# Stroke achievements of 2024

SAP-E countries Z to A

STROKE ACTION PLAN EUROPE 2018 – 2030





### Stroke achievements of Wales in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

- ➤ Al implementation across Wales (All sites) Brainomix. Nationally procured, Implemented by Health boards. 12,480 scans over first 12 months
- Data New Sentinel Stroke National Audit Programme (SSNAP) dataset changes.
- ➤ Guidelines Roll out of the 2023 National Clinical Guideline for Stroke
- ➤ Mapping exercise to ascertain Guideline implementation
- ➤ User support groups developed for clinicians and auditors

### ADVANCE IN ACUTE STROKE CARE

> Pre hospital triage pilot, other systems being reviewed to compare

### Stroke achievements of Ukraine in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

➤ National Standards of Ischemic Stroke Treatment were approved by the order of MoH #1070 on 20 Jun 2024 (the previous were from 2012 year), including pre-hospital triage using pre-hospital scales, imaging criteria for IV tPA, MT, obligatory vessel imaging, new timing criteria for anticoagulants in AF, criteria for palliative care, quality indicators for stroke care

### ADVANCE IN ACUTE STROKE CARE

- ➤ Increasing rate of IV tPA from 6,4% in 2022, 9,6% in 2023 to 13,5% in 2024 (15974 patients)
- ➤ Increasing rate of MT from 0,6% in 2022, 1,4% in 2023 to 2,6% in 2024 (3023 patients)

### ADVANCE IN SECONDARY PREVENTION

➤ Most of the drugs from WHO EML are fully reimbursed (except DOACs)

#### ADVANCE IN REHABILITATION

➤ 14,4% of stroke survivors got in-patient rehabilitation (10,2% in 2023)

### **OTHER**

- ➤ Successful 1st in-person ESO TF4UKR Conference in Lviv in September 2024
- ➤ 1<sup>st</sup> pilot audit for stroke departments in 6 regions of Ukraine (leaded by MoH and supported by WHO) 9 hospitals lost their contract with NHS
- > Training for Stroke teams: physicians (3 days) and nurses (2 days) in 20 hospitals by WB and MoH

### Stroke achievements of Sweden in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

➤ Increased access to reperfusion treatment

### ADVANCE IN ACUTE STROKE CARE

➤ Increased access to reperfusion treatment

### **ADVANCE IN SECONDARY PREVENTION**

➤ Anticoagulant treatment in patients with atrial fibrillation still high and statin use increasing

### **ADVANCE IN REHABILITATION**

> ESD is being well implemented in parts of the country

### **ADVANCE IN LIFE AFTER STROKE**

➤ Guideline approved for regular follow-up on need of rehabilitation, the problem is the implementation...

# Stroke achievements of Spain in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

Publication and presentation of the renewed 2024 Spanish National Strategy for Stroke: https://www.sanidad.gob.es/areas/calidadAsistencial/estrategias/ictus/home.htm

Establishment of Prioritized Actions, in agreement with SAPE:

- 1. Planification: establishment of Regional Stroke Plans
- 2. Health Promotion and Primary Prevention: promoting healthy lifestyle and early detection of vascular risk factors
- 3. Secondary prevention: ensure access to diagnostic tools, prevention treatments and continuum of care after hospitalization
- 3. Care organization. Stroke Units: create new SU where needed, promote continuous evaluation. National time-metrics for acute treatment. Development of automated data recollection from electronical medical records
- 4. Rehabilitation and life after stroke: ensure equity in access and monitor neuro-rehabilitation follow-up

Survey to Regional Health Governments ongoing for mapping of the actual situation

Survey to Stroke Unit directors of KPI of stroke care during September 2024 (answers from 46 SU)

### **ADVANCE IN ACUTE STROKE CARE**

➤ Commission for certification of neurologists trained on neurointerventionalism, progress in developing an official training-certification from different specialities (neurology, neurosurgery,..)

### Stroke achievements of Slovakia in 2024



# THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024 ADVANCE IN ACUTE STROKE CARE

➤ Stable rate of IVT – 25%, and MT 10-11% over the last 4 years

### ADVANCE IN SECONDARY PREVENTION

Educational activities to shorten the time until the start of DOAC after AIS

### **ADVANCE IN REHABILITATION**

Increasing the number of beds for acute rehabilitation is the part the "Recovery plan", robotic rehabilitation in some hospitals, neurorehabilitation - part of specialized training in neurology

### **ADVANCE IN LIFE AFTER STROKE**

Comprehensive neurological examination 3 months after stroke as a new procedure covered by the insurance company (NIHSS, mRS, MoCA, spasticity screening, speech assessment, dysphagia, treatment of the risk factors and secondary prevention)

### Stroke achievements of Serbia in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

- ➤ Preparation of a national plan for prevention, treatment and rehabilitation of patients with CVD is on the focus of the Ministry of Health again
- > The national plan is harmonized with the SAP-E
- > The signing of the Declaration is planned after the adoption of the national plan
- New Stroke Guidline is in the works

### **ADVANCE IN ACUTE STROKE CARE**

Making better networks between Comperhensive Stroke Centers (CSC) and Acute Stroke Ready Hospitals (ASRH)

### ADVANCE IN SECONDARY PREVENTION

> Raised the level of awareness on this topic among health professionals and stroke survivors

### **ADVANCE IN REHABILITATION**

➤ Increased in the number of the patients on long term rehabilitation and speeach therapists in many hospitals

### ADVANCE IN LIFE AFTER STROKE

> involving services outside of medicine, such as social services, local communities...

### Stroke achievements in Scotland in 2024



### The most important achievement of year 2024

- Improved admissions to stroke units
- ➤ More patients achieving brain imaging target (<12 hours)

### Advance in acute stroke care

Thrombectomy now available in three centres (numbers doubled 2022 to 2023)

### **Advance in secondary prevention**

➤ Consistent early antiplatelet use

### **Advance in rehabilitation**

➤ Annual rehabilitation reviews highlighting good practice and gaps in services

### Advance in life after stroke

➤ Plan for six monthly reviews for all patients

### Stroke achievements of Romania in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024



- > FOCUS STROKE Project
  - (Project funded by the EU, 2024-2028, 15 milions Euro, aims: training of healthcare specialists involved in stroke treatment ambulance staff, ER doctors & nurses, neurology doctors & nurses, specialists in neurointerventions, development of national ischemic & hemorrhagic stroke guidelines, revised version of Romanian Stroke Registry)
- > Revised national protocol for acute stroke treatment by IVT&EVT submitted to the MoH
- First draft of the The National Strategy for Cardiovascular and Cerebrovascular Diseases 2024-2030

  (aims to define and implement national health policies, directing the use of healthcare resources as well as addressing these high-burden pathologies within the Romanian healthcare system)

#### ADVANCE IN ACUTE STROKE CARE

> national IVT rate: 9.5% (vs 8.6% in 2023), national EVT rate: 2.9% (vs 1.1% in 2023)

### **ADVANCE IN SECONDARY PREVENTION - ns**

### **ADVANCE IN REHABILITATION**

Launch of a Priority Action for acute stroke rehabilitation (programme implemented by the MoH) – aimed to finance devices and medical supplies to support in-hospital rehabilitation procedures

#### **ADVANCE IN LIFE AFTER STROKE - ns**

# Stroke achievements of Portugal in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

➤ Global national thrombectomy coverage network

### **ADVANCE IN ACUTE STROKE CARE**

- ESO certification stroke centers and stroke units
- Stroke certification academy with Angels and ESO certification committee

### ADVANCE IN SECONDARY PREVENTION

➤ Long time prescription for DOACs

### **ADVANCE IN REHABILITATION**

Physical medicine and rehabilitation physician included in the National Health Program

### **ADVANCE IN LIFE AFTER STROKE**

- Free remote psychology support for stroke survivors
- ➤ More (>20) mutual stroke support groups

### Stroke achievements of Poland in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

- ➤ Full reimbursement of thrombectomy incl. new regulations from July 1<sup>st</sup> 2024
- > Healthcare education compulsory in schools

### **ADVANCE IN ACUTE STROKE CARE**

➤ Launch of Tenecteplase for acute ischemic stroke

### **ADVANCE IN SECONDARY PREVENTION**

➤ Preventive programme for hyperlipidemia for stroke (PCSK-9 inhibitors)

### **ADVANCE IN REHABILITATION**

➤ New regulations to enhance service for outpatient rehabilitation

### **ADVANCE IN LIFE AFTER STROKE**

**≻**None

# Stroke achievements of Norway in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

- > Children and Subarachnoid haemorrhages included in the Norwegian Stroke Registry
- ➤ Cognition / MOCA included in the Norwegian Stroke Registry

### ADVANCE IN ACUTE STROKE CARE- NO ADVANCEMENT

> (22% IVT, 6 % EVT, 95% treated in "stroke unit")

### **ADVANCE IN SECONDARY PREVENTION - NO ADVANCEMENT**

> (95% antithrombotic treatment, 85% lipid lowering medication, 71% antihypertensive medication)

### **ADVANCE IN REHABILITATION - NO ADVANCEMENT**

**ADVANCE IN LIFE AFTER STROKE - NO ADVANCEMENT** 

### **CHALLENGES**

Norw. Stroke Organisation efforts reg. <u>certification of stroke units/stroke centers</u> - not prioritized by health authorities

Norw. Stroke Organisation efforts reg. and <u>specialization requirements for stroke physicians</u> - not prioritized by health authorities

### Stroke achievements of N.Macedonia in 2024





### ADVANCE IN ACUTE STROKE CARE

- Acute stroke nurses education at the General Hospital in Ohrid
- ➤ General Hospital in Kocani is stroke ready hospital (equipped with CT scan, patient monitors, syring pupms and staff members pass course from Angels invitative )
- ➤ Train the trainer Angels Invitative in Republic of Lithuania (representatives from 4 different hospitals)

### ADVANCE IN SECONDARY PREVENTION

> Ticagrelor tablets are on the positive drug list

### ADVANCE IN REHABILITATION

- Physiotherapist are part of our team are involved in early rehabilitation all the time (University Clinic of Neurology)
- We have an agreement with Institute of Physical Medicine and Rehabilitation for further modern treatment

### **ADVANCE IN LIFE AFTER STROKE**

➤ Psychological support for these patient is very important, so part of our team gives them advice on further care and recovery before going home





### Stroke achievements of Northern Ireland in 2024



### The most important achievement of year 2024

Ongoing development of a cohesive stroke network agreeing regional standards of care and delivering service improvement across the stroke pathway

### Advance in acute stroke care

- > Thrombectomy:
  - ≥ 6.5% of ischaemic strokes
  - > Improved equity, furthest site moved from 6% to 15% activity
- Regional switch to Tenecteplase
- Regional roll out of AI, funding from redirection of lysing agent savings

### **Advance in secondary prevention**

Partial implementation of regional pathway for management of TIAs

### **Advance in rehabilitation**

- Agreement on a regional model for Community Stroke Service
- Commenced regional spasticity management educational sessions

### Advance in life after stroke

> Standardised regional service model for Long Term Support

### Stroke achievements of the Netherlands in 2024



### **ADVANCE IN ACUTE STROKE CARE:**

> introduction of intravenous thrombolysis (IVT) with tenecteplase

### **ADVANCE IN SECONDARY PREVENTION:**

> introduction of hybrid form of stroke aftercare and CVR-management by app

### **ADVANCE IN REHABILITATION:**

brain stimulation for arm recovery after stroke (B-STARS2 study)

### **ADVANCE IN LIFE AFTER STROKE:**

> strengthening of integrated care networks incl. recognition of invisible symptoms of stroke in primary care

### **ADVANCE IN STROKE ACTION PLAN:**

positive exploration of nation-wide support for SAP-NL: 'interconnectivity' of domains

# Stroke achievements of Montenegro in 2024



# THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024 ADVANCE IN ACUTE STROKE CARE

- ≥ 2<sup>nd</sup> interventional neuroradiologist available, 24h/7 days a week MT
  available
- CT perfusion started (only the education:/)

### **ADVANCE IN SECONDARY PREVENTION**

Neurosonology lab

### **ADVANCE IN REHABILITATION**

Mobile physical therapy

### **ADVANCE IN LIFE AFTER STROKE**

➤ None⊗

### Stroke achievements of Moldova in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

Unified stroke care across all centers nationwide.

### ADVANCE IN ACUTE STROKE CARE

- > Diagnostics: CT and Doppler devices equipped in all primary centers.
  - Thrombolysis:
    - 19% rate in Comprehensive Center (CC).
    - 75% increase in primary centers.
  - Thrombectomy: 13% rate in CC.
  - Workflow Efficiency:
    - Door-to-CT: 16.7 min
    - Door-to-IVT: 54.3 min
    - Door-to-puncture: **93.6 min**
  - **TeleStroke Network:** 90–100 consultations/month, 250–260 CT reports/month....

### Stroke achievements of Moldova in 2024



### ADVANCE IN SECONDARY PREVENTION

Access to lifestyle changes, medications (antihypertensives, anticoagulants, etc.), diabetes management, and carotid endarterectomy.

### **ADVANCE IN REHABILITATION**

- Specialized care in Chişinău's Neurological Rehab Unit.
- > Strengthened regional rehabilitation access.

### **ADVANCE IN LIFE AFTER STROKE**

Continued post-stroke care improvements, but no palliative care services introduced yet.

### Stroke achievements of Malta in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

> Development of National Stroke Plan, Declaration of commitment for continuous improvement signed and endorsed by Health Minister

### ADVANCE IN ACUTE STROKE CARE

- ➤ 10% increase in thrombectomies from 2023 (95 total)
- Inauguration of New Stroke Ward
- ➤ National Registry, RES-Q and SITS database, Update of the National Stroke Guideline

### ADVANCE IN SECONDARY PREVENTION

- National Discharge Proforma personalised discharge plan (clear target LDL levels & and close follow up post discharge)
- ➤ Lobbying for novel medications to be included in National Formulary

### **ADVANCE IN REHABILITATION**

- ➤ Further recruitment of Rehab Trainee Doctors & awaiting appointment of new Consultant Rehab Physician
- ➤ Improvement of Botox Clinic

### **ADVANCE IN LIFE AFTER STROKE**

➤ Nil

### Stroke achievements of Lithuania in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

### ADVANCE IN ACUTE STROKE CARE

- ➤ Development of the Lithuanian Stroke Database (StrokeLT)
- ➤ Acute stroke patient Biobank in VUH

### **ADVANCE IN SECONDARY PREVENTION**

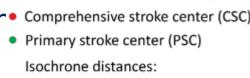
➤ Some liberalisation of DOACs reimbursemer • Comprehensive stroke center (CSC)

### **ADVANCE IN REHABILITATION**

> n/a

### **ADVANCE IN LIFE AFTER STROKE**

> n/a





IVT ~15% of all AIS MTE ~9% of all AIS

# Stroke achievements of Italy in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

First meeting with the ministry of health staff to obtain government's commitment to define a national stroke plan (KPI 1)

### **ADVANCE IN ACUTE STROKE CARE**

- ➤ 25 new thrombolysis capable centers (Total 224)
- > 10 new thrombectomy capable centers (total 84)

### ADVANCE IN SECONDARY PREVENTION

➤ Annual Joint Cardiologists-Neurologists "Heart-Brain" Congress

### **ADVANCE IN REHABILITATION**

- Map of Rehabilitation resources.
- Tracking of patients sent to rehabilitation (30.9%).

### ADVANCE IN LIFE AFTER STROKE

Active collaboration between the Italian Stroke Association and the National Stroke patients' association (ALICE)

### Stroke achievements of Israel in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024 in ISRAEL (10,000,000) citizens.

➤ Adding approx. 30 stroke beds in public hospitals. Stable rates of recanalization RX – 11.2% thrombolysis / IS, 9.1% Thrombectomy / IS Total reperfusion rate 17.6% /IS

#### > ADVANCE IN ACUTE STROKE CARE

- > Implementation of updated guidelines in more hospitals and remote stroke services (MRI for wake-up stroke for thrombolysis, longer treatment window, shorter treatment times)
- ➤ Defining additional new national quality indicators implemented by MOH from 2025 (door-to-needle 60 min, door to puncture 90 min)
- ➤ Qualification of new Stroke experts for full coverage of remote hospitals

#### **ADVANCE IN SECONDARY PREVENTION**

Establishing inter-disciplinary cooperation with Cardiology (LAAO) and Hematology (coagulation considerations)

#### **ADVANCE IN REHABILITATION**

> Most of rehabilitation resources were allocated towards war casualties. Improving rehabilitation facilities and work force.

#### **ADVANCE IN LIFE AFTER STROKE**

**>** ...

### Stroke achievements of Ireland in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

> Launch of National Primary Prevention Hypertension screening programme

### **ADVANCE IN ACUTE STROKE CARE**

- Swallow screen QI online training module
- ➤ QQI level 8 nursing qualification

#### **ADVANCE IN SECONDARY PREVENTION**

➤ Collaboration with national stroke charities /Exwell to enhance national secondary prevention programmes.

### **ADVANCE IN REHABILITATION**

➤ ESD – 11 operational teams with 830 patients discharged home on ESD pathway in 2023

### **ADVANCE IN LIFE AFTER STROKE**

- ➤ Life After Stroke Conference held in Dublin March 2024
- > Funding secured for Stroke Connect a comprehensive online stroke support programme







National Clinical Programme for Stroke



### Stroke achievements of Iceland in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

➤ Meeting with the Health minister – hopefully close to finalizing the signing of the declaration

### **ADVANCE IN ACUTE STROKE CARE**

➤ Preparing the opening of a stroke surveillance unit nested within the neurology department, giant step towards a stroke unit – novel care pathways and continuous education program for nursing staff. Organizational quality indicators approved by hospital management

### **ADVANCE IN SECONDARY PREVENTION**

- ➤ Population based survey revealed lack of knowledge about blood pressure as a major stroke risk factor in the general population currently following up
- ➤ Mapping problems through ICESTROKE data working on patient portfolios and hand-over letters between different service levels of the healthcare system
- ➤ Positive issue same electronic system at all service levels in Iceland

### Stroke achievements of Iceland in 2024



### **ADVANCE IN REHABILITATION**

Established collaboration with main rehabilitation centre for stroke in Reykjavik

### **ADVANCE IN LIFE AFTER STROKE**

➤ Activity group within the hospital focus in particular on patients experiences — initial stages in data collection



### Stroke achievements of HUNGARY in 2024





ADVANCE IN ACUTE STROKE CARE Dysphagia project – nutrition therapy after stroke

...Dysphagia Section of Horányi Neuroscience Society (est. 05.03.2024)









ADVANCE IN SECONDARY PREVENTION

> ...Educational short video based on a succesfull tender (supperted by Hungarian govertment)

















ADVANCE IN ACUTE CARE, REHABILITATION AND IN LIFE AFTER STROKE

...New specialty appeared in Hungary: voice, speech and swallowing therapists (VSST)









# Stroke achievements of Georgia in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

➤ Increased number of IVT and EVT

### ADVANCE IN ACUTE STROKE CARE

Implementing the prehospital care protocols (more stroke patients timely get to the "right hospitals")

### **ADVANCE IN SECONDARY PREVENTION**

➤ Increased use of DOACs and statins when appropriate

### **ADVANCE IN REHABILITATION**

**>**...

### **ADVANCE IN LIFE AFTER STROKE**

**>**...

# Stroke achievements of Germany in 2024



# THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024 (for the German Stroke Foundation)

Funding by German health authorities for another pilot study to implement stroke navigators and their governance in aftercare (completion in 2026)

### **ADVANCE IN ACUTE STROKE CARE**

- ➤ Well organised acute care (i.e. more than 340 certified stroke units; see Stroke Service Tracker)
- ➤ Active research community: Application for the development of a German stroke trials network (all medical universities), involvement of the German Stroke Foundation

### **ADVANCE IN SECONDARY PREVENTION**

➤ Well organised secondary prevention by general practitioners, involvement and cooperation with neurologists still to be improved

### ADVANCE IN REHABILITATION

> Development of the medical guideline on mobility therapy after stroke (completion in 2026)

#### **ADVANCE IN LIFE AFTER STROKE**

➤ Development of a new guideline in stroke aftercare by German stroke society/ German neurology society, involvement of the German Stroke Foundation (work in progress)

### Stroke achievements of Finland in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

➤ Perfect-Stroke registry restarted with support from Ministry of Health

### ADVANCE IN ACUTE STROKE CARE

➤ National median DNT < 30 min

### ADVANCE IN SECONDARY PREVENTION

➤ No clear advances were seen

### **ADVANCE IN REHABILITATION**

➤ No clear advances in 2024

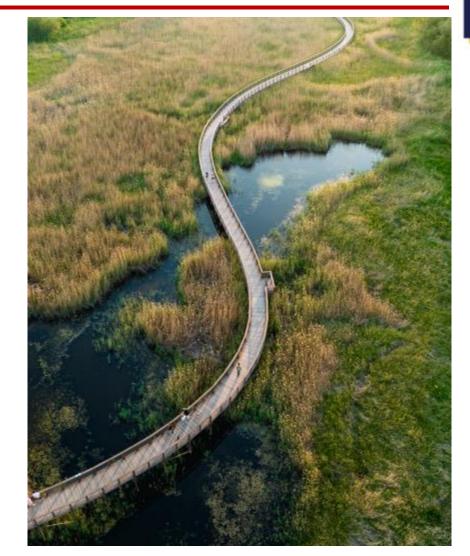
### **ADVANCE IN LIFE AFTER STROKE**

➤ Post Stroke Checklist (PSC) implementation continued

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Starting from January 1, 2025, a standard for the management of patients diagnosed with ischemic stroke was implemented, defining the actions within the pathway until 1 year after stroke.

Reimbursement for stroke coordinator and stroke nurse by the Estonian Health Insurance Fund.



# Stroke achievements of England in 2024



#### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

- Data New Sentinel Stroke National Audit Programme (SSNAP) dataset changes.
- Awareness New NHS England FAST campaign. 1st symptom to 999 88mins, 57% think need 2-3 symptoms to call 999. New Stroke Association advert.
- Guidelines Roll out of the 2023 National Clinical Guideline for Stroke
- Advocacy 'scale of problem'- incidence stroke risen by 28% in last 20 years = 55% rise aged 50-59, 42% rise aged 60-69, 25% rise for ages 70-79. Stroke
  Association engaged in 10 Year Health Plan workstream to influence the direction of policy over the next ten years. Stroke Association election manifesto 3 asks:
  Funded stroke prevention plan, Thrombectomy universally available 24/7, All stroke survivors access rehabilitation & Life After Stroke support in line with guidelines.
- BIASP strategic plan 2025-2028.
- Workforce New training route for stroke consultants 3 years.
- System support Integrated Stroke Delivery Network (ISDN) funding continued.

#### **ADVANCE IN ACUTE STROKE CARE**

- TNK roll out/pilot Imaging National Optimal Stroke Imaging Pathway (NOSIP )- CTP Steve Powis (NHS CMO) visiting all thrombectomy sites
- Full roll out of AI in stroke networks with Prime Minister highlighting benefits

#### **ADVANCE IN SECONDARY PREVENTION**

NHS health check programme 40-74 New digital NHS health check

#### **ADVANCE IN REHABILITATION**

Roll out of National Rehabilitation in Adults guideline Oct 2023 (NICE)

#### **ADVANCE IN LIFE AFTER STROKE**

SQuIRE projects showing collaboration between SSOs and NHS

### Key steps checklist

SSNAP - Dataset changes 2024 (strokeaudit.org)

#### **Review current SSNAP practice**

- · How are minutes and days of therapy delivery currently determined and by whom?
- · What paper or electronic systems and templates are used?
- How is data entered on SSNAP and by whom?
- · Are there are parts of this process that could be improved and if so how?

#### Discuss dataset changes and help notes

- . Discuss the new dataset and key changes as a multidisciplinary team
- Discuss help notes as a multidisciplinary team
- Consider how treatment and care under each heading will be determined
- · Adapt current collection approaches so that minutes and days can be accurately recorded
- Define roles so that data related responsibilities within the team are acknowledged

#### SSNAP user group engagement

- Share good practice and support across ISDNs
- Present at national SSNAP webinars

#### Local Electronic patient record (EPR) systems

- Engagement with IT and business performance teams
- · Requires longer period of time
- Trial different approaches whilst changes are being made

#### Consistency is key

- No double counting
- Outcome measure use

Local data flow diagrams

Dataset proforma and help notes

Spreadsheets

Therapy calculators

Recordings of presentations FAQ

Import/export CSV file

SSNAP resource

Local resource

### Stroke achievements of Denmark in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

A new national health reform aim to centralizes rehabilitation of patients with complex needs Danish Stroke Alliance decided to update the Danish stroke action plan.

### ADVANCE IN ACUTE STROKE CARE

- > 24% obtained revascularization
- >> 90% transferred to a stroke unite.

### > ADVANCE IN SECONDARY PREVENTION

➤ Blood pressure awareness event in the Danish Parliament. Danish Stroke association and the biggest Danish supermarket chain offers blood pressure measurement on a regular basis in low-income areas

### **ADVANCE IN REHABILITATION**

➤ It is decided that a national rehabilitation register will be launched in 2025

### **ADVANCE IN LIFE AFTER STROKE**

National online aphasia communities are established

### Stroke achievements of Czechia in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

> All domains are steadily progressing, and the national plan declared by the government

### **ADVANCE IN ACUTE STROKE CARE**

**≥**33.2% IVT, 10.5% thrombectomy, reduction in ICH 30D-mortality (38->35%)

### **ADVANCE IN SECONDARY PREVENTION**

➤ Educational programs and certification for cerebrovascular neurologists, >50 certified

### **ADVANCE IN REHABILITATION**

> The first completed national quality monitoring in rehabilitation, 5 indicators

### **ADVANCE IN LIFE AFTER STROKE**

➤ New community programs, continuous programme of self-help activities, campaign for covert deficits after stroke (Cerebrum)

### Stroke achievements of Croatia in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

➤ Pilot project of national stroke registry – finished

### **ADVANCE IN ACUTE STROKE CARE**

> %IVT 16.4%, DTN 42 min, %MT 12.0%, DTG 54 min. (Q1-2024 – RES-Q)

### **ADVANCE IN SECONDARY PREVENTION**

➤ Availability of dabigatran – fully reimbursed

### **ADVANCE IN REHABILITATION**

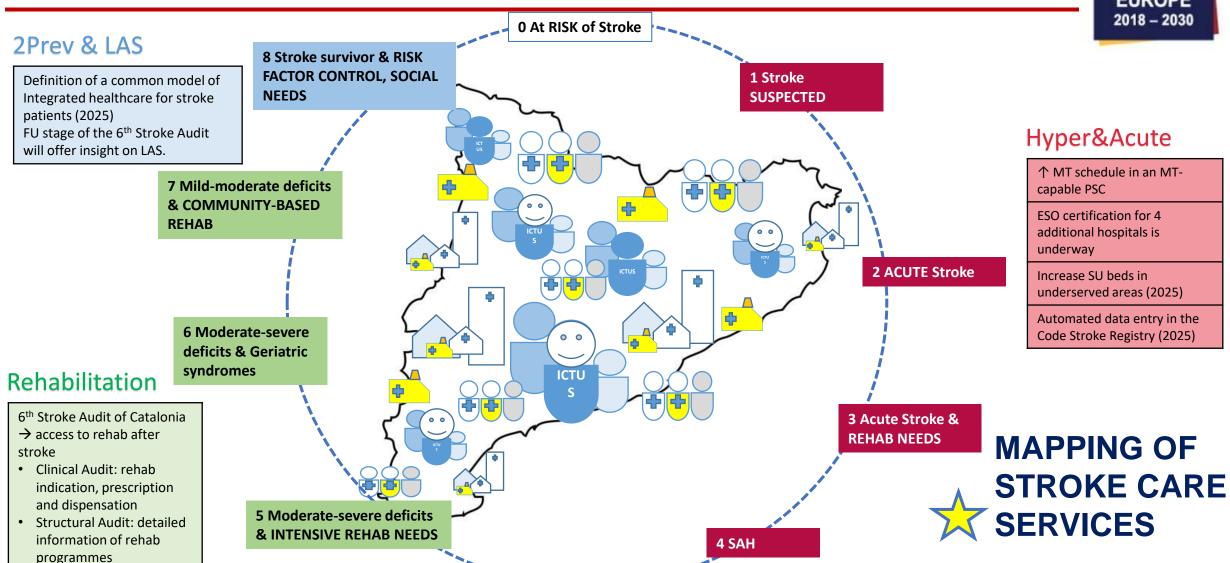
➤ Availabitity of robotic rehabilitation / Nothing

### **ADVANCE IN LIFE AFTER STROKE**

➤ Stroke awareness campaigns (WSD, Red Dress Day) / Nothing...

### Stroke achievements of Catalonia in 2024

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# Stroke achievements of Bulgaria in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

- ➤ Development of National Stroke Treatment Plan
- > The latest update of the national consensus on stroke treatment
- > The duration and reimbursement of the clinical pathway for stroke treatment has been increased
- > The start of a permanent campaign for public stroke awareness- partners all municipalities in Bulgaria
- > Infobot for Stroke on Viber an innovative free stroke guide for mass information.

### ADVANCE IN ACUTE STROKE CARE

> A gradual increase in the percentage of thrombolysis

### ADVANCE IN SECONDARY PREVENTION

➤ Maintaining a high rate of secondary prevention

### ADVANCE IN REHABILITATION

> Maintaining high rates of early rehabilitation and reimbursement various options for late rehabilitation

### ADVANCE IN LIFE AFTER STROKE

- > Translated and adapted into Bulgarian Post-stroke checklist
- > Research on unmet needs of stroke and aphasia survivors, their families and caregivers.

# Stroke achievements of Belgium in 2024

### STROKE ACTION PLAN EUROPE 2018 - 2030

### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

- ➤ Planning of a first Belgian stroke care meeting 10/06/2025
- -focus on national data registry and national stroke plan





Stroke awareness campaigns —bread bags; game; workshops...













- E-learning module prehospital stroke management ambulance staff
- PIVO VLAAMS-BRABANT
- First Flemish stroke care quality report on IVTL, mortality, post-stroke infections (based on ICD 10)



### **ADVANCE IN LIFE AFTER STROKE**

> Flanders: Hersenletsellijn (Brain Injury Line)



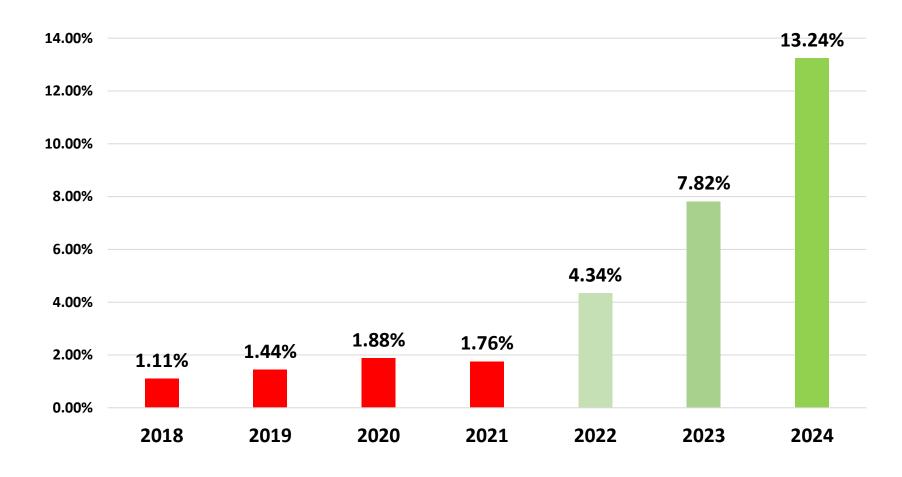
### Stroke achievements of Belarus in 2024



# THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024 ADVANCE IN ACUTE STROKE CARE

### > Recanalization rate

IVT + EVT + IVT + EVT



# Stroke achievements of Azerbaijan in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

- ➤ The establishment of five specific stroke centers in Baku, Sumgait, Ganja, Guba
- > ADVANCE IN ACUTE STROKE CARE
- > See above

### **ADVANCE IN SECONDARY PREVENTION**

> Everyone's access to all healthcare facilities funded by mandatory health insurance

### **ADVANCE IN REHABILITATION**

➤ Participation in ESO/EFNR neuro-rehab course and the beginning of local implementation activities based on 4-module training: aphasia, dysphagia, motor recovery, cognition

### **ADVANCE IN LIFE AFTER STROKE**

This is not (yet) an important topic for all stakeholders in medicine—there are too many challenges in developing better standards of care.

### Stroke achievements of Austria in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

Enquete in BMG; establishment of the Austrian Stroke Platform Study to test new initiatives in post-stroke care (delirium programme, prevention of fracture risk, etc.); BMG provides data for Stroke Service Tracker

### ADVANCE IN ACUTE STROKE CARE

Increase in the capacity of stroke unit beds to meet SAP-E goal of 90% treated in stroke unit; new local benchmarks for the evaluation of SUs (compliant with SAP-E) including ASUR

### ADVANCE IN SECONDARY PREVENTION

Initiatives: Post-stroke App to improve secondary prevention; primary prevention program; development of the individualized polypill

### **ADVANCE IN REHABILITATION**

➤ Review of the Austrian quality standard of stroke with a focus on out-patient rehabilitation; development of tele-rehabilitation; forecast of rehabilitation demands until 2035 +20%

#### ADVANCE IN LIFE AFTER STROKE

➤ Roll-out of the post-stroke care program (Stroke Card) in Austria; development of the post-stroke App; update of the book "Life after stroke"

### Stroke achievements of Armenia in 2024



### THE MOST IMPORTANT ACHIEVEMENT OF THE YEAR 2024

National stroke database

### ADVANCE IN ACUTE STROKE CARE

> Telemedicine

### ADVANCE IN SECONDARY PREVENTION

Better rates of endarterectomies, carotid stentings, also in acute setting, better rates of PFO closure

### **ADVANCE IN REHABILITATION**

By ministerial order government will support rehabilitation in acute phase of stroke and different neurological disorders. By the same order the standards of rehabilitation in acute phase of stroke are defined

### **ADVANCE IN LIFE AFTER STROKE**

None