



Ente Ospedaliero Cantonale

Modello organizzativo tra ospedale acuto e clinica riabilitativa: esempio di collaborazione di successo in Canton Ticino

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Simposio REHA TICINO
Venerdì, 25 settembre 2020



Stroke Center Neurocentro (EOC)

- ✓ Care Unit with 12 beds dedicated to Stroke Patients
 - ✓ Within neurology Departement Neurocentro (NSI), Ospedale Civico Lugano
 - ✓ 6 semi-intensive monitored beds
 - ✓ Dedicated staff (specialized nurses, vascular neurologists, Rehab)
- ✓ Comprehensive Stroke Center 24/24 h – 365/365 availability:
 - Neurologist on site
 - Neuroradiology diagnostic & interventional
 - Neurosurgery, Vascular Surgery,
- ✓ >500 patients /year
- ✓ Acute phase ↔ specialized out-patient unit



Stroke Center Lugano: centralization of competences

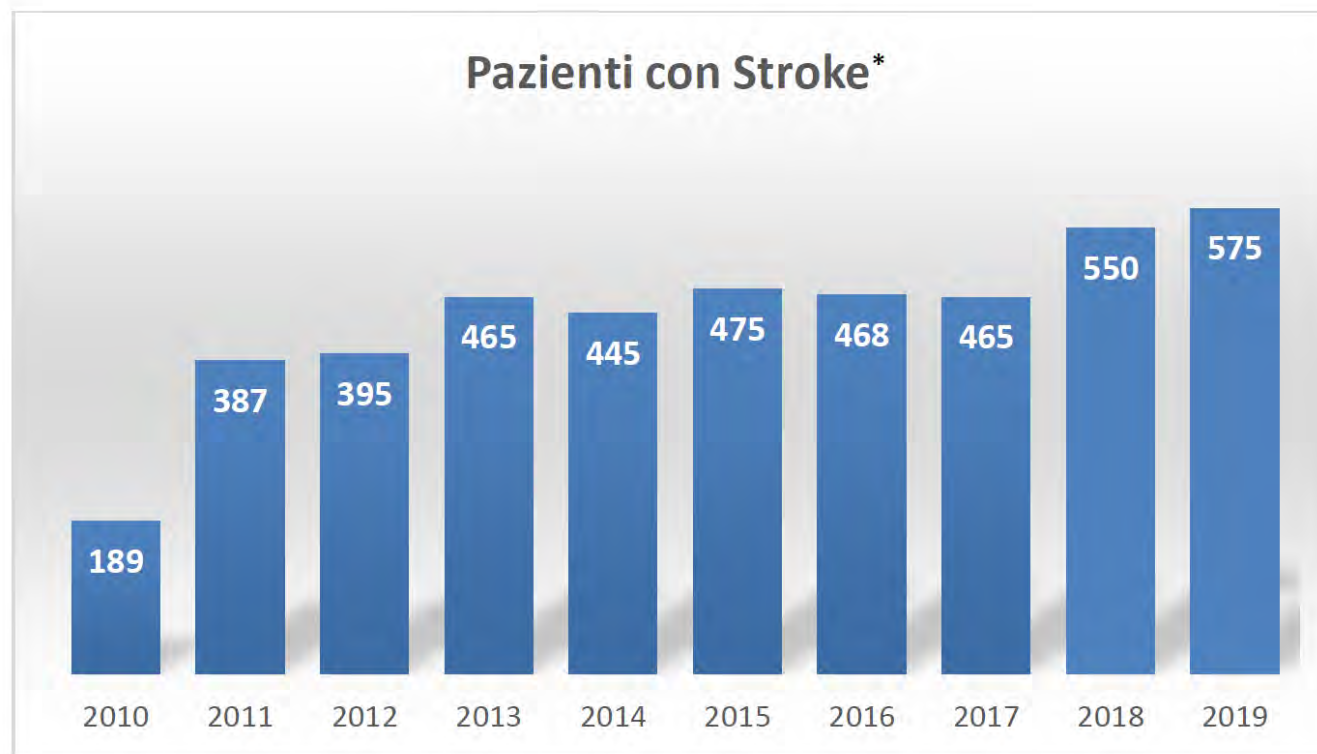


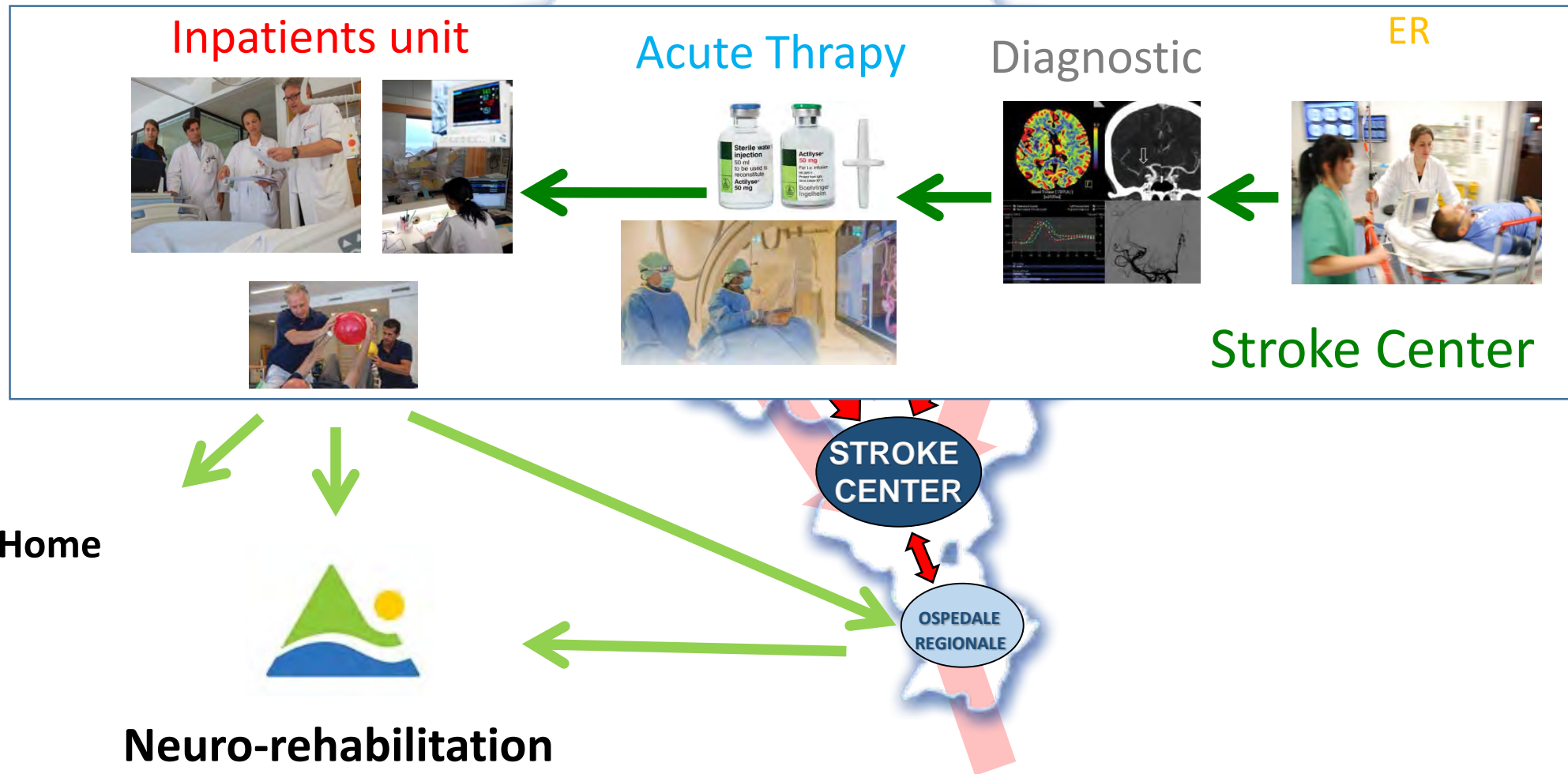
Figura 1. Pazienti ricoverati in Stroke Center EOC con problematica cerebrovascolare acuta

* Dati complessivi report EOC (da SSR) che includono i casi di Stroke or TIA mimic e Non-traumatic subarachnoid hemorrhage

Stroke Center: multidisciplinary work



Stroke Center: care network





THE EARLY REHABILITATION EVIDENCE

STROKE UNITS 30 years ago

Benefit of a stroke unit: a randomized controlled trial
B Indredavik, F Bakke, R Solberg, R Rokseth, LL Haaheim and I Holme

Stroke 1991, 22:1026-1031
doi: 10.1161/01.STR.22.8.1026

**Treatment in a Combined Acute and Rehabilitation Stroke Unit : Which Aspects
Are Most Important?**

B. Indredavik, F. Bakke, S. A. Slørdahl, R. Rokseth and L. L. Håheim

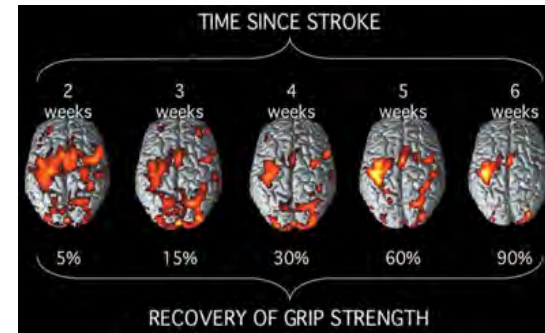
Stroke 1999, 30:917-923
doi: 10.1161/01.STR.30.5.917

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EARLY NEUROREHABILITATION IN NSI EOC-CRB mixed team from 2010 to 2020

- **Early** interdisciplinary rehabilitaiton in acute phase
- **Quick** pathway identification
- Correct **resource** allocation
- **Specialistic know** how development and sharing
- More linear pathways and more **clinical sharing** in setting change
- Patient and care giver **involvement** in linear pathway



2010

SU/N



SU/N/NCH



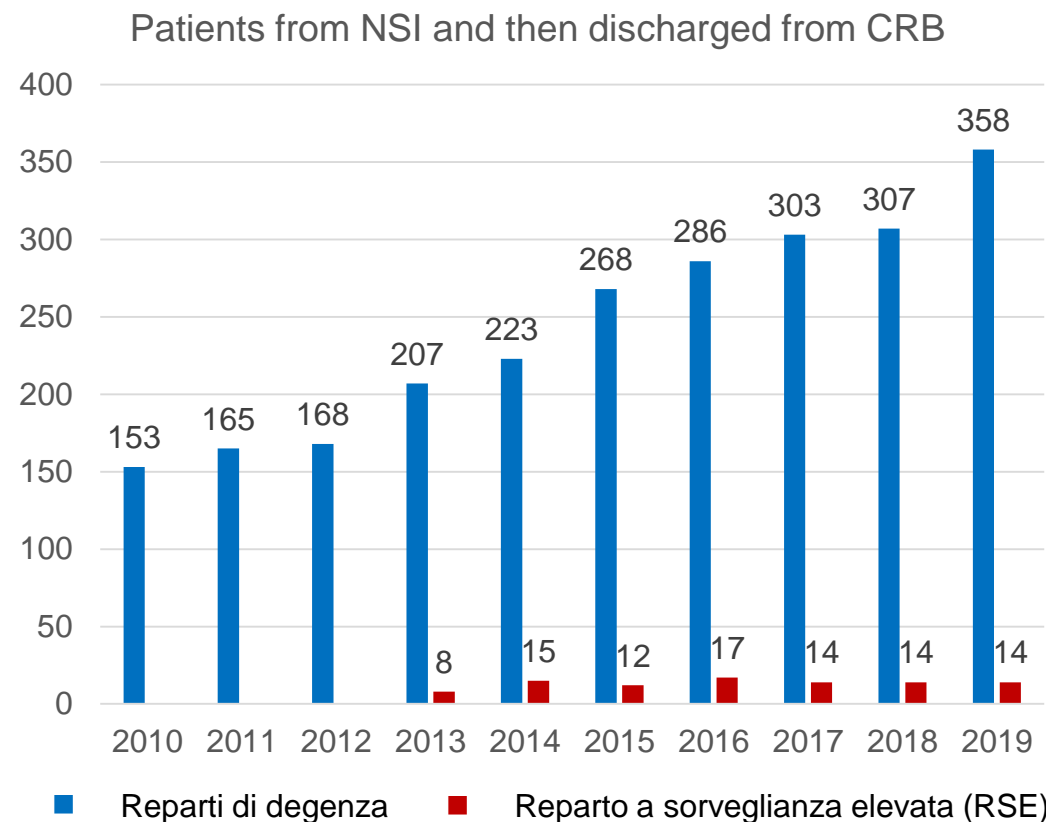
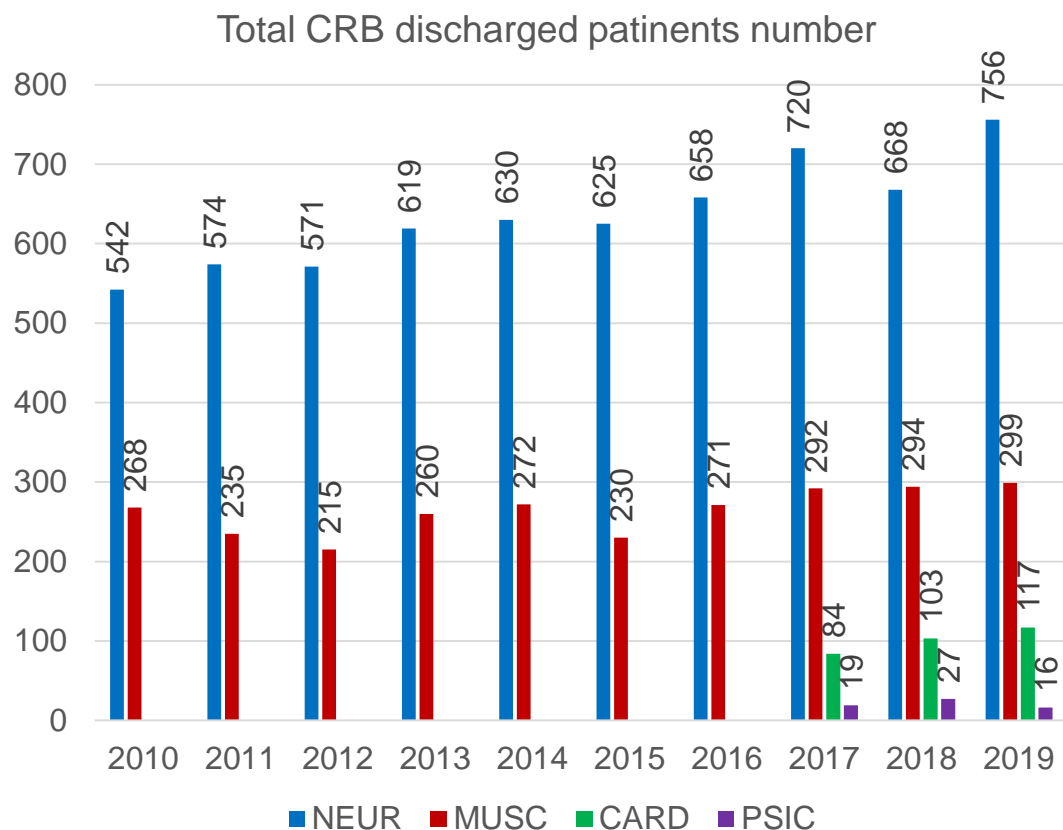
SU/N/NCH/CIM



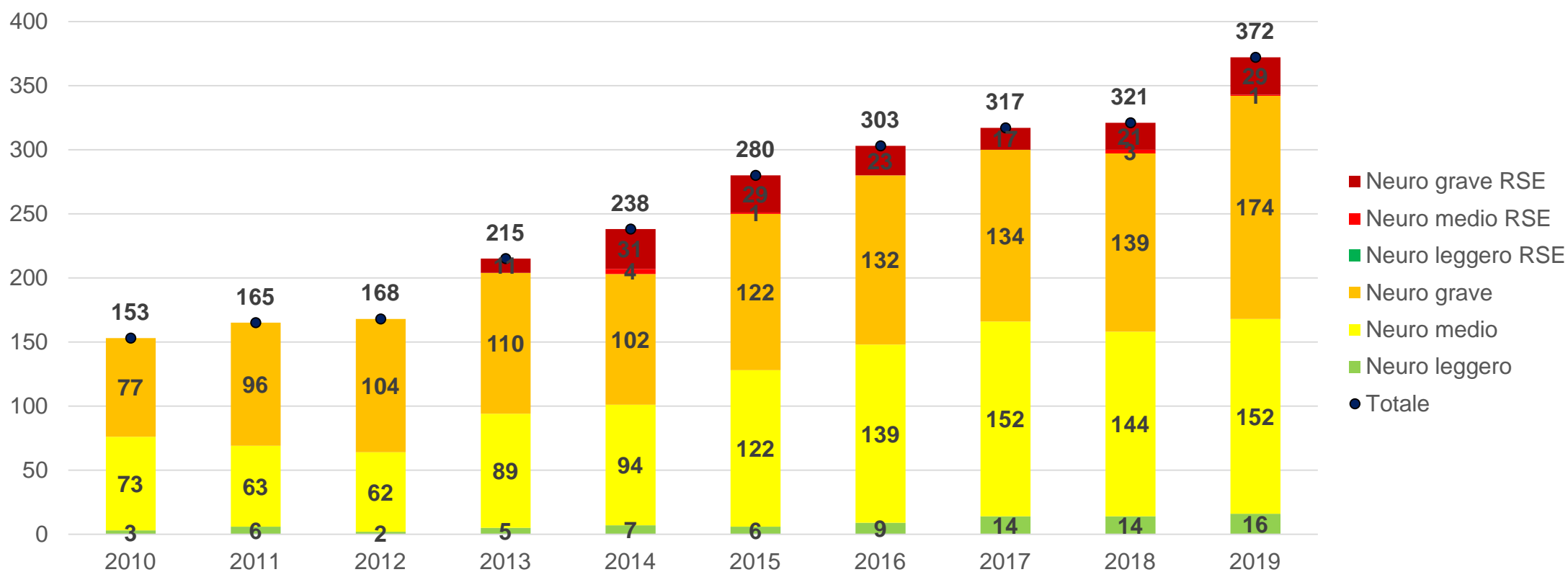
SU/N/NCH/CIM/CNSI/Amb-PD

2020

Number of patients discharged from CRB

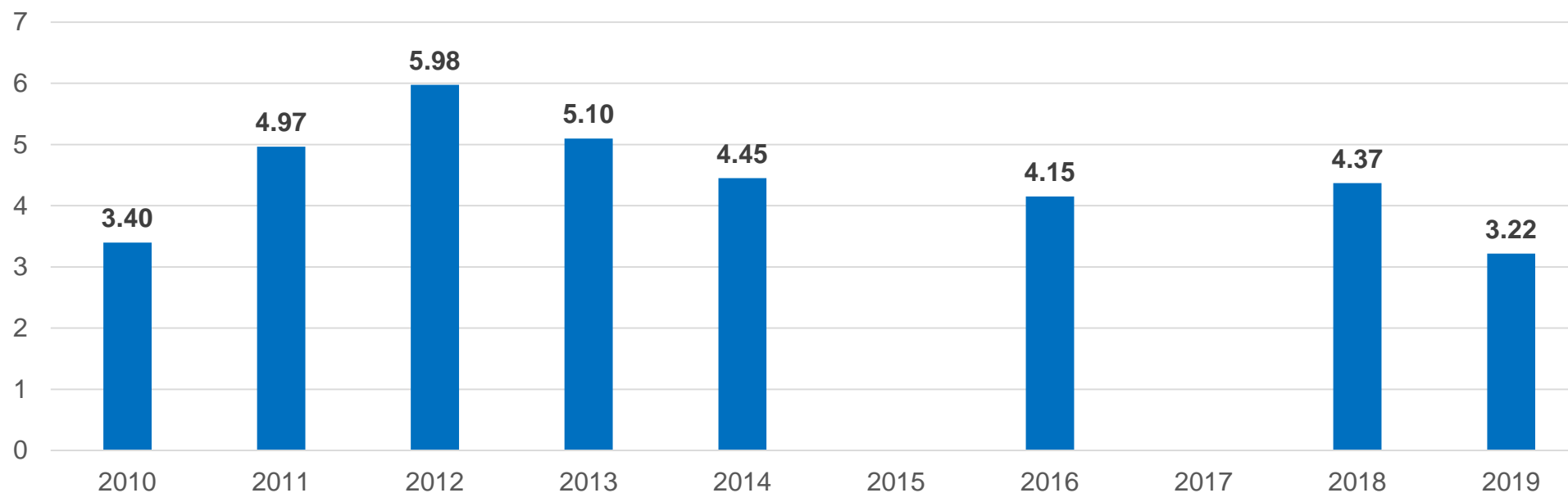


Patients from NSI - functional severity



Le classi di gravità si riferiscono all'attuale sistema tariffale

Patients from NSI: waiting time for CRB admission



Fonte: Servizio sociale EOC



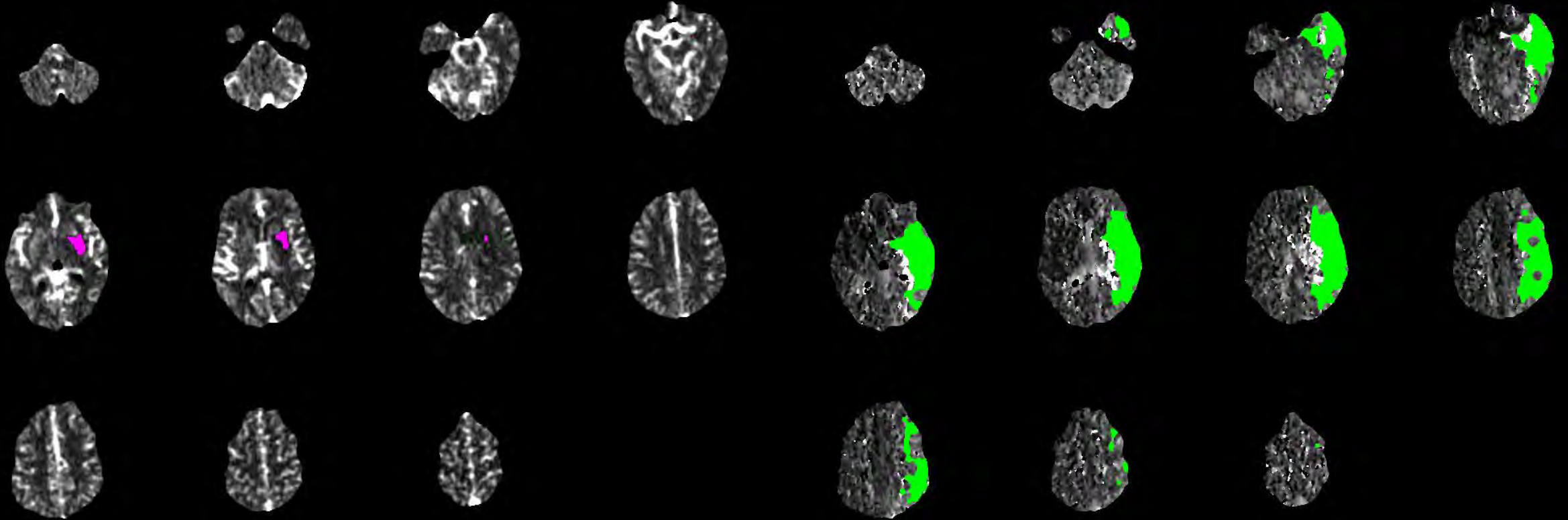
Patient 56 year

At 11:45 on the sofa at home he presents acutely:

- Inability to express himself
- Severe paralysis of the face, arm and leg

Wife quickly calls 144





CBF < 30% volume: 4 ml

Mismatch volume: 145 ml
Mismatch ratio: 37.2

Tmax > 6.0s volume: 149 ml

RAPID

For research purposes only.

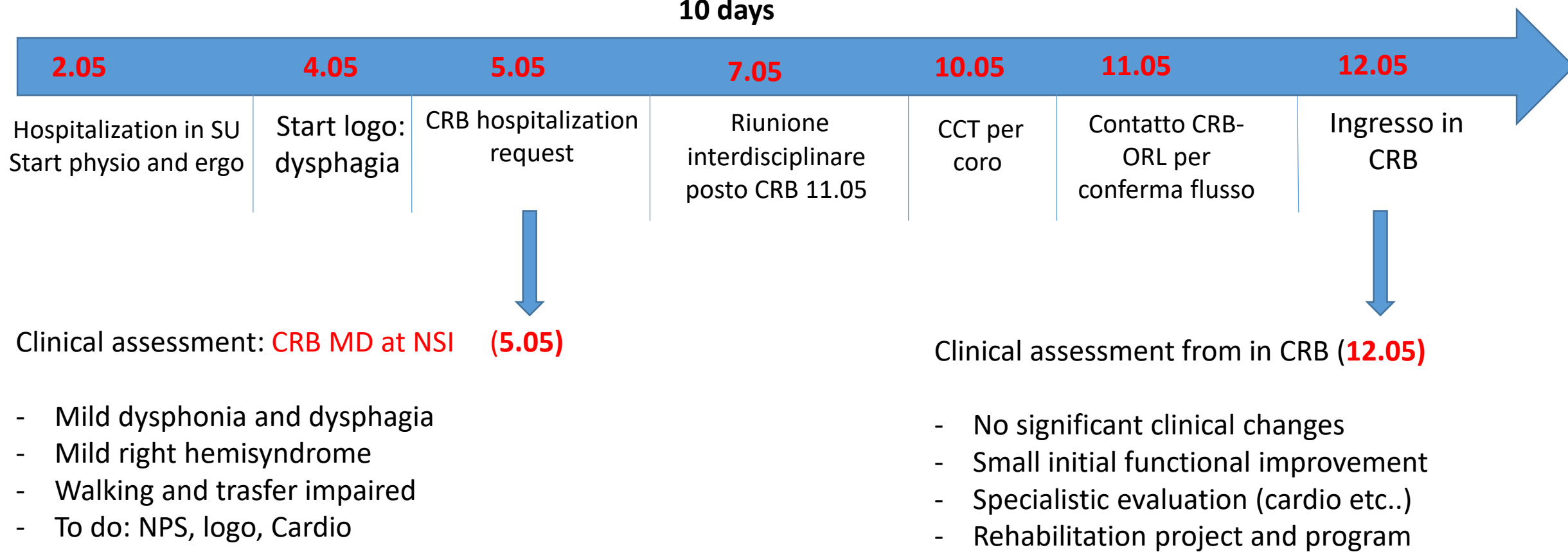


- Initial Stroke Severity 22 (NIHSS)
- Intravenous therapy + Endovascular therapy
- 90 minutes after symptoms with complete reperfusion
- NIHSS at 24 hours 6: paralysis has disappeared !
- Cause: severe heart disease, not previously known
- Early Neuro-Rehabilitatin programm



TIMELINE

10 days





REHABILITATION PROGRAM IN CRB

Hip Stab, balance, endurance



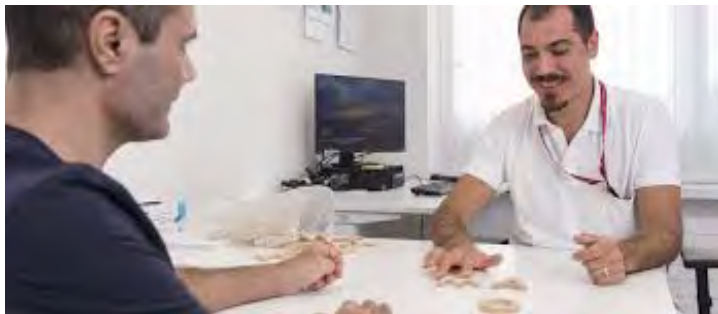
Shoulder Stab, bimanual, BADL



No Neurovisive



Diet



No speech deficit nor dysphagia



NPS: attention, impulse inhibition, Speed, verbal memory, psychological support, Vienna test



Cardio: aerobic training (continuous training with constant effort 25Wx15', progressive improvement, more endurance at 2-4 mets)

**REHABILITATION PROJECT
WITHDRAWAL IN 6-8 WEEKS**



WITHDRAWAL 04.07.2020 (7 WEEKS)

- No motor limbs or axial deficit
- No coordination deficit
- Normal walking
- More effort endurance
- Loss of weight (-7Kg)
- No NPS deficit (minimal verbal memory)
- Autonomus in IADL and abilitation do drive

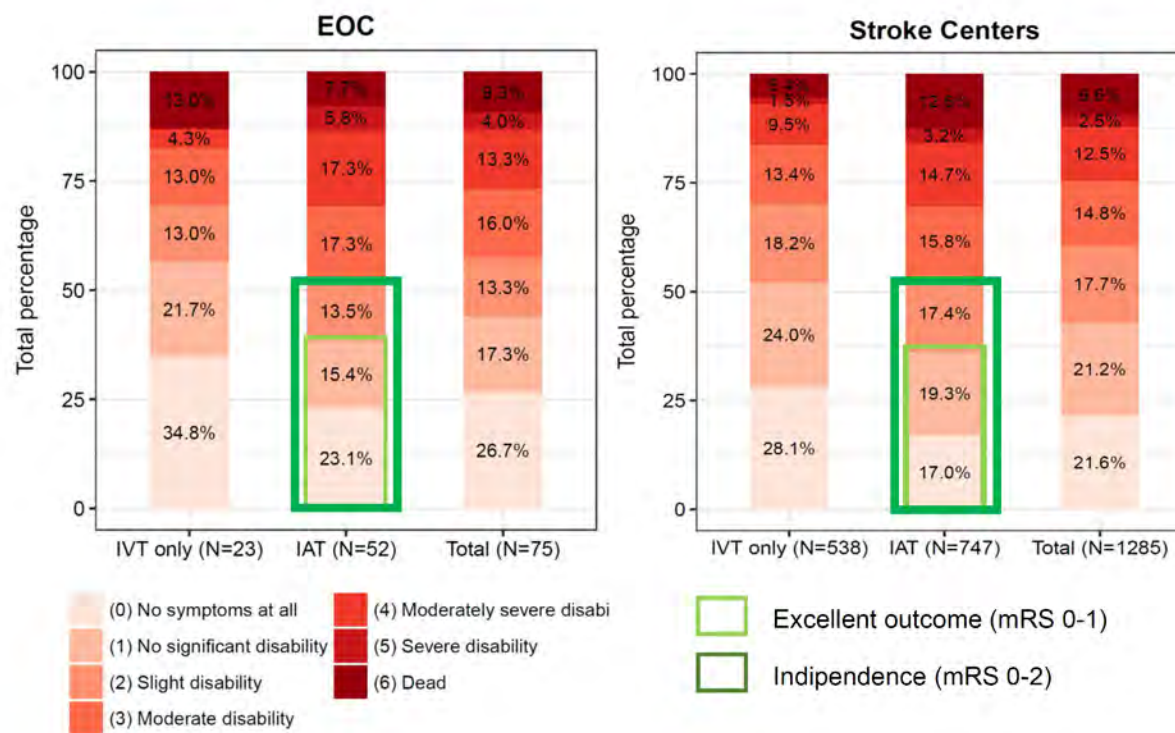


MI AVETE SOSTENUTO AFFINCHÉ POTESSI
TORNARE ALLA MIA VITA FUORI DI QUI...
VI SALUTO, IO ESCO E TORNO DALLA MIA
FAMIGLIA...

Evoluzione clinica dei pazienti a 3 mesi dopo terapie di ri-perfusione



52%: indipendenti
38.5%: senza sintomi





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Thank you

