

# The SOMADEM unit

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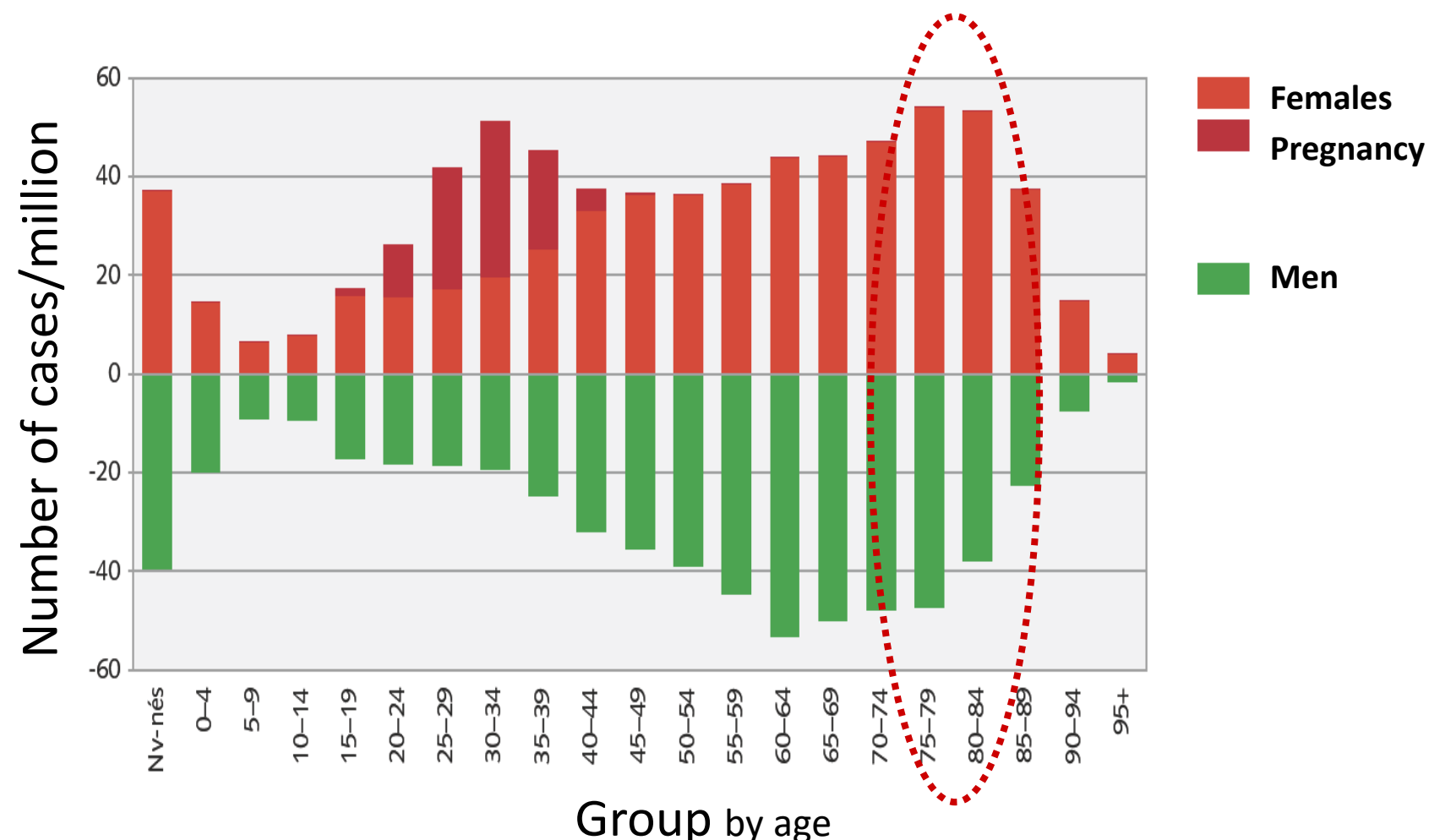
**SOMADEM**  

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**SOM**atique **Aigu** & **DEM**ence



# Number of hospitalizations/age in Switzerland



# Background

→ Rate of acute hospitalization of Alzheimer's patients is high (30% per year);

Aguero-Torres et al., 1998

→ Older people → high risk of delirium;

Tropea et al., 2008

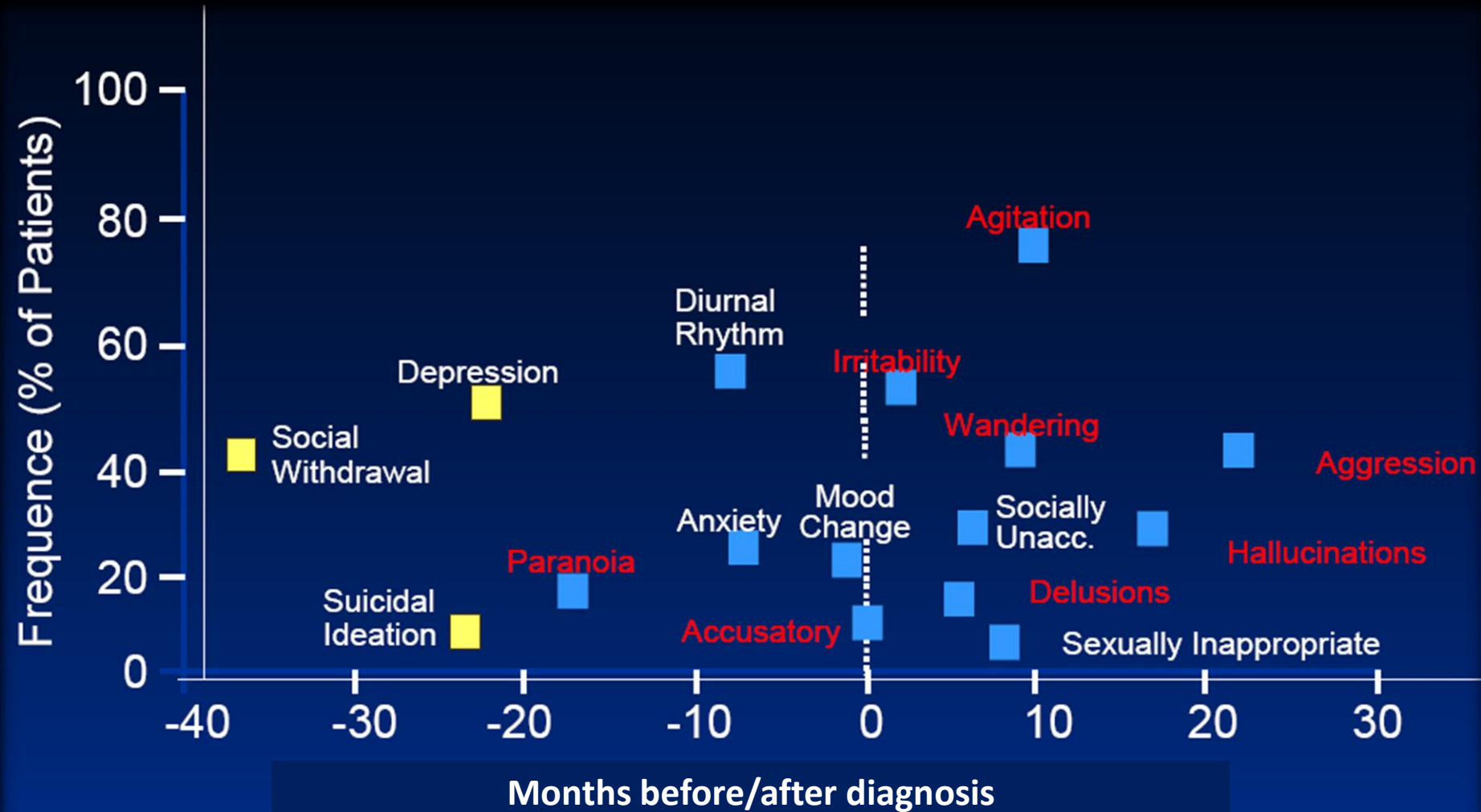
→ Dementia increases the risk of delirium (more than 50% superimposed);

Fick et al., 2002

→ Delirium worsens the prognosis of dementia and accelerates cognitive impairment;

Fick et al., 2002

# Prevalence of behavioral and psychological symptoms of dementia (BPSD) and progression of the disease



## Major issue

- ❑ Patients with behavioral and psychological symptoms of dementia (BPSD) due to a concomitant acute somatic disease are at risk of not being adequately treated in respect to all their problems either in a somatic or in a psychiatric setting.

## Consequences

- ❑ Frequent and often repetitive transfers between institutions;
- ❑ The need for models of care for patients with dementia hospitalized for somatic disease concomitant with challenging BPSD has led to the development of **SOMADEM**.



# ***Target and Outcomes***

- Improvement in quality of care resulting in better outcomes

## ***Important issues***

- The safety for wandering patients
- Reduction of psychological stress and workload for the staff
- Better integration of proxies in the care process

# SOMADEM

## SOMatique Aigu & DEMence

In 2000, a program of care led to the creation of a unit for elderly patients with acute somatic disorders (SOMA) with dementia (DEM) and BPSD, called "SOMADEM";



# SOMADEM

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## SOMatique Aigu & DEMence

- 18-bed acute unit in a 300-bed Geriatric Hospital (with acute and rehabilitation programs);
- Major behavioral disorders are detected (according to the Pittsburgh scale):
  - Agitation
  - Shouting
  - Disrupted behavior during the night
  - Opposition to care
  - Verbal and physical aggression
  - Wandering
  - Disinhibition
- The patient with at least one of these disorders in addition to an acute somatic problem is referred to the SOMADEM unit.

→ **Delirium Superimposed on Dementia**



# Cognitive status - behaviour

## Pittsburgh Agitation Scale – Hospital setting

- Measures 4 dimensions of agitated behavior:  
Rated from 0-4 – 0 represents normal behavior, 4 represents extreme example of agitated behavior.
- Takes 1 minute or less to complete per patient.
- Completed by nurses.
- Assess for efficacy of interventions during hospitalization.

- **Aberrant Vocalization:**

- Crying, shouting, inappropriate communication.

- **Motor Agitation:**

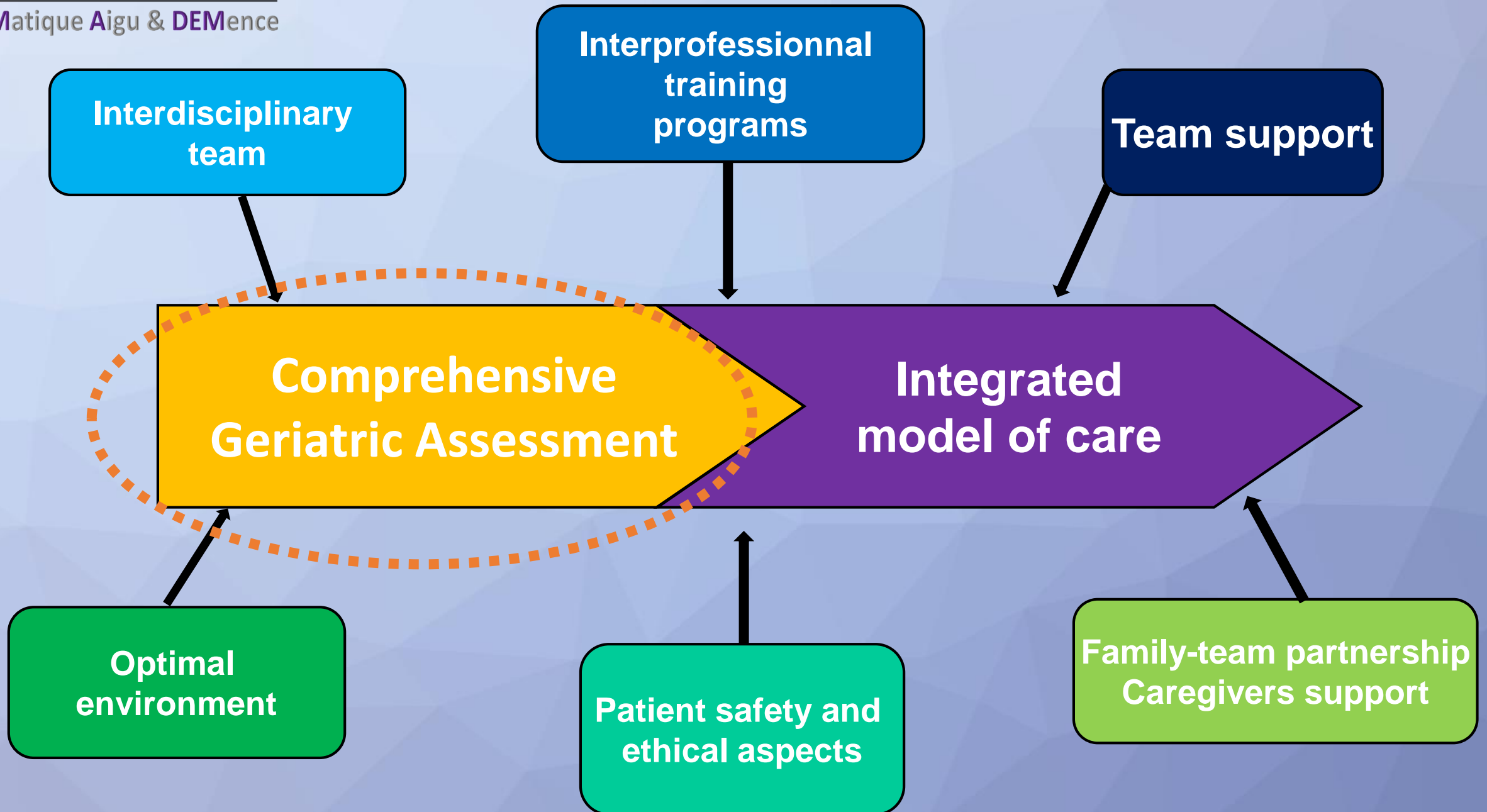
- Pacing, rate of movement, exit seeking.

- **Aggression:**

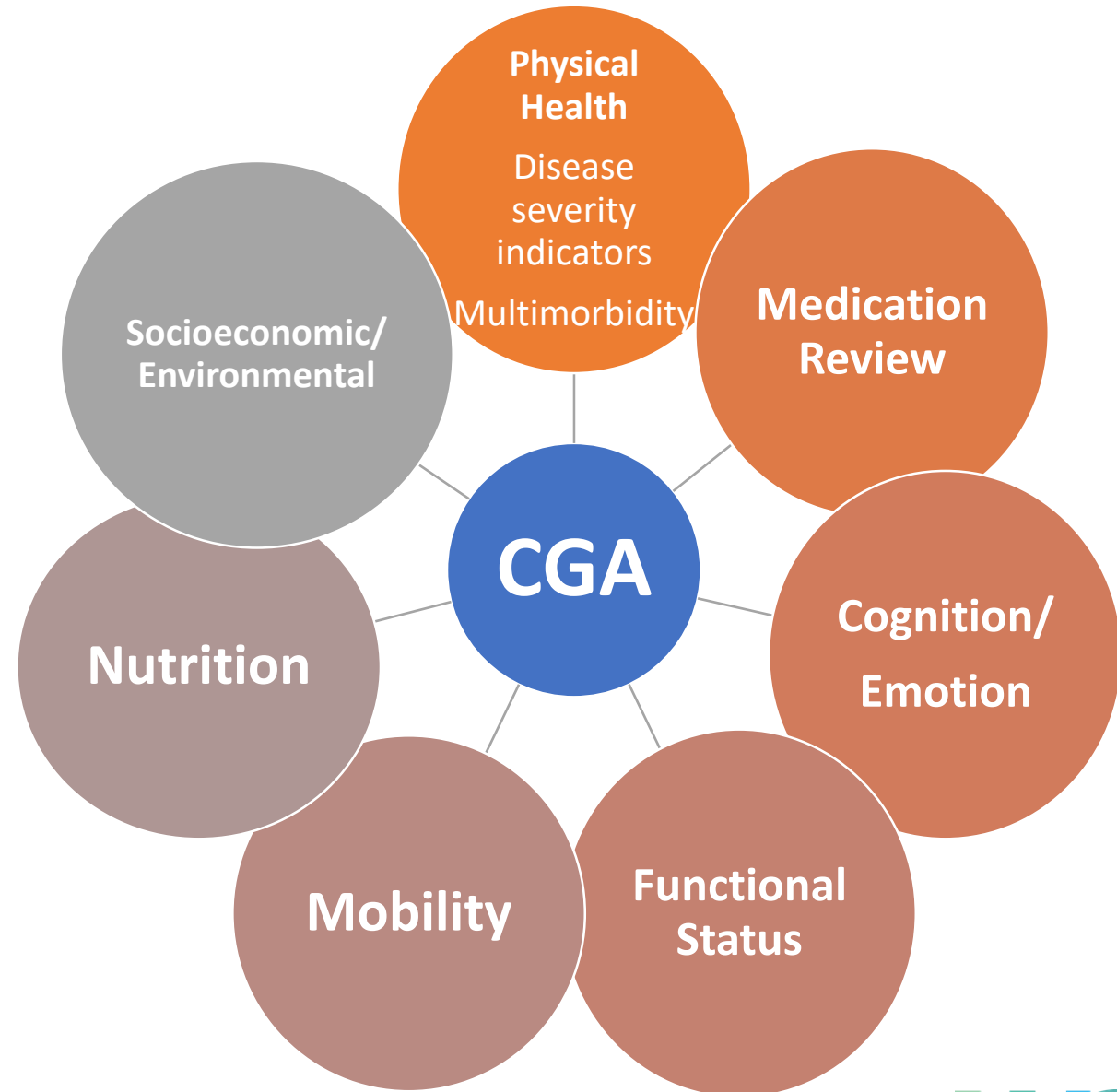
- Threats, physical violence.

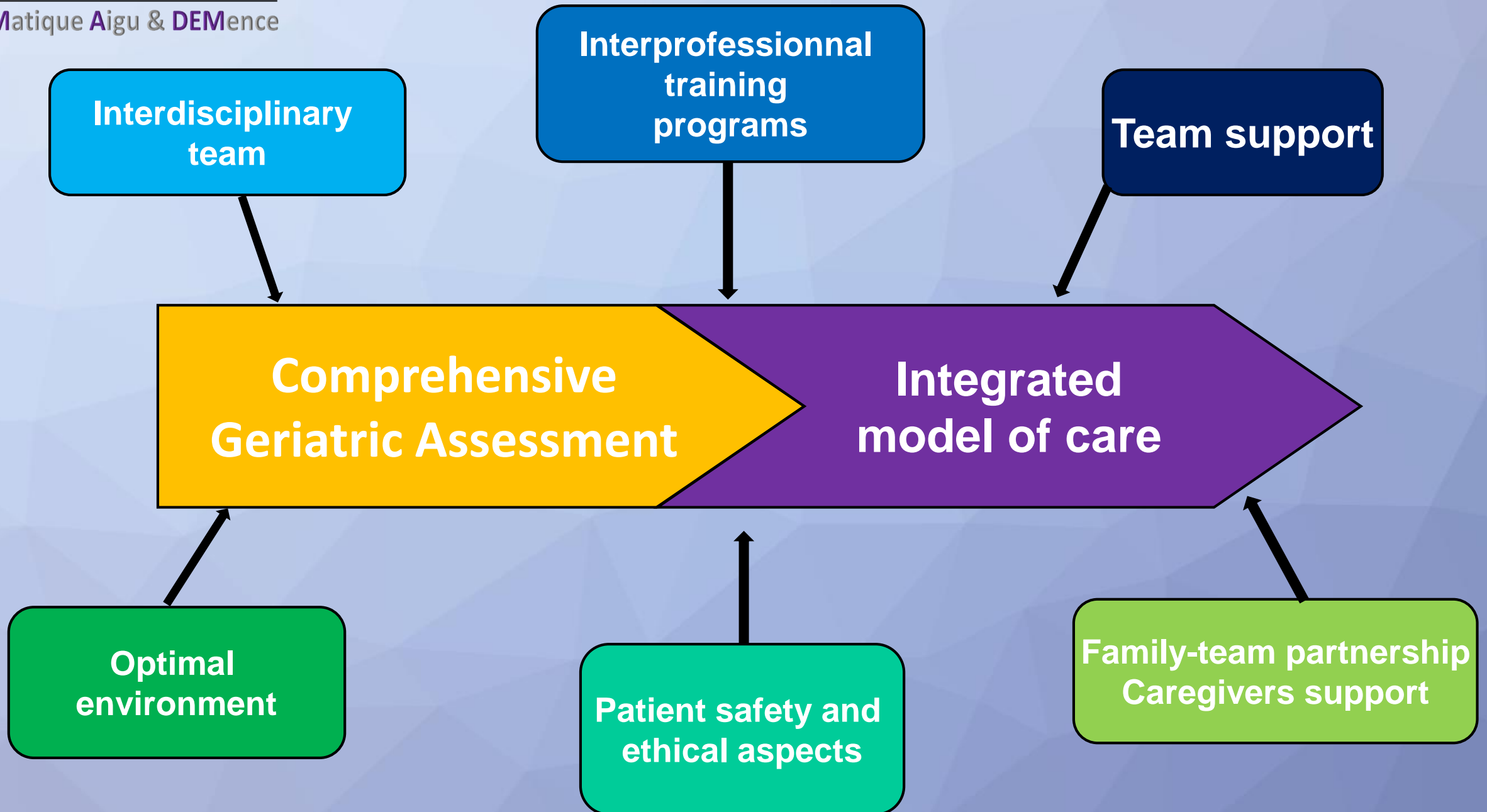
- **Resistance to Care:**

- Procrastination, refusal, striking out during care.



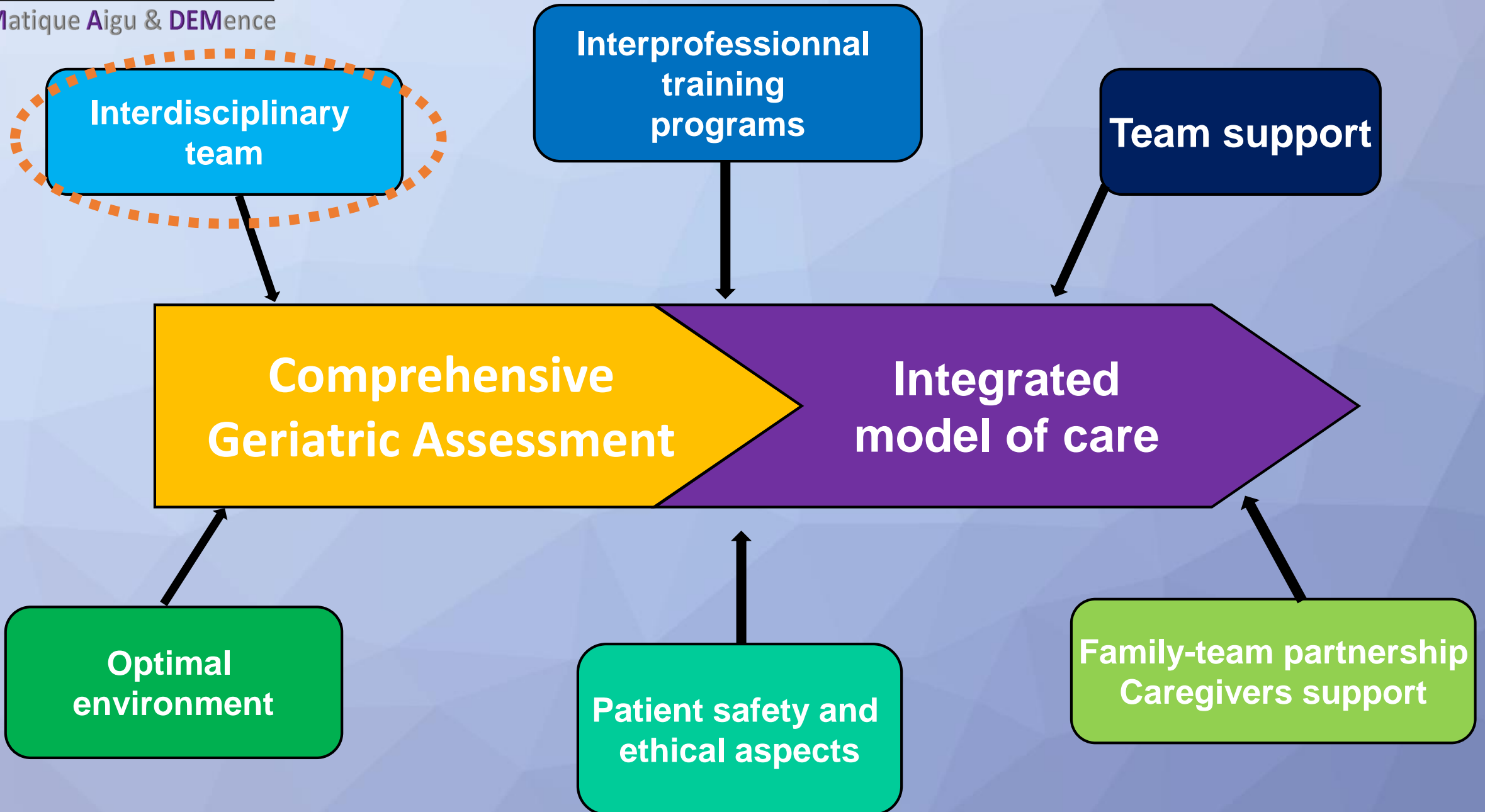
*“The multidimensional and multidisciplinary tool of choice to determine the **clinical profile**, the **pathologic risk** and the **residual skills** as well as the short- and long-term **prognosis** to facilitate the clinical decision making on the personalized care plan of older persons.”*



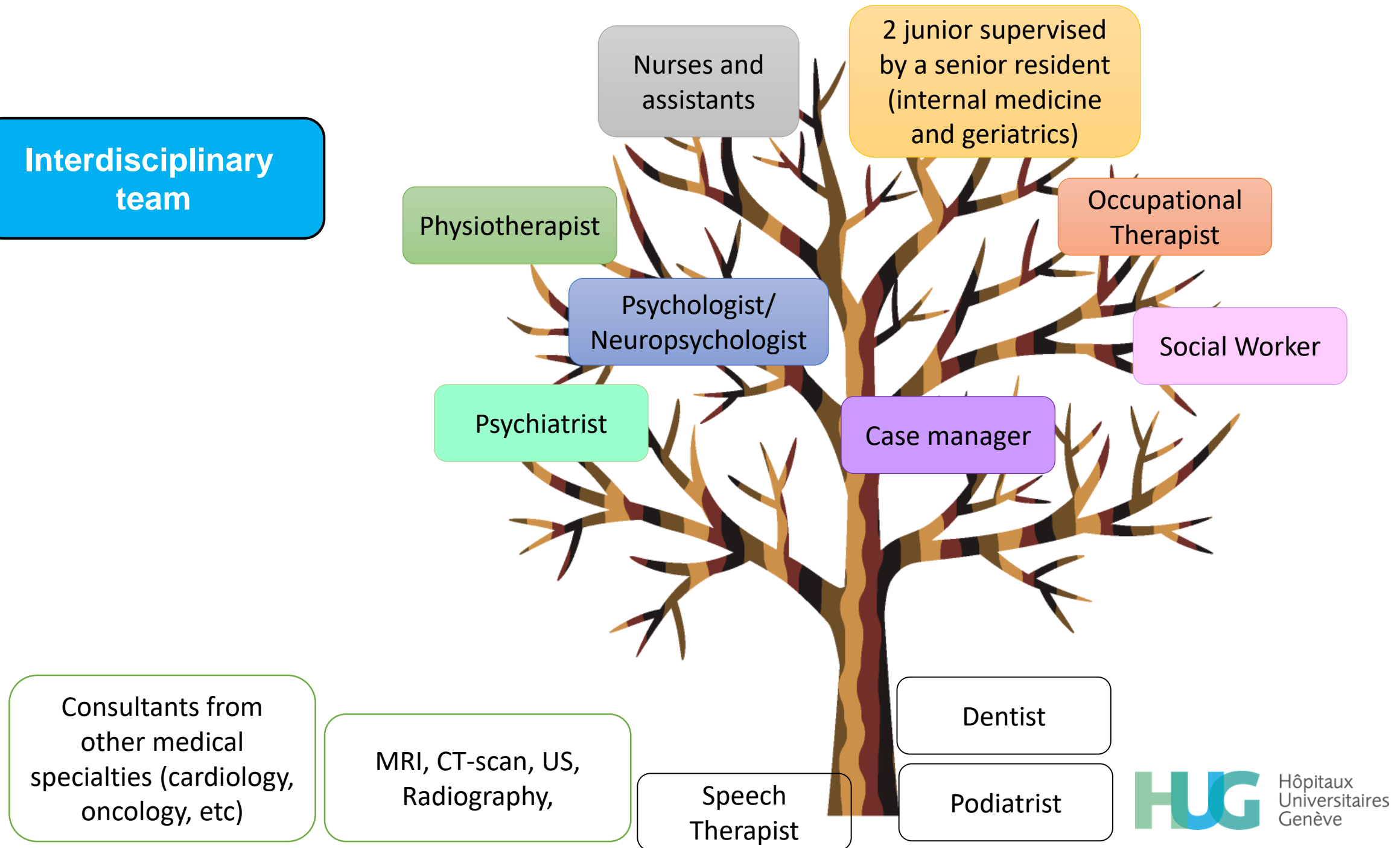


- ✓ Secured windows, to avoid defenestration of confused patients;
- ✓ Controlled water temperature in the faucets so that patients do not burn with too hot water;
- ✓ Quo Vadis: a radio system, composed of a wristwatch - controlled wandering;
- ✓ Circular path that promotes walking in a contained environment;
- ✓ One patient per room (only 2 rooms with 2 beds);
- ✓ Noise and light control.





## Interdisciplinary team



## Interdisciplinary team



## Interprofessional training programs



## Team support

- ✓ 3-day training program/year;
- ✓ 1 hour/ week – team support, management of challenging behaviours.





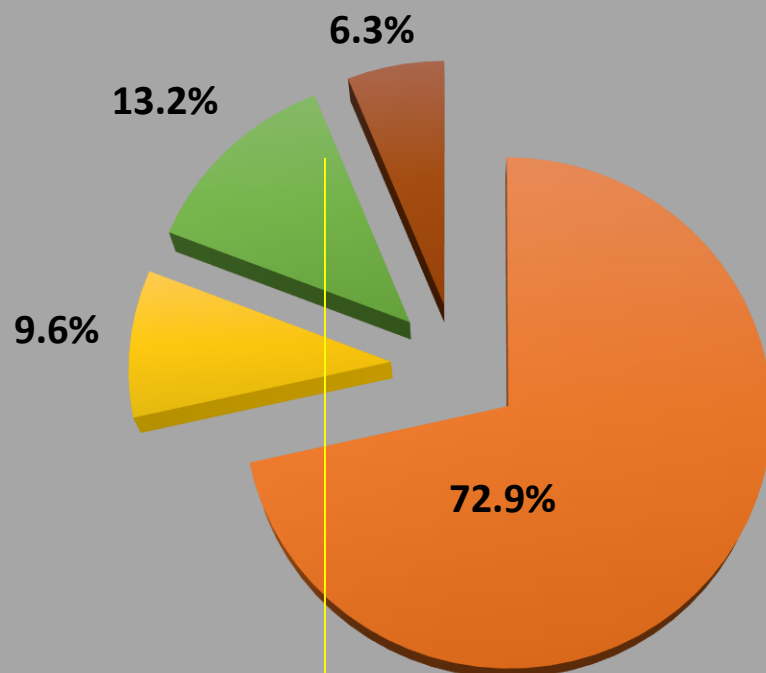
# Characteristics of the Population at admission

	Geriatric acute units	SOMADEM	p
<b>Number of admissions</b>	<b>806</b>	<b>271</b>	
<b>Age</b>	<b>84.3 ± 6.9</b>	<b>83.6 ± 6.9</b>	0.166
% <b>females</b> (n)	<b>60.4</b> (487)	<b>55.4</b> (150)	0.142
% <b>Coming from</b> (n)			0.169
Emergency room	<b>66.3</b> (533)	<b>66.4</b> (180)	
General hospital	<b>17.4</b> (140)	<b>19.6</b> (53)	
Own home alone	<b>8.6</b> (69)	<b>5.5</b> (15)	
Own home partner	<b>6.2</b> (50)	<b>5.9</b> (16)	
Nursing home	<b>1.0</b> (6)	<b>0.4</b> (1)	
Psychogeriatrics	<b>0.4</b> (3)	<b>1.9</b> (5)	
<b>MNA</b> (15 items)	<b>8.2 ± 2.9</b>	<b>7.9 ± 2.53</b>	0.353

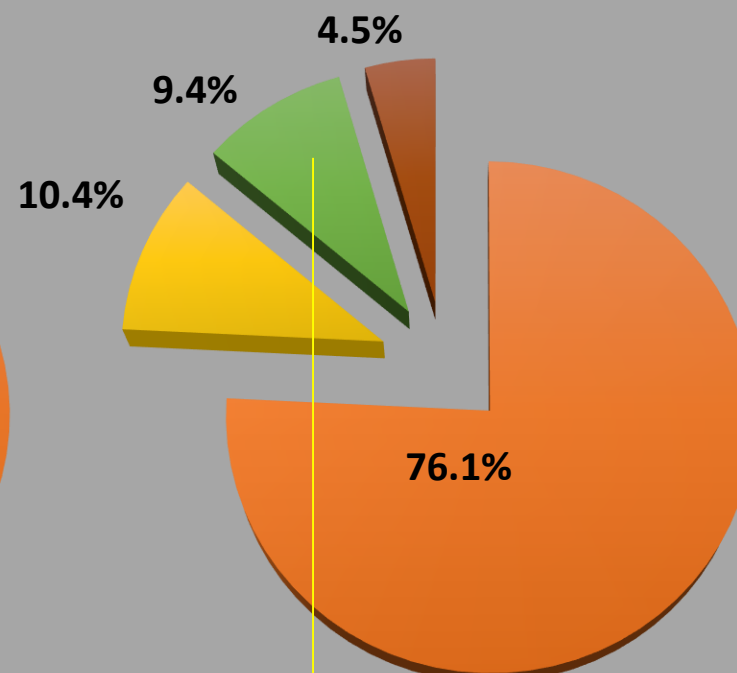
MNA = Mini Nutritional Assessment

# Destination after discharge

## SOMADEM



## Geriatric acute units



p = 0.028

- Usual way of living
- Nursing home/long term care

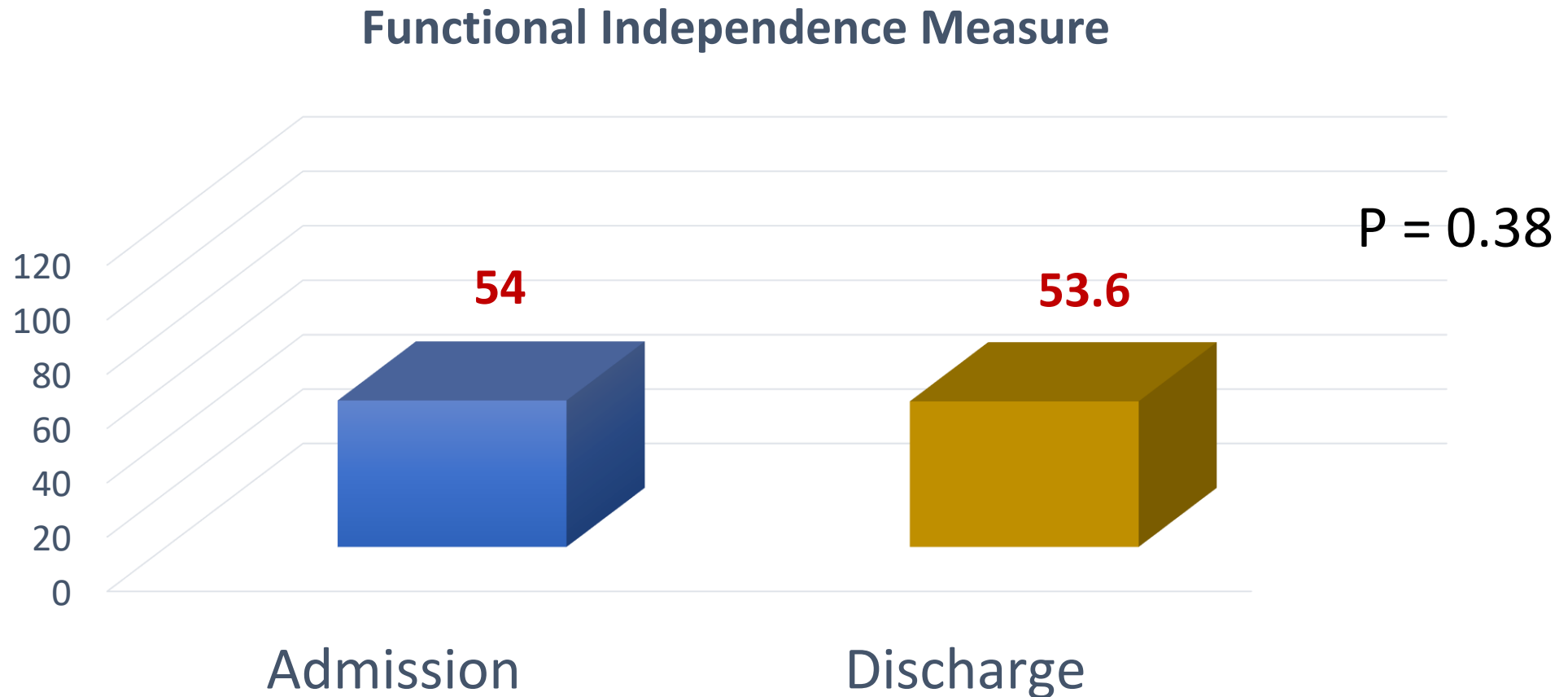
- General hospital
- Psychogeriatrics

# Quality Indicators

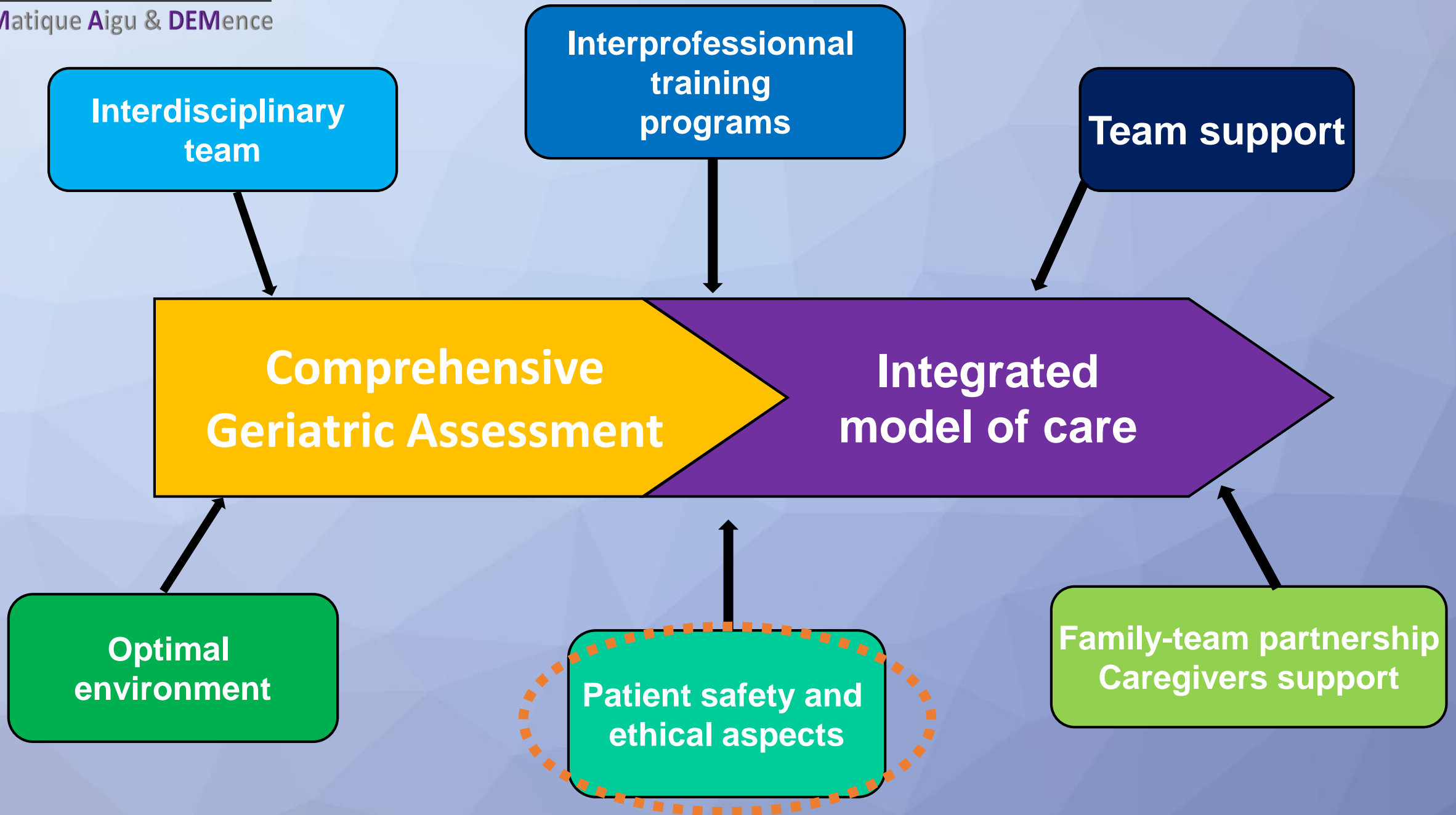
	Geriatric acute units	SOMADEM	P
% Falls (n)	19.1 (154)	18.8 (51)	0.498
% Intra-hospital mortality (n)	11.2 (90)	13.3 (150)	0.348
% Discharge to (n)			0.169
Usual way of living	76.1 (613)	72.7 (197)	0.326
General hospital	10.4 (84)	9.6 (26)	0.697
Nursing home/long terme care	9.4 (76)	13.2 (31)	0.028
Psychogeriatrics	4.5 (36)	6.3 (17)	0.218
% Mortality 3 months after discharge (n)	5.2 (24)	13.7 (22)	<0.001

LOS 2019 = 17 days

# Functional decline acquired during hospitalization

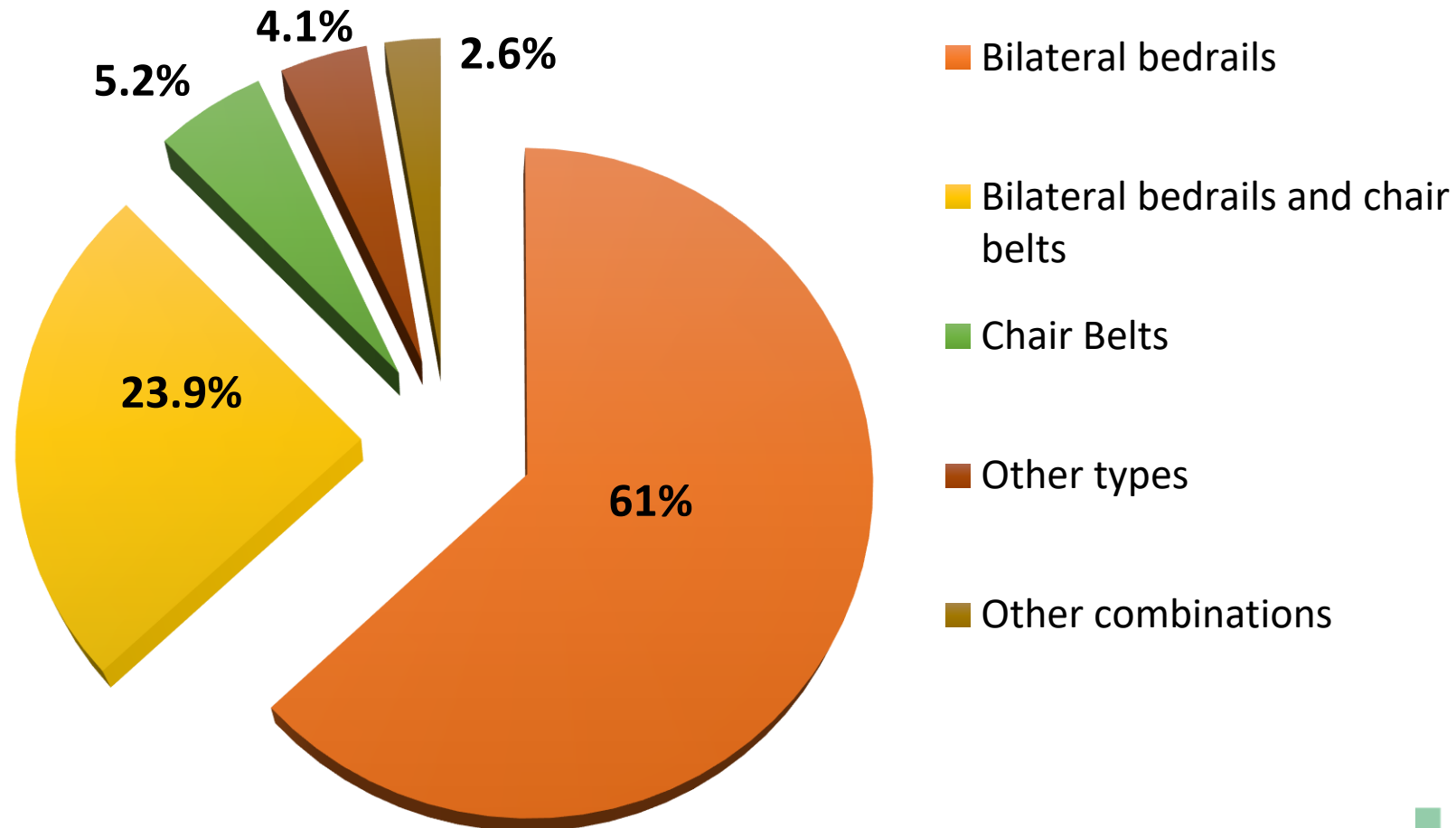


*Functional Independance Measure (0-126) – higher scores indicate better functional status.*

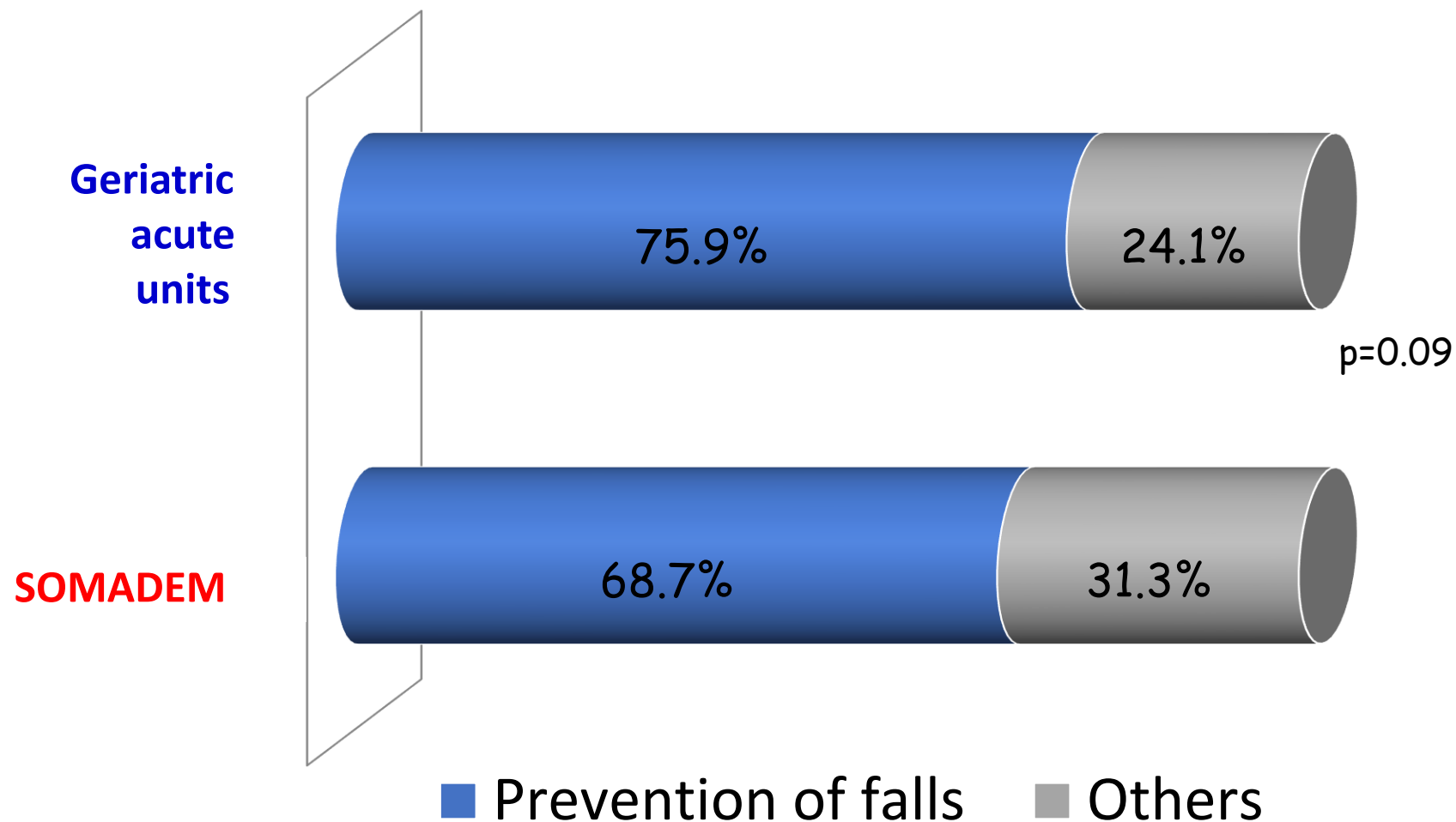


# Prescription of physical restraints

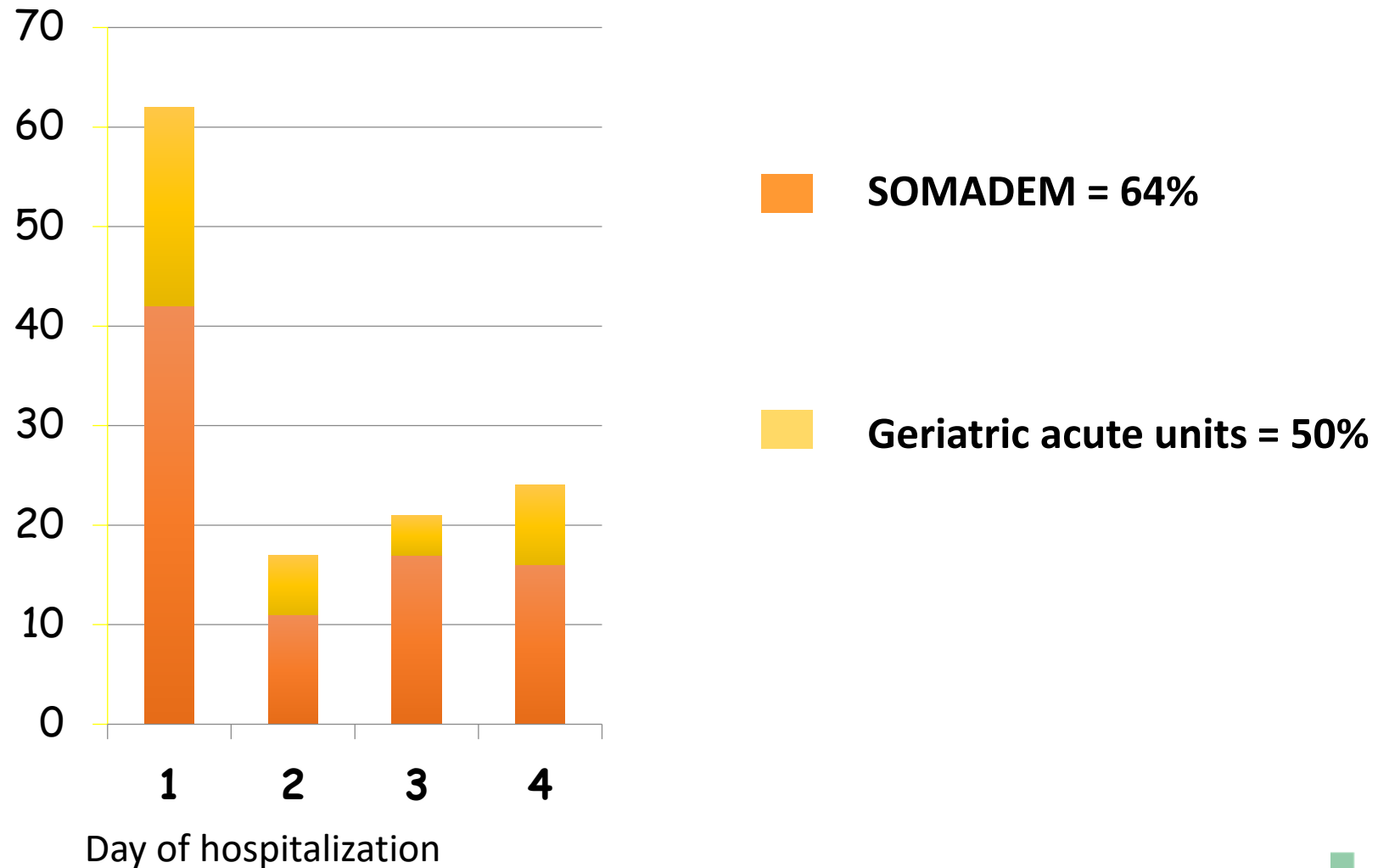
→ *28% of patients admitted to SOMADEM will have a PR prescription during the hospital stay.*



# Justification for use of physical restraints



# Period of hospitalization when physical restraints were introduced







# Physical restraints

Example of interdisciplinary work

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- 51% of prescriptions  $\Rightarrow$  STOP after the discussion at the interdisciplinary huddle;
- All patients with PR  $\Rightarrow$  at least one alternative strategy tried;
- 16% of patients under PR  $\Rightarrow$  family participation to decrease and /or STOP use.

# Conclusions

- These acute care units for Alzheimer patient represent an innovative advance in the care of acutely ill hospitalized old persons with dementia;
- These units are rare;
- Lack of research specifically looking at acute unit for Alzheimer patient;
- Need to evaluate the effectiveness and efficiency.





# Thank you!

Prof Gabriel Gold, Prof Dina Zekry, Prof François Herrmann, Mme Pascale Layat-Jacquier , Mme Marie-Louise Montandon and [all members of the SOMADEM team.](#)

