolysis treatment through the 'Green Channel'. He also received intra-arterial thrombectomy arranged at the same time and successfully opened up the blocked vessel. The recovery was going smoothly. He explains that since the establishment of the 'Green Channel', the multidisciplinary team receives clinical data on suspected stroke patients via HA Chat for advance preparation, enabling timely treatment.

Cover Story
- Striving for excellence
- CHIMP: Real-time patient condition monitoring
- 'EASY buddy' helps patients with special needs attend consultations with ease
- Digitisation of pathology samples: AI accelerates cancer diagnosis

Feature
- 'Green Channel' admission secures golden hour for stroke treatment
- Stroke patients' clinical data sent via HA Chat with just one click in CMS
- Mandatory reporting of child abuse to protect our children
- Enhance sensitivity to identify indicators of child abuse

People
- The philosophy of winning: From the hospital to the badminton court

The Inside Stories of Hong Kong's Hospitals
- Celebrating 65 years of CCH: A hospital at the cape, as close as family
- Historical stories of the Cheshire Home

What's New
- KWH mobile app empowers staff to work on the move for sustainable transformation
- Multi-sensory rehabilitation garden cheers up child patients
- Henry Fan receives Directors of the Year Awards

Helen HA
- Galloping into the Year of the Horse

Staff Corner
- 耳鳴背後（Chinese only）
- Editorial Board
- Editorial Team

Stroke patients' clinical data sent via HA Chat with just one click in CMS

The stroke call activation system is a critical component of the 'Green Channel'. Once stroke nurses input clinical data into the Clinical Management System (CMS), the information is automatically transmitted to the multidisciplinary team via HA Chat. This automation streamlines the workflow and significantly shortens the time required to save lives.

Dr **Chi Man-sum**, QMH's Associate Consultant in the Department of Medicine, notes that the system has greatly improved efficiency. "In the past, when a suspected acute stroke patient arrived at the A&E, the doctor would diagnose them and inform the stroke nurse, who would then contact the neurologist. If an intervention was required, the nurse had to call the radiology and neurosurgery teams individually. This meant the stroke nurse spent a lot of time on the phone repeating patient information to different departments." He adds that with the new system, stroke nurses can focus more on clinical assessments, such as recording medical history and onset time, allowing the entire team to grasp the patient's condition instantly.

Dr **Chris Tsang**, Chief Manager (Integrated Clinical Services) of the Hospital Authority (HA), explains that various hospitals had previously developed their own notification systems in accordance with their workflows. Taking ideas from the systems developed by hospitals, the HA Head Office has launched a stroke call activation system. The goal is to standardise the system and apply it across hospitals in an orderly manner for the benefits of patients.

Following a pilot programme at QMH, the HA will progressively roll out the system to the Prince of Wales Hospital (PWH) and Tuen Mun Hospital (TMH) starting from the first quarter of 2026. This complements the Pre-hospital Stroke Diversion Scheme recently announced by the HA and the Fire Services Department. Under this scheme, patients in the New Territories East and West clusters suspected of having large vessel occlusions will be sent directly to designated hospitals. Patients in Sha Tin, Tai Po, and the North District will go directly to PWH, while those in Tuen Mun and Yuen Long will go to TMH, securing the golden hour for patients.

Cover Story
- Striving for excellence
- CHIMP: Real-time patient condition monitoring
- 'EASY buddy' helps patients with special needs attend consultations with ease
- Digitisation of pathology samples: AI accelerates cancer diagnosis

Feature
- 'Green Channel' admission secures golden hour for stroke treatment
- Stroke patients' clinical data sent via HA Chat with just one click in CMS
- Mandatory reporting of child abuse to protect our children
- Enhance sensitivity to identify indicators of child abuse

People
- The philosophy of winning: From the hospital to the badminton court

The Inside Stories of Hong Kong's Hospitals
- Celebrating 65 years of CCH: A hospital at the cape, as close as family
- Historical stories of the Cheshire Home

What's New
- KWH mobile app empowers staff to work on the move for sustainable transformation
- Multi-sensory rehabilitation garden cheers up child patients

How the stroke call activation system works

1. Pre-Hospital Notification

When A&E nurses receive a pre-hospital notification from ambulanceman regarding a suspected stroke patient arriving soon, they input the data into the CMS. This allows the stroke team to arrange examinations and treatment in advance.



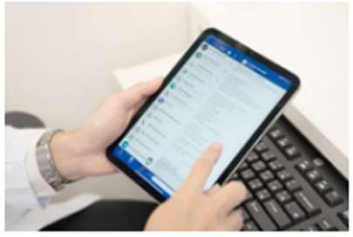
2. Patient Assessment

Upon arrival, the stroke nurse assesses the patient and inputs clinical data, such as blood pressure, limb weakness and severity, into the CMS via a tablet.



3. Automatic Transmission

The CMS is linked to the HA's acute stroke proforma. Clinical data will be sent to a dedicated HA Chat group with one click. All relevant colleagues, including neurologists, neurosurgeons, radiologists, anesthesiologists, and stroke nurses will receive the message simultaneously. Colleagues can also configure the setting so that notifications are only sent to those who are currently on duty.



新界東醫院聯網下周一起推行院前中風分流計劃　爭取更多黃金時間

2025-12-12 HKT 17:20

推介 3　分享工具



消防處與醫管局宣布，將在醫管局新界東醫院聯網，以及新界西醫院聯網推行「院前中風分流計劃」。（港台圖片）

主頁 > 日報 > 港聞

消防處醫管局合作 推院前中風分流計劃

港聞　更新時間：03:00 2025-12-13 HKT



今年《施政報告》提出強化中風緊急救治服務網絡及進一步完善服務流程，從而提升中風病人存活率和功能恢復的目標。消防處與醫院管理局昨日宣布加強合作，將於後日上午8時30分起，在醫管局新界東及新界西醫院聯網推行「院前中風分流計劃」，經救護人員初步評估屬懷疑患有大血管閉塞的患者，將會直接送往指定醫院盡早接受治療，避免患者需轉院及重複評估的情況，進一步縮短整體治療時間，為患者爭取更多黃金時間，減低腦損傷和長期殘疾的風險。

為患者爭取更多黃金時間

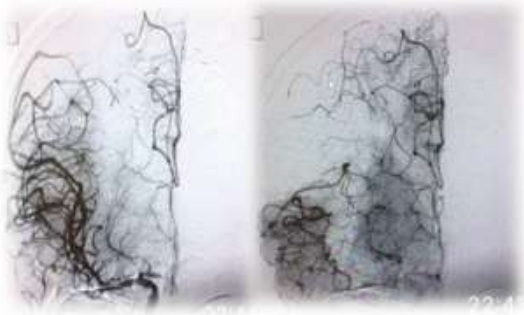
消防處與醫管局自2021年起合作在全港推行「院前中風通報」機制。消防救護人員會在患者送抵醫院前進行「院前中風評估」，利用標準化的醫療評估判斷患者有否出現懷疑急性中風症狀。若患者被評估為需要通報個案，救護人員會立即致電相關的公立醫院急症室，以便醫院的中風科團隊提前安排檢查及治療。

Stroke Patient Journey























Thank You



5A, Block L,UCH

Phone contact:
52156783

Email:
yuct1@ha.org.hk









Multidisciplinary Approach in Stroke Care



CMP participate in Stroke Round

- Stroke Round in every Tuesday
- Multidisciplinary Approach

Stroke Round	Neurologist
	Stroke Nurse
	Physiotherapist
	Occupational Therapist
	Speech Therapist
	Medical Social Worker
	Chinese Medicine Practitioner

Acupuncture



Acupuncture cart

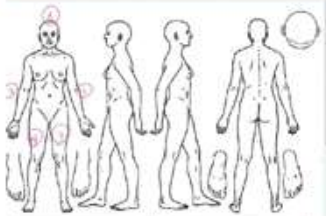


Preparation



Electro acupuncture Stimulators

Acupuncture









Chinese Medicine

- ICWM Programme CM Dispensing Drill held on 24 Aug 2022
- Training and audit for nurse
  - Receipt and Storage of CMs
  - Administration Oral CM
- 83% of nurse have trained and administered oral CMs in ASU









