

## UNIVERSITÀ DEGLI STUDI DI PAVIA FACOLTÀ DI MEDICINA E CHIRURGIA POSTGRADUATE SCHOOL OF EMERGENCY MEDICINE

# X CONGRESSO NAZIONALE SIMEU Il volto della Medicina di Emergenza-Urgenza: identità professionale e servizio pubblico



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# UNIVERSITÀ DEGLI STUDI DI PAVIA FACOLTÀ DI MEDICINA E CHIRURGIA POSTGRADUATE SCHOOL OF EMERGENCY MEDICINE

# La strategia paziente-centrica nel management dell'anziano in DEU

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# CENTRALITA' DEL PAZIENTE ANZIANO IN EMERGENCY DEPARTMENT

- CENTRALITA'
- PAZIENTE
- ANZIANO
- EMERGENZA ED URGENZA

# CENTRALITA' DEL PAZIENTE ANZIANO IN EMERGENCY DEPARTMENT QUATTRO ITEM DEL benessere organizzativo:

- il paziente,
- i colleghi,
- la professione e
- l'organizzazione sanitaria

# CENTRALITA' DEL PAZIENTE ANZIANO IN EMERGENCY DEPARTMENT

- INFORMAZIONE
- COMUNICAZIONE
- COMPARTECIPAZIONE, EMPOWERMENT
- COINVOLGIMENTO, COMPLIANCE
- ORGANIZZAZIONE

 The delivery of acute care in a busy environment to older patients presents its own unique challenge.

• IMPRESA DIFFICILE!

## STATIC EVALUATION

Implies that the speaker's feelings are UNICHANGING

Key words or phrases: Is I am I / he / she will  Older patients in the emergency department (ED) are a vulnerable population who are at a higher risk of functional decline and hospital reattendance subsequent to an ED visit, and have a high mortality rate in the months following an ED attendance.

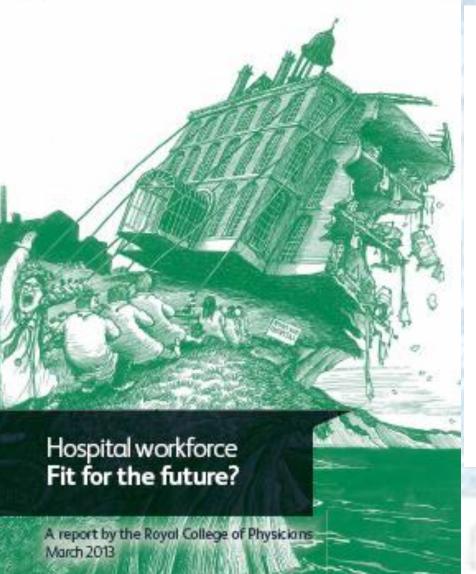
# WHAT IS HAPPENING NOW IN THE WORLD?

# WHICH IS THE CURRENT SITUATION?

Sebbene già nel 1992 la Geriatric Emergency Task Force (Sauders AB. Care of the elderly in ED: conclusion and recomandations. Annals of Emergency Medicine) raccomandava attenzione ai problemi sociali, psicologici e funzionali della popolazione anziana da parte dei professionisti dei reparti di emergenza, nonché l'implementazione di tali principi nella routine pratica, la maggior parte dei report degli staff di PS dichiarano di aver ricevuto una preparazione inadeguata in ambito geriatrico.







'We are going to need more consultants with skills in acute, general and geriatric medicine to be able to cope with the ageing population.'

'We are going to need more consultants with skills in acute, general and geriatric medicine to be able to cope with the ageing population.'

- Over the past 10 years hospital admissions have risen by over 35% while hospital bed numbers have fallen by 10%.
- Hospitals have so far only managed to cope with these dramatic changes by reducing average length of stay but can no longer cope with the increasing demands posed by the number of hospital patients.

- The number of <u>frail elderly people</u> in hospital is increasing year on year and this has been identified as the key challenge
- The proportion of frail elderly people has risen to 30% of all admissions in the past year.
- The average length of stay is LESS THAN 4
   DAYS FOR PEOPLE UNDER 60, and over 10
   days for those over the age of 75.

- <u>'ACUTE MEDICINE'</u> is a new specialty that concerns the care of general medical patients in the first 24–48 hours in hospital. <u>GERIATRIC EMERGENCY MEDICINE</u>
- Acute medicine is distinct from the broader field of emergency medicine, which is concerned with the management of all people attending the emergency department, not just those with internal medicine diagnoses

Commission on Improving Dignity in Care for Older People

Commission to improve dignity in care provided to older patients in hospitals and care homes.

QUESTIONS AND ANSWERS

• 1. What in your opinion are the main factors that contribute to the failure of hospitals and/or care homes to meet the immediate health, nutrition, hydration and hygiene needs of older people?

Do you have any evidence to support these opinions?

 The main factors contributing to the failure of hospitals and/or care homes to meet the needs of older people has been the systemic failure to provide healthcare staff with appropriate skills and training and in sufficient numbers to meet the increasing complexity of frail older people in hospitals and in care homes. There has also been an assumption that there is no need to teach staff about what compassion, empathy, dignity and humanity in routine care means to the patient, resident of a care home and their next of kin.

- Two thirds of people in care homes have a form of dementia and up to one quarter of hospital beds are occupied by people with dementia.
- People with dementia stay in hospital up to twice as long as other people who go in for the same procedures.
- The failure to recognize their needs has contributed to the poor care that they often receive

- Problems often arise from a breakdown in communication between medical and nursing staff.
- In acute hospitals, doctors are often no longer accompanied by nurses on ward rounds. This separation, and sometimes segregation, leads to either no sharing or inappropriate sharing of information (for example, discussing patients in front of others in the middle of a ward).

# COSA SUCCEDE AD UN ANZIANO IN PRONTO SOCCORSO?

#### **PROBLEMS:**

- Atypical clinical presentation of illness,
- high prevalence of cognitive disorders,
- presence of multiple comorbidities
- complicate evaluation and management of older patients.
- Increased frailty, delayed diagnosis, and greater illness severity contribute to a
- higher risk of adverse outcomes.

## NON CURARE LE MALATTIE ACUTE DELL'ANZIANO

## MA CURARE UN ANZIANO CON MALATTIE ACUTE

# CURARE UN ANZIANO CON MALATTIE ACUTE SU MALATTIE CRONICHE

GERIATRIC EMERGENCY MEDICINE

- Principi teorici dell'approccio geriatrico in PS:
- Presentazione complessa del paziente
- Presentazione atipica di malattie comuni
- Effetto confondente della comorbilità
- Polifarmacoterapia
- Deficit cognitivi
- Differenze nei valori di normalità dei test ematochimici

- Principi teorici dell'approccio geriatrico in PS:
- Riduzione della riserva funzionale
- Essenzialità della conoscenza dello stato funzionale di base
- Inadeguato supporto sociale
- Accesso in PS come un'opportunità per valutare importanti condizioni di salute e di vita del paziente

Although purely "social" ED admissions certainly occur (impossibility of the family), emergency physicians must always consider that subacute or acute illness can present as functional decline, motivating the social ED visit (51%)

#### A recent study reported that although

- 9%of older patients were admitted to the ED ostensibly for social reasons,
- 51% of these patients had <u>an underlying</u> acute medical problem such as:
- ➤ infectious (24%),
- > cardiovascular (14%),
- > neurologic (9%),
- digestive (7%),
- > pulmonary (5%), or
- > other disorders (delirium, fractures, anemia, acute renal failure, uncontrolled pain, etc).

## **COMMON GERIATRIC DISEASES IN ED**

- delirium,
- Infections,
- acute pain,
- recently prescribed medications,
- cardiovascular disease, and
- Chronic disease exacerbation
- may result in acute modifications of the patient's functional status and an ED visit

### COMMON GERIATRIC DISEASES IN ED

- Chronic orthopedic,
- cardiovascular, and
- neurologic conditions
- may also lead to altered functional status, primary caregiver exhaustion, and social ED admission.

## In another study, the 1-year mortality of such patients was as high as 34%

(Aging (Milano). 1999;11:56-60.)

## **ANZIANO IN ED**

Recognizing older patients in need of comprehensive geriatric assessment

#### **Comprehensive Geriatric Assessment in the ED**

Table 1. Comprehensive Geriatric Assessment Tools in the Emergency Department

Topic	Tool	Items	Score
Delirium	Confusion Assessment Method <sup>5</sup>	<ul> <li>(1) Acute onset of changes or fluctuations in the course of mental status</li> <li>(2) Inattention</li> <li>(3) Disorganized thinking</li> <li>(4) Altered level of consciousness</li> </ul>	At risk if 1 and 2, plus feature 3 or 4
Cognition	Quick Confusion Scale <sup>6</sup>	Time orientation (3 questions) Mental count Mental flexibility Delay recall	6 points 2 points 2 points 5 points At risk if <11 points
Depression	Hustey's questionnaire <sup>7</sup>	<ul><li>(1) During the past month, have you often been bothered by feeling down, depressed, or hopeless?</li><li>(2) During the past month, have you often been bothered by little interest or pleasure in doing things?</li></ul>	1 point per question At risk if $\geq$ 1 points
Functional status	Older Americans Resources and Services ADLs <sup>8</sup>	7 ADLs (bathing, dressing, toilet use, transfer, feeding, continence and walking) 7 instrumental ADLs (using the telephone, travel, shopping, meal preparation, housework, taking medicine, and management of finances)	2 points if independent 1 point if help necessary 0 points if dependant At risk if <28 points
Falls	One leg balance <sup>9</sup>	Ability to stand on one leg unsupported for 5 seconds.	At risk if $<$ 5 seconds
Polypharmacy	Beer's criteria <sup>10</sup>	Identify inappropriate medication	32

#### **ANZIANO IN ED**

- Key elements of comprehensive geriatric assessment
- Medical assessment: Problem list, Comorbidities, Medications, Nutritional assessment
- Functional assessment: Basic activities of daily living, Instrumental activities of daily living, Gait assessment, Exercise/activity assessment
- Psychological assessment: Cognitive status,
   Assessment of mood
- Social assessment: Informal social support
- Environmental assessment: Care resource eligibility/financial assessment Home safety Access

### **Neuropsychiatric Disorders**

- 25% of all older patients presenting to the ED as a result of delirium, dementia, or both.
- The Geriatric Emergency Medicine Task Force recommends a mental status assessment for all older patients in the ED.
- Delirium is potentially severe and important to recognize quickly.
- It occurs in 7% to 10% of this population and is associated with increased mortality

#### CAM

- 1. Is there evidence of an acute change in mental status from the patient's baseline?
- **2a.** Did the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?
- **2b.** Did the behavior fluctuate during the interview, that is, tend to come and go, or increase and decrease in severity?

#### CAM

- 3. Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or
- 4. Overall, how would you rate this patient's level of

unpredictable switching from subject to subject?

#### consciousness?

- alert (normal)
- vigilant (hyperalert)
- lethargic (drowsy, easily aroused)
- stupor (difficult to arouse) 
   coma (unarousable)

#### Six-Item Screener to Identify Cognitive Impairment

Question	Score Range	Score
1. What year is it?	0 – 4	
•	Correct - 0 points	
	Incorrect – 4 points	
2. What month is it?	0 – 3	
	Correct – 0 points	
	Incorrect – 3 points	
3. Give the patient an address phreeg John, Smith, 42	ase to remember with 5 com 2, High St, Bedford	iponents,
4. About what time is it (within 1	0 – 3	
hour)	Correct - 0 points	
,	Incorrect – 3 points	
<ol><li>Count backwards from 20-1</li></ol>	0- 4	
	Correct - 0 points	
	1 error – 2 points	
	More than I error – 4 points	
6. Say the months of the year in	0- 4	
reverse	Correct - 0 points	
	1 error – 2 points	
7. Repeat address phrase	More than I error – 4 points 0 – 10	
John, Smith,	Correct - 0 points	
	1 error – 2 points	
42, High St,	2 errors – 4 points	
Bedford	3 errors – 6 points	
	4 errors – 8 points	
	All wrong – 10 points	
TOTAL SCORE	0 – 28	/28

#### Outcome from Score

Cutcome nom ocore	
0-7 = normal	Referral not necessary at
	present
8- 9 = mild cognitive impairment	Probably refer
10-28 = significant cognitive impairment	Refer

### ED DEPRESSION SCREENING TEST

- Ti senti spesso triste o depresso?
- 2) Ti senti spesso abbandonato e senza aiuto?
- 3) Ti senti spesso malinconico e abbattuto?

Almeno 1 risposta positiva, identifica un'elevata probabilità di depressione

### **Screening for frailty**

- Short screening instrument (FRESH-screening)
- The questions were as follows:
- 1) "Do you get tired when taking a short (15–20 min) walk outside?" (positive answers included both "yes," and "can't do it")
- 2) "Have you suffered any general fatigue or tiredness over the last 3 months?"
- 3) "Have you fallen these last 3 months?" and "Are you afraid of falling?" (positive answers included "yes, a bit," "yes," and "yes, very afraid");

### **Screening for frailty**

- Short screening instrument (FRESH-screening)
- 4) "Do you need assistance in either getting to the store, managing obstacles (such as staircases) to and from the store, or in choosing, paying for, or bringing home groceries?"
- 5) question pertained to having had three or more emergency department (ED) visits over the last 12 months

 frailty by answering "yes" to two or more of these five questions

#### **FALL**

- Falls are the main cause of ED admissions for elderly patients (15% to 30%).
- A targeted interview of the patient and the caregiver on previous falls, as well as location, activity, and symptoms preceding the actual fall, assisted by the mnemonic "CATASTROPHE", may help to distinguish between an isolated episode and a fall as a result of an underlying pathology or general frailty.

#### **FALLS**

- Falls may also be <u>the chief symptom</u> of other pathologies such as:
- acute myocardial infarction,
- sepsis,
- medication toxicity,
- acute abdominal pathology, and
- elder abuse.
- Four percent to 6% of falls result to fractures
- Hip fractures accounting for 1% to 2% of them.
- Two percent to 10% of falls produce other major injuries requiring hospitalization or immobilization

### MNEMONIC FOR an older patient's fall

- C Caregiver and housing (information on the circumstances of present fall and falls history)
- A Alcohol (including withdrawal)
- T Treatment (medications, recently added or stopped, compliance)
- A Affect (depression or lack of initiative)
- S Syncope (any episodes of fainting)
- T Teetering (dizziness)
- R Recent illness
- Ocular problems
- P Pain with mobility (as the reason for falls in chronic joint pain or as the result and proof of repeated falls)
- H Hearing (necessary to avoid hazards)
- E Environmental hazards (rags, steps, etc)

#### **ABDOMINAL PAIN**

- Abdominal pain is the main complaint in 3% to 13% of ED visits in older patients.
- Compared with that of younger patients, mortality rates are 6 to 8 times higher and surgery rates are increased 2-fold.
- The rates of correct diagnoses for abdominal pain in the ED differ greatly throughout the literature and range from 40% to 82%

#### TARGETING "HIGH-RISK" ELDERLY

- 1. Before the illness or injury that brought you to the emergency department, did you need someone to help you on a regular basis? (yes)
- 2. Since the illness or injury that brought you to the emergency department have you needed more help than usual to take care of yourself? (yes)
- 3. Have you been hospitalized for one or more nights during the past 6 months (excluding a stay in the emergency department)? (yes)

### TARGETING "HIGH-RISK" ELDERLY

- 4. In general, do you see well? (no)
- 5. In general, do you have serious problems with your memory? (yes)
- 6. Do you take more than 3 different medications every day? (yes)

## MULTIDIMENSIONALE (MPI) di Pilotto

· L'indice MPI e' un indice prognostico di mortalita' a breve (1 mese) e lungotermine (1 anno) basato su informazioni ottenute da una Valutazione Multidimensionale (VMD) del soggetto anziano.

### INDICE PROGNOSTICO MULTIDIMENSIONALE (MPI)

#### 8 domini della VMD:

- 1. Activities of Daily Living (ADL),
- 2.Instrumental Activities of Daily Living (IADL),
- 3. Short Portable Mental Status Questionnaire (SPMSQ),
- 4. Mini Nutritional Assessement (MNA),
- 5. scala di Exton-Smith,
- 6. Comorbidity Index Rating Scale (CIRS),
- 7. numero di farmaci,
- 8. stato abitativo.

### LENDING TO CONCLUSIONS

### WHAT IS HAPPENING NOW IN THE WORLD?

### WHICH IS THE CURRENT SITUATION?

### What's cooking? What boils in the pan? What are you up to? what's the matter? WHAT WE NEED NOW? My suggestions.....

### WHAT'S COOKING?

- **❖** NEED TO GIVE RIGHT TRAINING FOR GERIATRIC URGENTISTS
- ❖NEED 'TO GIVE AN EDUCATION IN GERIATRICS TO URGENTISTS AND IN EMERGENCY MEDICINE TO GERIATRICIANS
- **❖IMPOSE THE USE OF A COMPREHENSIVE GERIATRIC ASSESSMENT IN THE ELDERLY IN ER**
- **APPLY ALL THE SCALE FOR DISABILITY, FRAILTY, COMORBIDITY, BEERS CRITERIA**
- **❖ DIFFERENT ORGANIZATION OF EMERGENCY DEPARTMENTS**

# FIRST SOLUTION Geriatricians

in ER



### Geriatrics in the Emergency Department:



**The Regional Geriatric Program of Toronto** 

### SECOND SOLUTION

## EDUCATION IN GERIATRICS



#### **GEM Education**

- Staff Inservices
- Orientation of new staff

Informal Education
 [for staff, caregivers, patients]

Marketing of services, media

### THIRD SOLUTION

### NEW ORGANIZATION OF ER OR ED



### Ideas for Future GEM

'GERI AREA' in ED

Strategic partnerships between LTC, acute care hospitals

Research: EMS workers gather information

The world's elderly population continues to explode, creating both strain and opportunity in the field of emergency medicine. Emergency physicians need to respond by solidifying the ED as the hub of care for the aging patient.

Fig. 1: The ED as a Hub of Care for the Elderly

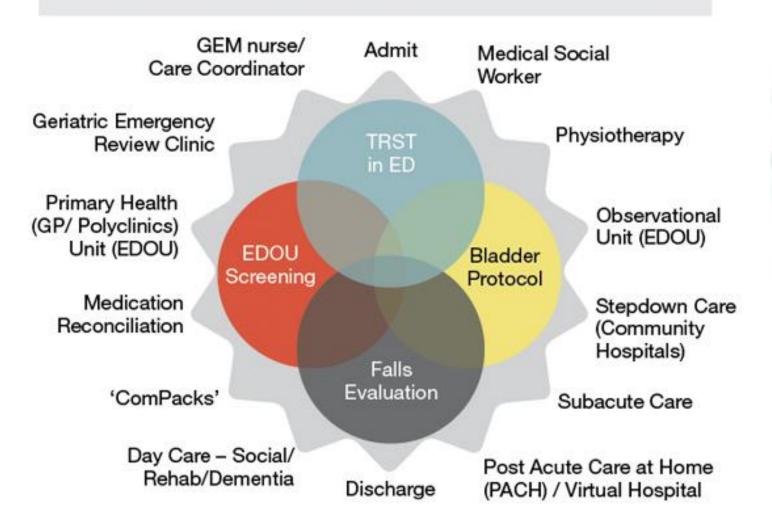
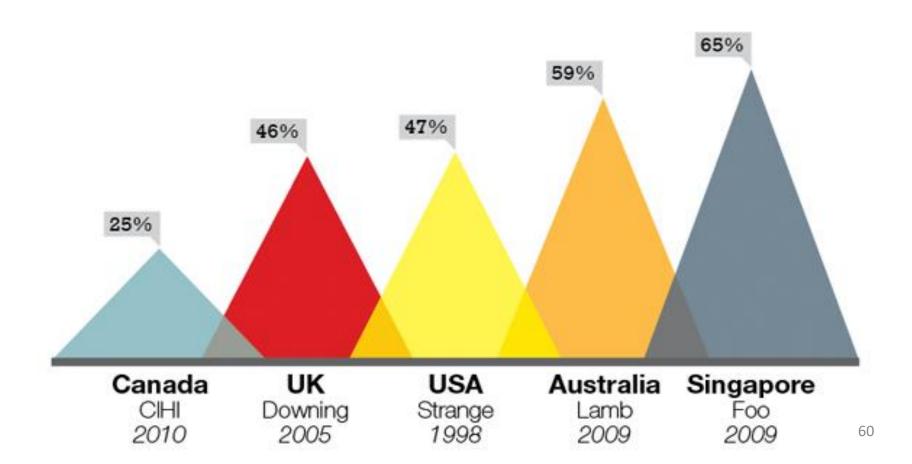


Fig. 2: Elderly admission rates across five of the world's most developed healthcare systems



One of the main hurdles to overcome is demonstrating that the geriatric ED can provide better health, improved patient experiences and reduced cost to the healthcare system.

### Learning Needs Assessment Screening At-Risk Elderly in the Emergency Department TORONTO GENERAL UNIVERSITY HOSPITAL

1.	Have you taken a course on adult	Yes		No		
	physical assessment?					
2.	Did you learn about normal aging	Yes		No		Not applicable
	changes on your course?					
A	ll the following questions refer to p	atien	its 7	/5 ye/	ars	of age or older
3.	Depression in the elderly is a common					
	problem. Major depression in the					
	elderly typically includes negative					
	thoughts, extreme sadness, and severely					
	limited activity.					
	Do you routinely ask you elderly					
	patients whether they feel depressed?	Yes		No		Sometimes
4	Do you find it easy to tell whether your					
	elderly patients are depressed?	Yes		No		
5.	Dementia is a disorder of cognitive					
	function of sufficient severity to					
	interfere with independent functioning.					
	It is characterized by significant					
	memory impairment. Disturbances to					
	higher cortical function such as					
	judgment or language may also be					
	present. Do you routinely ask your					
	alert elderly patients questions which					
	help you determine whether they are	Yes		No		Sometimes
	dementing?					
	If yes, please give two examples of quest	ions th	iat v	ou mi	ght	ask:
	, , , , , , , , , , , , , , , , , , ,				-	
	a)					
	~/					

### Learning Needs Assessment Screening At-Risk Elderly in the Emergency Department

patient, do you confirm with family that there has been no acute change in mental status?	Yes No Sometimes
7. Do you routinely ask your elderly patients whether they have difficulty performing the following activities of daily living?	
a. eating b. washing/grooming c. dressing d. toileting e. meal preparation f. housekeeping/laundry g. mobility (e.g. walking, getting up from sitting)	Yes         No         Sometimes           Yes         No         Sometimes
h. shopping i. using the telephone j. driving k. handling finances	Yes No Sometimes Yes No Sometimes Yes No Sometimes Yes No Sometimes Yes Sometimes Yes Sometimes
8. Which of the following is part of your routine assessment for an elderly patient who presents with a fall?	
ask about alcohol consumption     b. ask about any previous falls     c. screen for visual impairment     d. check for orthostatic hypotension     e. walking aids     f. whether they live alone	Yes         No         Sometimes
<ol><li>Do you routinely ask elderly patients what they weigh?</li></ol>	Yes No Sometimes
Do you routinely ask elderly patients whether they have experienced any unplanned weight loss?	Yes No Sometimes

### Learning Needs Assessment Screening At-Risk Elderly in the Emergency Department

11. When do you ask your elderly patients about alcohol consumption?		
a. when they have alcohol on their breath	Yes No Sometimes	
b. when they present with a fall	Yes No Sometimes	
<ul> <li>c. when they appear underweight or have obvious wasting.</li> </ul>	Yes No Sometimes	
12. Elder abuse is defined as any action by a caregiver which results in physical or mental harm to the elderly individual. Neglect is the intentional withholding of the basic necessities of life such as medical care, adequate food, personal care, and safe surroundings. Elders can also be subject to financial abuse. Please list two indicators that would raise your suspicion about the possibility of		
abuse or neglect.	e your suspicion about the possionity of	
a)		
b)		
13. Which of the following would raise your suspicion about the possibility of caregiver stress?		
a. caregiver fatigue b. caregiver displays poor coping	Yes	
strategies		
<ul> <li>c. caregiver is angry; lashes out at hospital staff</li> </ul>	Yes No	
14a. Do you routinely ask your elderly patients whether they receive assistance from family, friends, neighbours, or community resources (eg home care).	Yes No Sometimes	
14b. Do you routinely recommend referral to homecare, or social work etc. if think that the need is there	Yes No Sometimes	

### Learning Needs Assessment Screening At-Risk Elderly in the Emergency Department

15. Less than half of elderly patients	True False
presenting with myocardial infarction	
have chest pain.	
<ol><li>Less than half of elderly patient</li></ol>	True False
presenting with myocardial infarction	
have ECG changes.	
17. Septic elderly patients can present	True False
without an elevated white blood count	
or fever.	
18. The elderly presenting with an acute	True False
abdomen will demonstrate guarding or	
rebound tenderness	
<ol><li>Thirst is a good indicator of</li></ol>	True False
dehydration.	
20. Urinary incontinence is a normal part	True False
of aging	

#### **CONCLUSION:**

Treatment of acutely sick frail elderly patients in a geriatric evaluation and management unit (GEMU) gave

- considerable reduction of mortality
- increased the patients' chances of being able to live in their own homes

Ref: I Saltvedt & al J Am Ger Soc 2002

Triage of Geriatric Patients in the Emergency Department: Validity and Survival With the Emergency Severity Index Ann Emerg Med. 2007;49:234-240.]

- We evaluate the validity of the Emergency Severity Index (version 3) (ESI) triage algorithm in a geriatric emergency department (ED) population and determine the association between ESI categorization and survival.
- When used to triage patients older than 65 years, the ESI algorithm demonstrates validity. Hospitalization, length of stay, resource utilization, and survival were all associated with ESI categorization in this cohort.

#### CONCLUSIONS

- Problema internazionale del sovraffollamento del PS
- aumento della prevalenza di anziani in PS
- sebbene l'accesso in PS sia secondario a problemi di salute emergenti ex-novo, e quindi debba essere inevitabile, necessario e appropriato, in molte circostante l'uso del PS è frutto la soluzione di bisogni sanitari persistenti non riconosciuti

#### CONCLUSIONS

- the appropriate use of available screening and assessment tools
- can help emergency physicians provide high-quality care to older patients, the increasing population.

Annals of Emergency Medicine, 2010





# THANK YOU



