

ICTUSnet FINAL DISSEMINATION EVENT

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Work Package 4

Transfer of Knowledge

Responsible beneficiary:

Administração Regional de Saúde do Norte de Portugal
(ARSN)

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Partners:

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Product 4.1 - **ACTION PLAN**

WP 4

for agents involved in stroke care ICTUSnet regions



AIM

-  To identify areas for improvement in each region, detected from the data, collected and analyzed by ICTUSnet
-  To update and improve medical protocols and care plans

Addressed to **health care professionals**

Product 4.1 - **ACTION PLAN**

WP 4



Action plan categories

1. General data
2. Primary prevention, health promotion and campaigns
3. Organization of stroke services and management of acute stroke
4. Follow-up and rehabilitation, secondary prevention, life after stroke

Stroke Action Plan for Europe 2018-2030

1. Primary Prevention
2. Organization of Stroke Services
3. Management of Acute Stroke
4. Secondary prevention and organized follow-up
5. Rehabilitation
6. Evaluation of Stroke Outcome and Quality Assessment
7. Life after stroke

Product 4.1 - **ACTION PLAN**

WP 4

RESULTS AND CONCLUSIONS

Common recommendations (examples)

- ✓ Include the **risk of stroke** in population campaigns
- ✓ Enhance **screenings** for detection of atrial fibrillation in the population at risk
- ✓ Evaluate the results and impact of **campaigns**
- ✓ Guarantee **access to a stroke unit** regardless of the patient's geographical location
- ✓ Develop a maintenance plan for the stroke **registry** with regular updates
- ✓ Incorporate the whole process (rehab/follow-up) into the **integrated health records**
- ✓ Work to provide an **early supported discharge** to at least 20% of the stroke population
- ✓ Evaluate **secondary prevention** with properly indicators

Product 4.1 - **ACTION PLAN**

WP 4

RESULTS AND CONCLUSIONS





Specific recommendations (regions)

- ✓ Carry out campaigns on the detection of hypertension in the population at risk (Navarre)
- ✓ Include atrial fibrillation indicators in the list of Primary Care collected indicators (Aragon, Catalonia, Navarre, Occitanie)
- ✓ Update the Stroke Physical Medicine and Rehabilitation Policy Document, 2012 (North Portugal)
- ✓ Analyse human and material resource needs to ensure that each patient receives the necessary rehabilitation by specialised professionals (Balearic Islands)

Product 4.2 – **ROADMAP** for stroke care

WP 4

AIM

-  Propose key actions for the improvement of stroke care in the short, medium and long term
-  To address and disseminate the final recommendations to key stakeholders, to be incorporated into health strategies and plans

Addressed to **health care authorities**

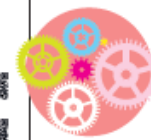
ROADMAP

1 STROKE SHOULD BE A HEALTH PRIORITY; IT NEEDS GOVERNMENT'S INVOLVEMENT AND EUROPEAN CONSENSUS.



- [illegible]

2 STROKE NEEDS AN INTEGRATED ORGANISATIONAL AND COLLABORATIVE STRATEGY ENCOMPASSING THE ENTIRE CHAIN OF CARE.



- **management** & **organisational** aspects should have a **whole** **viewpoint** from **primary prevention** to **late** **stages**, with an **integrated**, **multidisciplinary** and **open** **approach**.
- **Cooperation** should be **encouraged** **across** **multistakeholders** and **voluntary** **organisations** from **public** **health**, **health** **care** **systems**, **non-profit**, **primary**, **local** **and** **national** **and** **social** **care** **organisations**, and **patients** & **families**.

3 | STROKE REQUIRES A PERSON-CENTERED MODEL OF CARE.



- From the office in Cambridge, I've collected a few small and a few big problems and comments that might be useful to the process, and also to the education of students and quality of life.
<http://www.igmp.ca/IGMP/IGMP.html>

4 | STROKE IS PREVENTABLE AND HAVE DISTINCTIVE RISK FACTORS



- Improve a population's **knowledge** on the most effective risk **reduction** for tobacco. Community-wide tobacco prevention programs should be carried out regularly to educate **young persons** and **low-risk** **populations**.
- Reduce **access** to tobacco for **young persons** and **at-risk** **populations** by **providing** and **maintaining** **access** to **smoking cessation**.
- Reduce the **economic** **burden** of tobacco. Upstream, **and** **downstream** **secondary** **prevention** **strategies** **should** **be** **tailored** **to** **the** **regional** **tobacco** **plan**.

5 | STROKE IS A TIME-DEPENDENT TREATABLE EMERGENCY.



- improve population's knowledge on BSE as it and its exposure and how to avoid. BSE awareness campaigns should be continued regularly.
- expand surveillance system for early warning should be established, updated and evaluated periodically by a regional multidisciplinary BSE Task Team.
- reverse the availability of BSE in meat and BSE-infected professionals. Promote certified or all-BSE-free, BSE and customers of suppliers who assure that it is uninfected.

6 STROKE DEMANDS A CONTINUUM OF INTEGRATED CARE AND A REHABILITATION PROCESS: DISABILITY CAN BE REDUCED



- **Causes in case should be avoided**, as soon as it develops **secondary case** should be treated by **therapy** for long after case has been over the whole pathway after long list of changes and a comprehensive, all elements and **its risk exposure** should be taken into place.
- **Key Performance Indicators** in all these strategies should be identified and **to be done** data on **impact** on **cost** in **prevention** **intervention** and **long-term** **effectiveness**.

7 LIFE AFTER A STROKE DOES CONTINUE. STROKE SURVIVORS HAVE SPECIFIC HEALTH AND SOCIAL NEEDS.



- [illegible]

8 STROKECARE NEEDS DATA MANAGEMENT, SYSTEMATIC AND STANDARDISED COLLECTION OF STROKE DATA



- **Workflow** defines and maintains data flow between different steps in process. Systematic approach, documents results and comments to ensure the whole team understands
- To this end, they may utilize data sources from inside organization or data from external sources, e.g. social media, for their large projects, compliance with the privacy rules (GDPR, HIPAA, etc.) is of great importance
- **task** is done a step forward and the way which enables another step forward. ICT/MSB projects, data flow and regulatory and the way in which identified constraints are particularly important for the whole project
- **data** is the information that is used to create and sustain a system or a process, e.g. <http://www.ibm.com/de-de/data-and-analytics/>

9 STROKE CARE ORGANISATIONS NEEDS TO EVALUATE, AUDIT AND DISSEMINATE HEALTH OUTCOMES AND RESULTS TO IMPROVE



- [illegible]

**10 | STROKE NEEDS INNOVATION AND RESEARCH
IN MANAGEMENT AND CARE.**



- **classical management model** **assumes** that **employees** will **work hard** if **management** can **provide** the **right** **incentives** and **control** **systems** to **motivate** them to **work** hard
- **assists** in **achieving** **strategic** **goals** **by** **using** **the** **best** **available** **tools** **and** **techniques** **to** **achieve** **the** **best** **possible** **results** **in** **the** **short** **term**
- **communication** **and** **dissemination** **of** **knowledge** **is** **critical** **to** **achieving** **strategic** **goals**
- **employees** **are** **motivated** **by** **incentives** **and** **control** **systems** **to** **achieve** **the** **best** **possible** **results** **in** **the** **short** **term**
- **employees** **are** **motivated** **by** **incentives** **and** **control** **systems** **to** **achieve** **the** **best** **possible** **results** **in** **the** **short** **term**

ROADMAP

1

STROKE SHOULD BE A HEALTH PRIORITY; IT NEEDS GOVERNMENT'S INVOLVEMENT AND EUROPEAN CONSENSUS.



- Tackle the challenge of stroke not only to **invest resources** on prevention and treatment of stroke, but to **promote effective and efficient care** for the increasing number of stroke survivors with sequelae.

- Use the European Stroke Action Plan (E-SAP) Stroke Action Plan for Europe (SAP-E) as a reference for the **development of collective actions** in the right direction
<https://actionplan.eso-stroke.org>

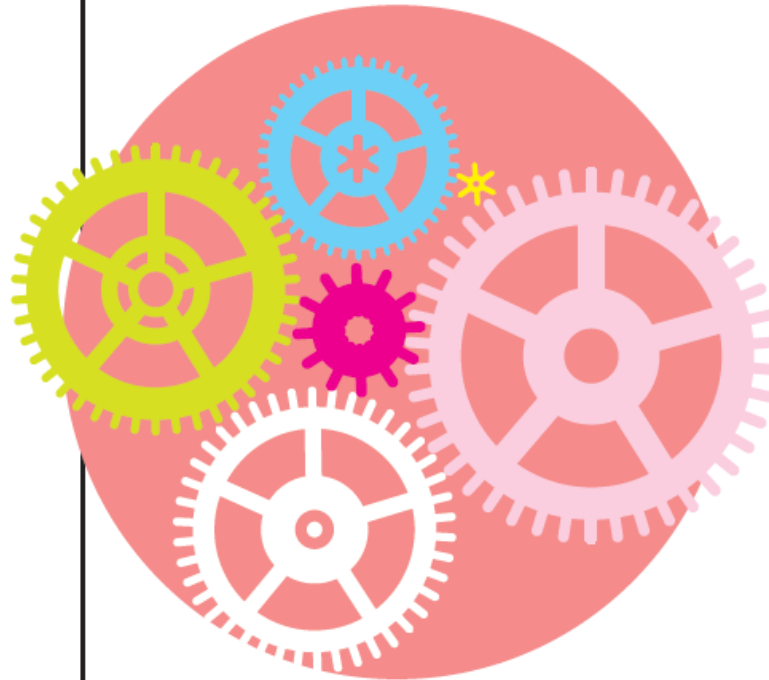
- ICTUSnet tools and products should be used as European best practices; available at ICTUSnet platform
platform.ictusnet-sudoe.eu



ROADMAP

2

STROKE NEEDS AN INTEGRATED ORGANISATIONAL AND COLLABORATIVE STRATEGY ENCOMPASSING THE ENTIRE CHAIN OF CARE.



- **National and regional stroke plans** should have a **whole strategy** from **primary prevention** to **life after stroke**, with an integrated, multidisciplinary and synergetic approach.
- **Cooperation should be encouraged across stakeholder groups** including representatives from **public health, health management, emergency, primary, hospital healthcare** and **social care** organisations, and **patients' associations**.

ROADMAP

3

STROKE REQUIRES A PERSON-CENTERED MODEL OF CARE.



- Promote **effective communication**, **shared clinical decisions** and active participation of **patients** and **caregivers** throughout the whole process, and also in the **evaluation** of outcomes and **quality** of life.

<https://youtu.be/uX2sfVsa0ak>



ROADMAP

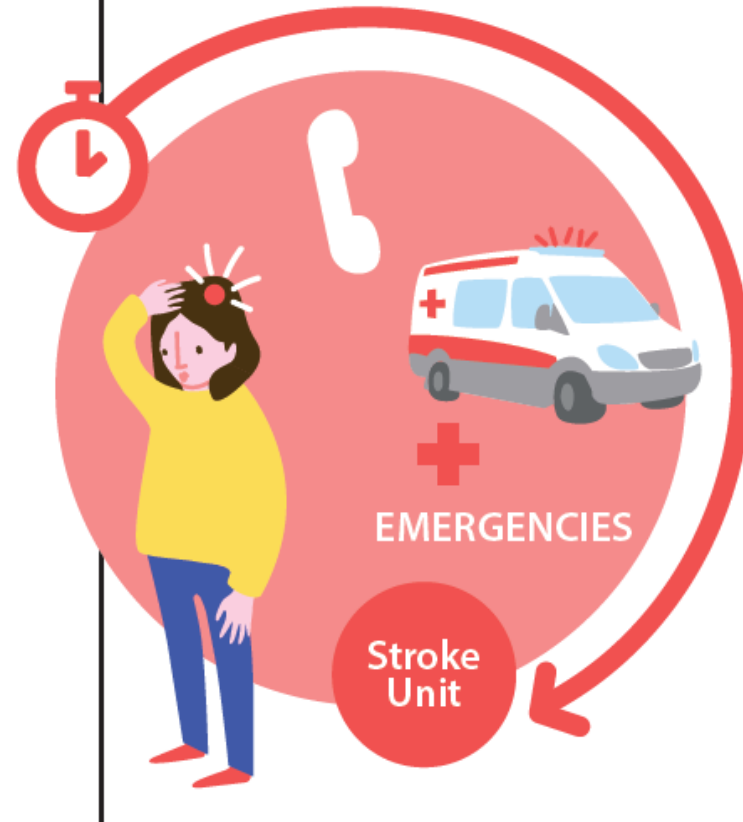
4 STROKE IS PREVENTABLE AND HAVE DISTINCTIVE RISK FACTORS



- Improve population's **knowledge** on the modifiable risk **factors for stroke**. Comprehensive stroke prevention campaigns should be carried out regularly including **recommendations for healthy lifestyles**.
- **Strategies** should be improved **for the prevention** and control of **obesity, arterial hypertension** and **atrial fibrillation**, and for **smoking cessation**.
- **Reduce the recurrence of stroke**. Updated, evidence-based secondary prevention strategies should be included in the **Regional Stroke Plan**.

ROADMAP

5 STROKE IS A TIME-DEPENDENT TREATABLE EMERGENCY.



- Improve population's knowledge on **stroke signs and symptoms** and **how to react**. **Stroke awareness campaigns** should be conducted regularly.

- **Equitable emergency pathways** for stroke patients should be established, **updated** and **evaluated periodically** by a regional multidisciplinary Stroke Code Team.

- **Increase the availability of Stroke Units and stroke-trained professionals**. Promote certification of Stroke Units. **Rates and outcomes of reperfusion therapies** should be improved.

ROADMAP

6

STROKE DEMANDS A CONTINUUM OF INTEGRATED CARE AND A REHABILITATION PROCESS; DISABILITY CAN BE REDUCED



- **Gaps in care should be avoided**; the **Regional Stroke Regional Plan** should include a **strategy for integrated care** throughout the whole pathway after hospital discharge and a comprehensive, evidence-based **multidisciplinary neurorehabilitation plan**.

- Key Performance Indicators of these strategies should be included on **stroke data management to enable periodic evaluation** and improve efficiency.

ROADMAP

7

LIFE AFTER A STROKE DOES CONTINUE. STROKE SURVIVORS HAVE SPECIFIC HEALTH AND SOCIAL NEEDS.



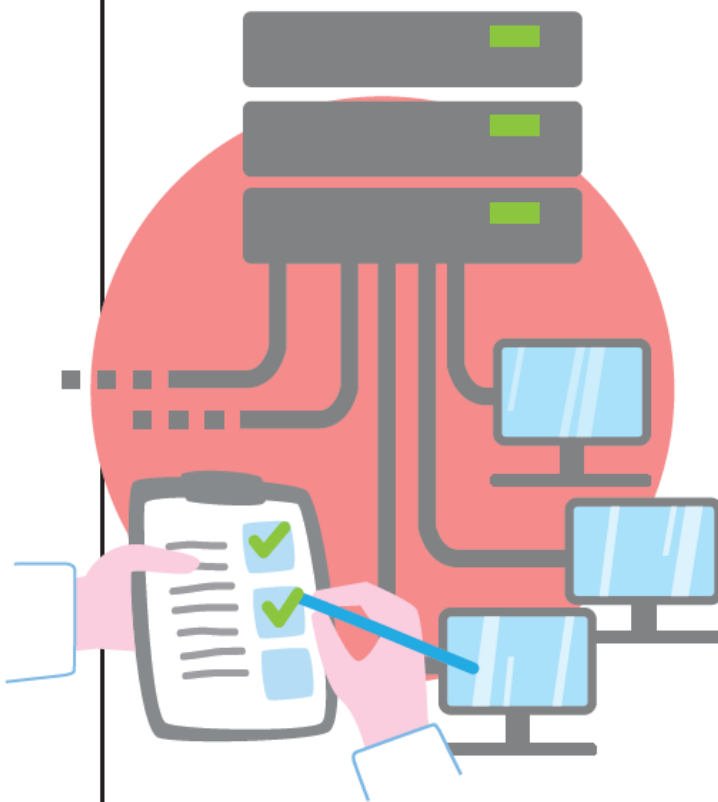
- A **specific section** in the Regional Stroke Regional Plan should be dedicated **to life after a stroke**, long-term health and **social support** for stroke survivors.

- Promote **integration of stroke survivors** into their communities and participation in **support and educational groups**, for them and their caregivers. An active role for Stroke Support Organizations and Patients' Associations should be encouraged, in coordination with **community resources**.

ROADMAP

8

STROKECARE NEEDS DATA MANAGEMENT; SYSTEMATIC AND STANDARDISED COLLECTION OF STROKE DATA



- Build, develop and maintain **data infrastructures that support systematic approach**, data-centric stroke care assessment across the whole care pathway. To this end, use any available data source, from **stroke registries** to **electronic health care records** or **discharge reports**, compliant with the principles of the European Framework of Interoperability.

- **Enable data anonymisation and sharing** with other stroke registries. **ICTUSnet project centralized registry** and the use of its identified standards are particularly recommended for the acute phase <http://platform.ictusnet-sudoe.eu/red-ictusnet/informe-tratamiento-de-reperfusion-e-indicadores/>



ROADMAP

9

STROKECARE ORGANISATIONS NEEDS TO EVALUATE, AUDIT AND DISSEMINATE HEALTH OUTCOMES AND RESULTS TO IMPROVE



- Promote **stroke care continuous assessment** and sound comparisons of care providers, within and between health systems. **Settle targets and benchmarks for evaluation** of the whole stroke care pathway in a quality-improvement program. Indicators identified in the ICTUSnet project should be used, aligned with Stroke Action Plan in Europe.

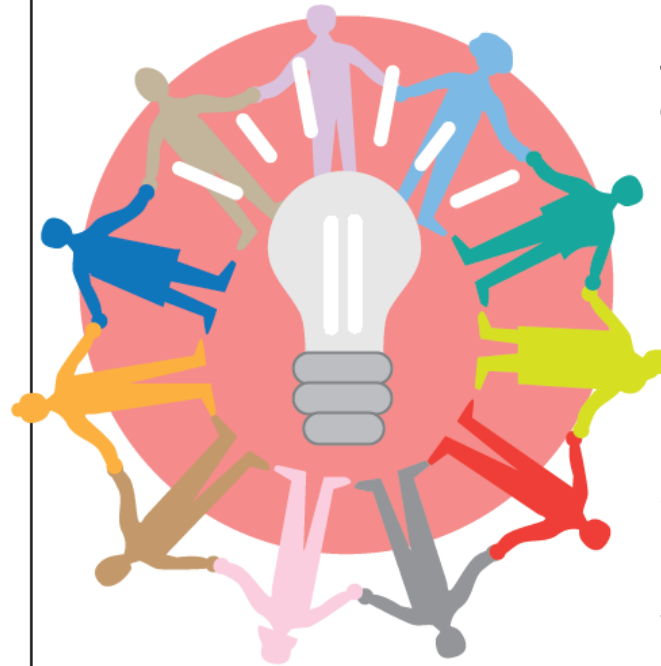
- **Promote regular public reporting** of the results produced in the evaluation of stroke care and, out of this, foster dialogues with health authorities and within the **multidisciplinary working group**.

- The **economic** and **social impact** of stroke should also be regularly assessed, including measures of indirect costs throughout the care process.

ROADMAP

10

STROKE NEEDS INNOVATION AND RESEARCH IN MANAGEMENT AND CARE.



- **Data management seeks innovation.** Enable digital transformation, **promote real time data monitoring**, explore advanced data mining tools and **innovate in data reuse**.

- **Models of strokecare** should be innovative: **incentivise and enable stroke professionals** to provide integrated, patient-centered care.

- **Communication and dissemination of knowledge** should include innovative strategies.

- **Social innovation** is needed **to improve support for patients** with acquired brain injury.

- **Research on long-term management** and patient-reported experience should be encouraged **to identify best practices and efficient models** of care **from a broad perspective**.