COMBATTERE OGNI GIORNO CON LO SCOMPENSO CARDIACO (e non solo….)

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Abiti da Lavoro

Scompenso Cardiaco

- Lo scompenso non può essere considerato come una patologia omogenea, ma è piuttosto una sindrome, che riconosce diverse tipologie di malati con caratteristiche differenti anche all'interno della stessa classe funzionale.

- Diversi fattori possono modificare il percorso gestionale e l'aderenza ai programmi di cura al di fuori dell'ospedale

Ital Heart J Suppl 2006; 7 (6): 381-432

Prevalenza di scompenso cardiaco nella popolazione generale

Popolazione generale	0,5-1,5%
Età > 70 anni	5-10%

Mosterd A., Hoes AW, *Clinical epidemiology of heart failure* Heart 2007

Età 65-84 anni (popolazione Lazio) 6-7%

2008	**17.260 ricoveri**
2009	**31% riospedalizzazioni**
	9% riospedalizzazioni precoci

50% sopravvivenza a cinque anni

Studio *Predictor* 2008-2010 (Regione Lazio)

- Circa 14 milioni di europei sono affetti da insufficienza cardiaca, l'equivalente della popolazione del Belgio, con un'incidenza di 3.6 milioni di nuovi casi annui e una stima di oltre 30 milioni di pazienti previsti per il 2020. Nei paesi occidentali, la percentuale di malati varia dall'1% al 2% della popolazione, valore che cresce in modo esponenziale con l'aumentare dell'età. La mortalità per questa patologia è comunque elevata, nonostante si osservi una riduzione del rischio di morte laddove siano stati intrapresi idonei programmi di prevenzione [3-6].

  - *P. Fontalive et. Al. G Ital Cardiol* 2015;16(1):21-30

L’aumento dell’incidenza si ritiene sia dovuto :

- **1) all’aumento progressivo dell’età media della popolazione**
- **2) al maggior numero di diagnosi effettuate a seguito di una maggiore sensibilizzazione al riconoscimento di questa patologia**
- **3) Aumento dei pazienti trattati in modo adeguato**

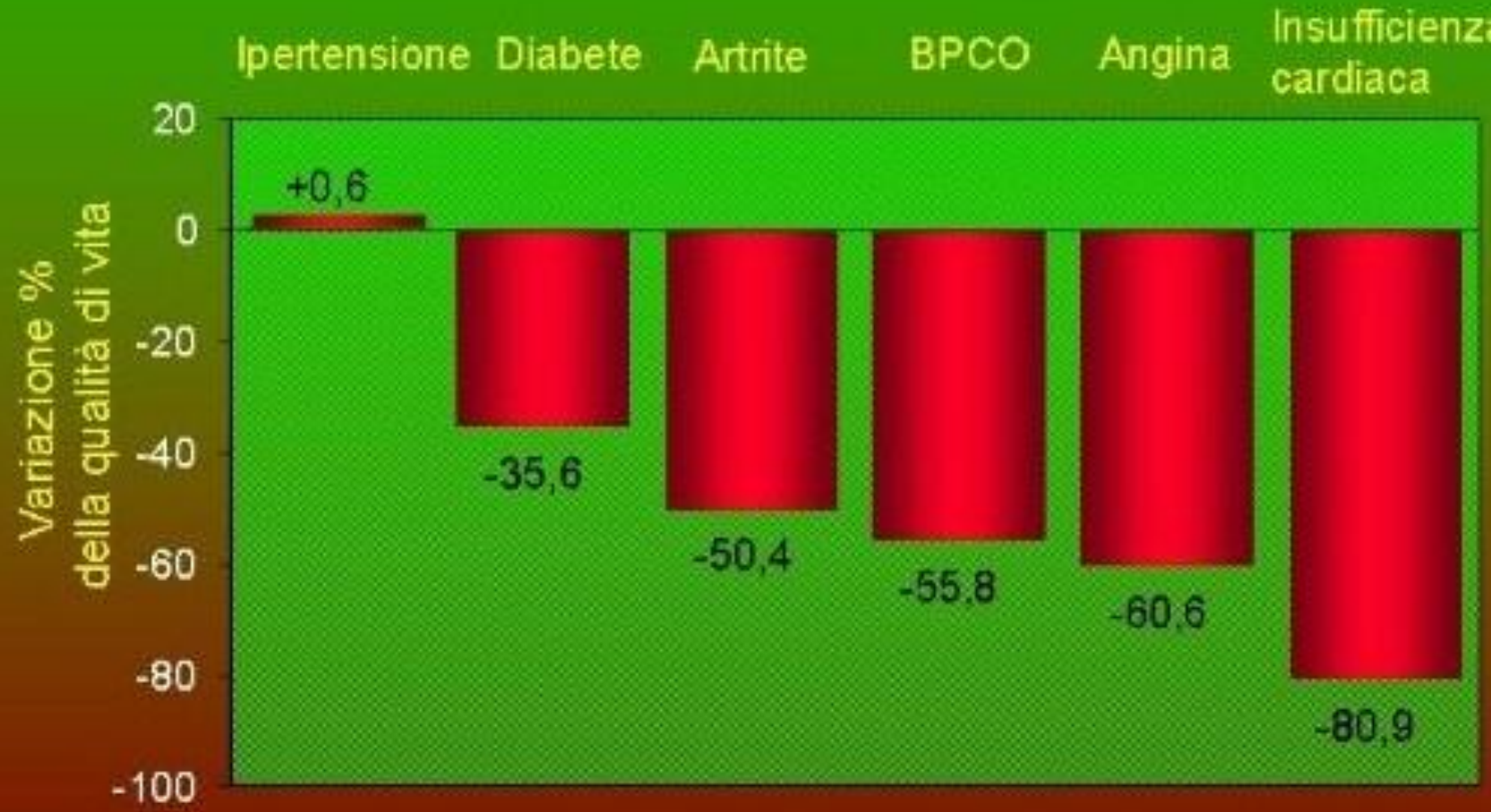
Page Navigation

Scompenso Cardiaco : *INCIDENZA*

Totale : 1-5 ‰ / anno

Aumento esponenziale con l'età

Qualità di Vita in diverse malattie (Medical Outcomes Study)

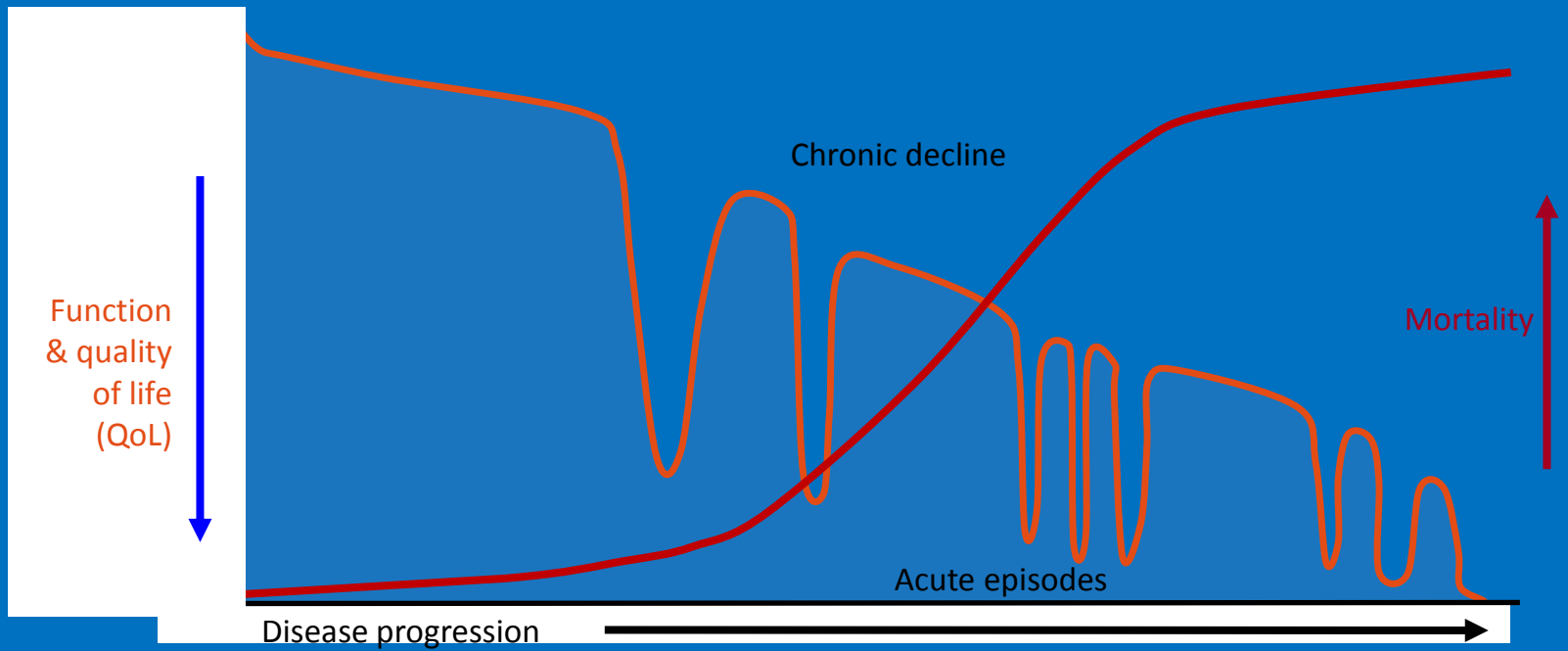


(Stewart et al., JAMA 1989)

HF is a chronic condition interspersed with acute episodes

- Increasing frequency of acute events with disease progression leads to high rates of hospitalization and increased risk of mortality[1–5]

  - With each acute event, myocardial injury may contribute to progressive LV dysfunction
  - Increasing frequency of acute events with disease progression leads to high rates of hospitalization and increased risk of mortality



Adapted from Gheorghiade et al. 2005

Ahmed et al. Am Heart J 2006;151:444–50; Gheorghiade et al. Am J Cardiol 2005;96:11G–17G
Gheorghiade & Pang. J Am Coll Cardiol 2009;53:557–73; Holland et al. J Card Fail 2010;16:150–6
Muntwyler et al. Eur Heart J 2002;23:1861–6

1. Ahmed et al. Am Heart J 2006;151:444–50; 2. Gheorghiade et al. Am J Cardiol 2005;96:11G–17G
3. Gheorghiade, Pang. J Am Coll Cardiol 2009;53:557–73; 4. Holland et al. J Card Fail 2010;16:150–6
5. Muntwyler et al. Eur Heart J 2002;23:1861–6

SYMPTOMS AND REALITY

HEART FAILURE IS A HIGH MORTALITY SYNDROME, DESPITE SIMPTOMS

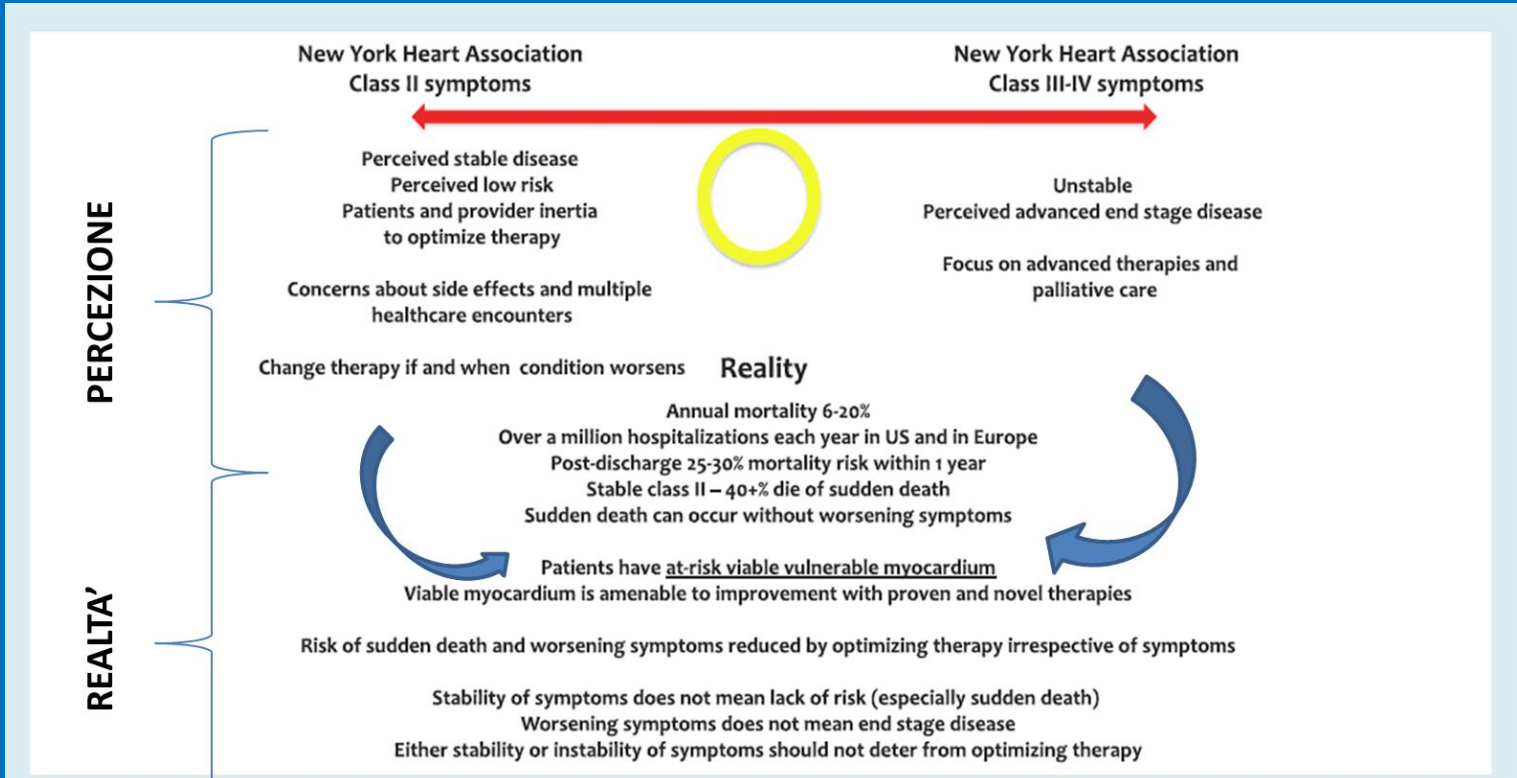
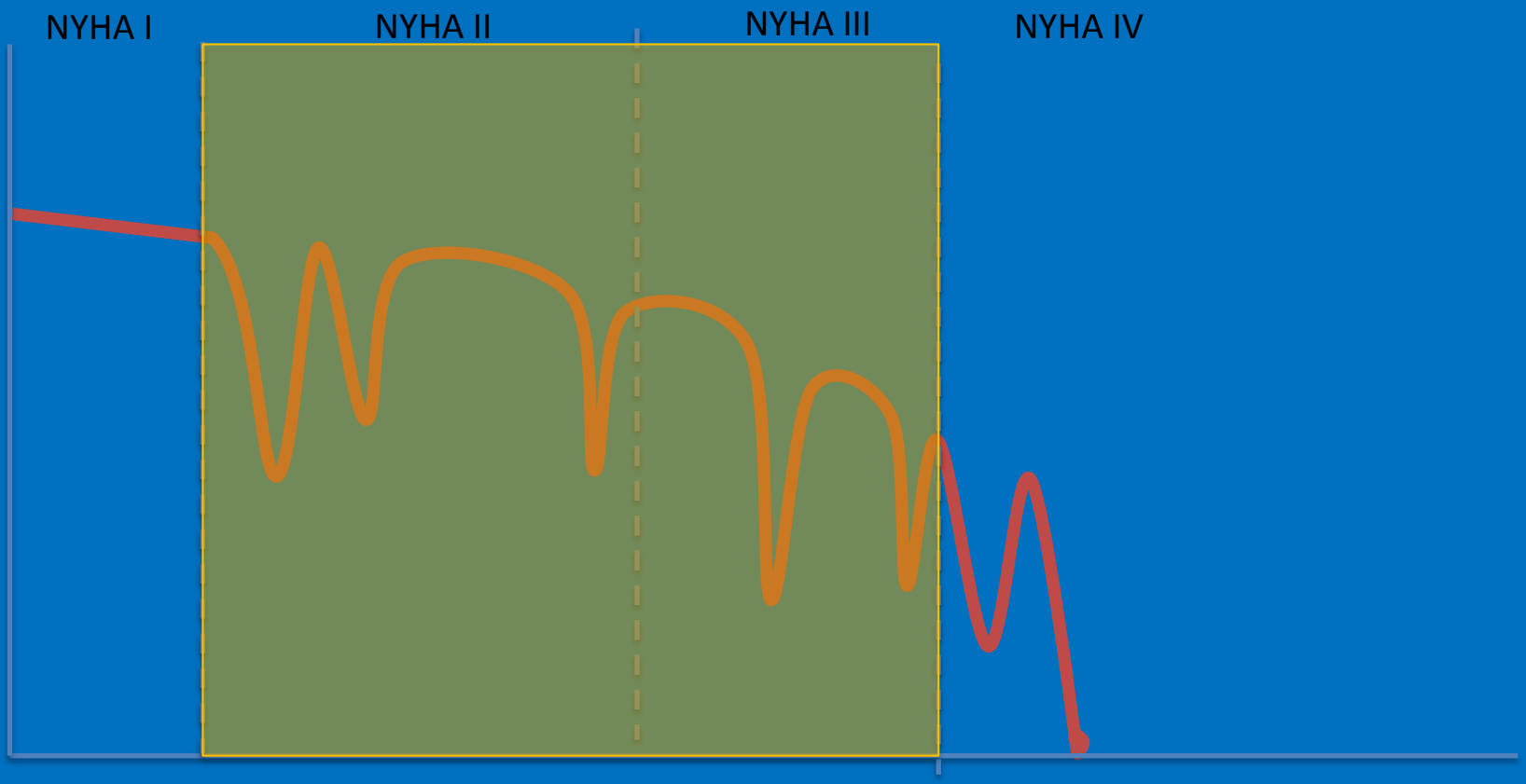


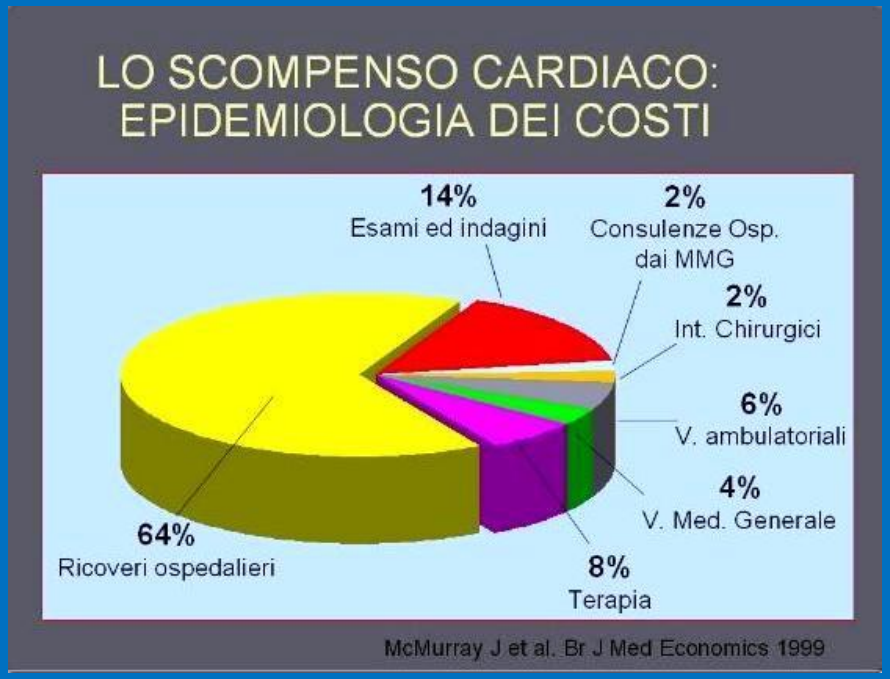
Figure 1 Misperceptions of heart failure trajectories based on symptoms.

1 2017 Metra_JCardiovascMed_2017
2 Butler_et_al-2016-European_Journal_of_Heart_Failure

ACTUAL DISEASE PROGRESSION



Costi ricovero Scompenso



- Degenza ospedaliera che mediamente supera i dieci giorni
- il Servizio sanitario nazionale spende complessivamente 550 milioni di euro l'anno (equivalenti a 11.800 euro per ciascun paziente) di cui l'85% è rappresentato dai costi di ospedalizzazione.
- Il costo delle riospedalizzazioni quasi il doppio rispetto a quello del primo ricovero: oltre 7 mila euro contro i circa 4.500 per il primo ricovero.

Maggioni AP et al: The real word evidence CHF: Findings from 41413 patients of the ARNO database 2015

Acute Heart Failure: Hospitalizations

- Worsening chronic heart failure (HF):80% of all admissions
- Acute *de novo heart failure (diagnosed for the first time): 15%*
- Advanced/end-stage/refractory HF: 5%

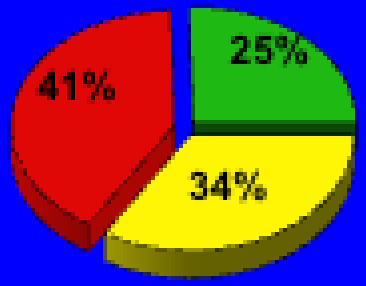
Gheorghiade M, Circulation 2005

Insufficienza cardiaca (DRG 127)

- 52% dei ricoveri avviene per "Scompenso a basso rischio"
- 40% delle riospedalizzazioni per scarsa compliance del paziente

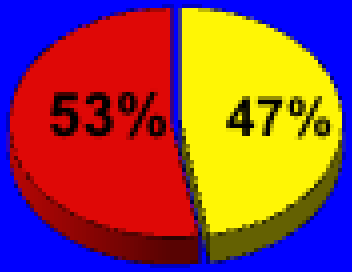
Il consumo di liquidi nello SC

Secondo lei bisogna bere:



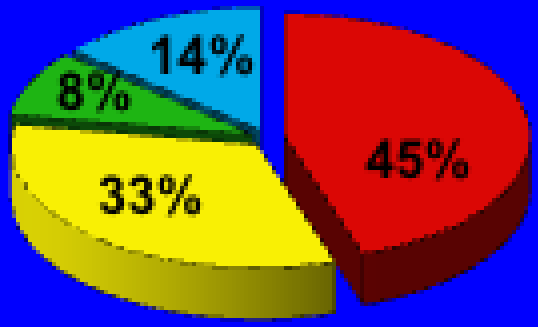
Molto Poco Solo se si ha sete

Quanta seta ha ?



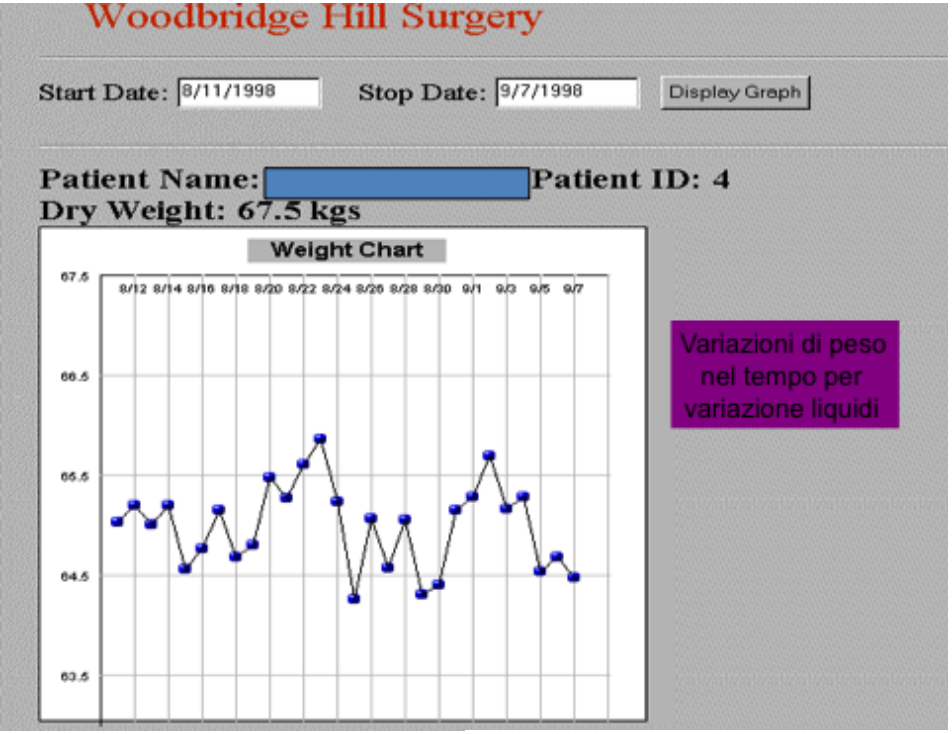
Molta Poca

Perché?:



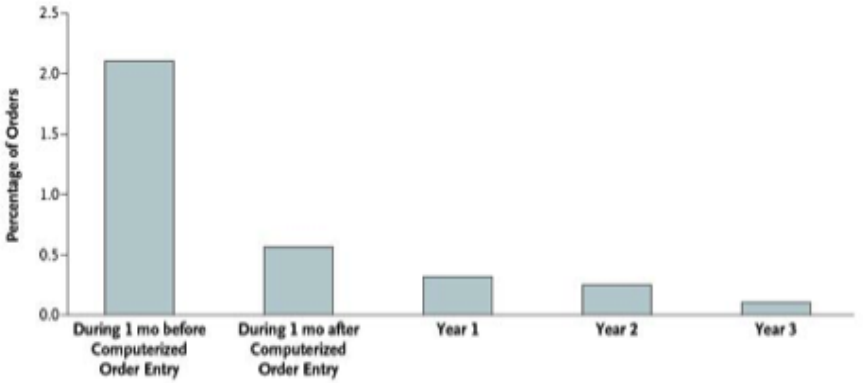
consiglio medico
prendo il diuretico
aiuta il cuore
altro

*Intervista a 76 paz. consecutivi con SC in 6 ambulatori per lo scompenso
Gilardi R. presentato al 36° congresso Nazionale ANMCO 1-4 giugno 2005

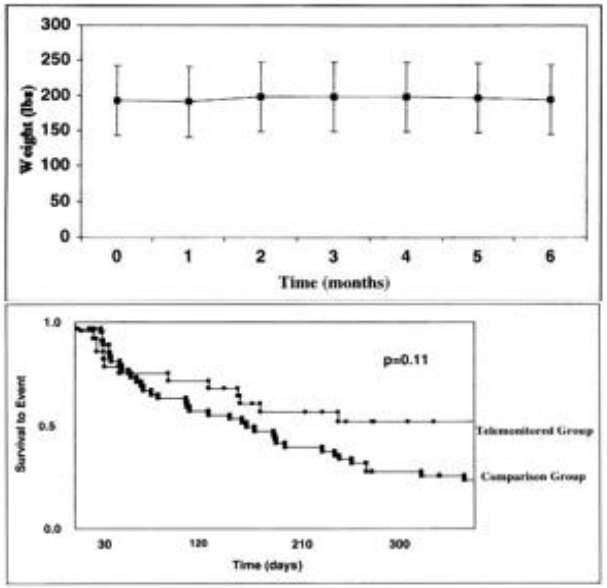


Variazioni di peso nel tempo per variazione liquidi

Riduzione% di prescrizioni con dosi "over-Range" di diuretico con monitoraggio del peso

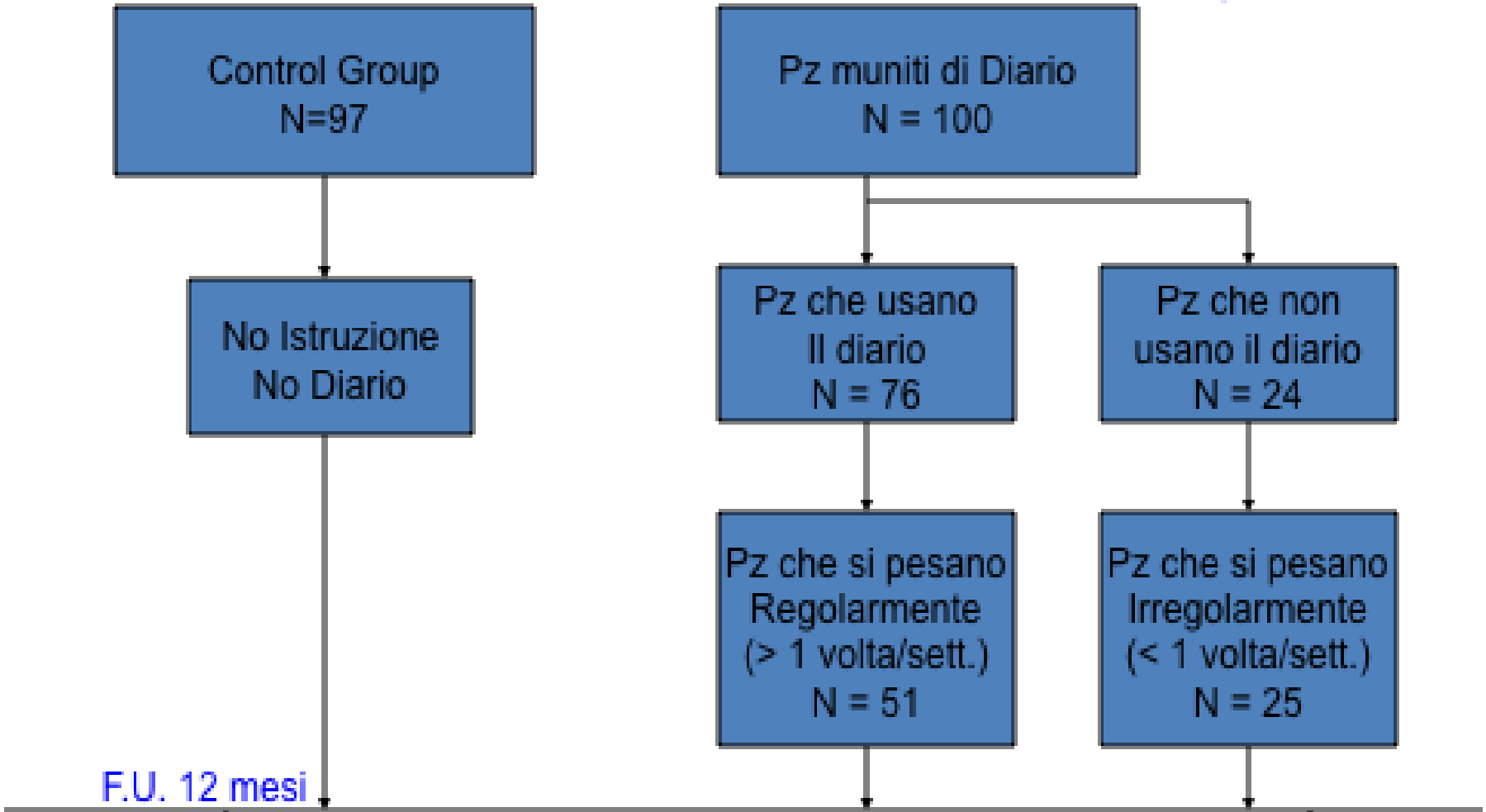


Bates D.W::NEJM 2003; 348:2526-34



Cordisco, M.E.: Am.J.Cardiol. Vol84(7).October 1, 1999.860-862

Auckland Heart Failure Management Study Intervention Group: Effetti dell'utilizzo di un diario clinico dello scompenso



Da: Wright S.P.: European J Heart Failure 5(2003) 371-380, modificata

AMBULATORIO SCOMPENSO CARDIACO POLICLINICO CATANIA

MESE_____ 201__

		Mattino h.___			Mezzogiorno h.___			Sera h.___		
Giorno	**Peso**	**Glic.**	**PA**	**FC**	**Glic.**	**PA**	**FC**	**Glic.**	**PA**	**FC**
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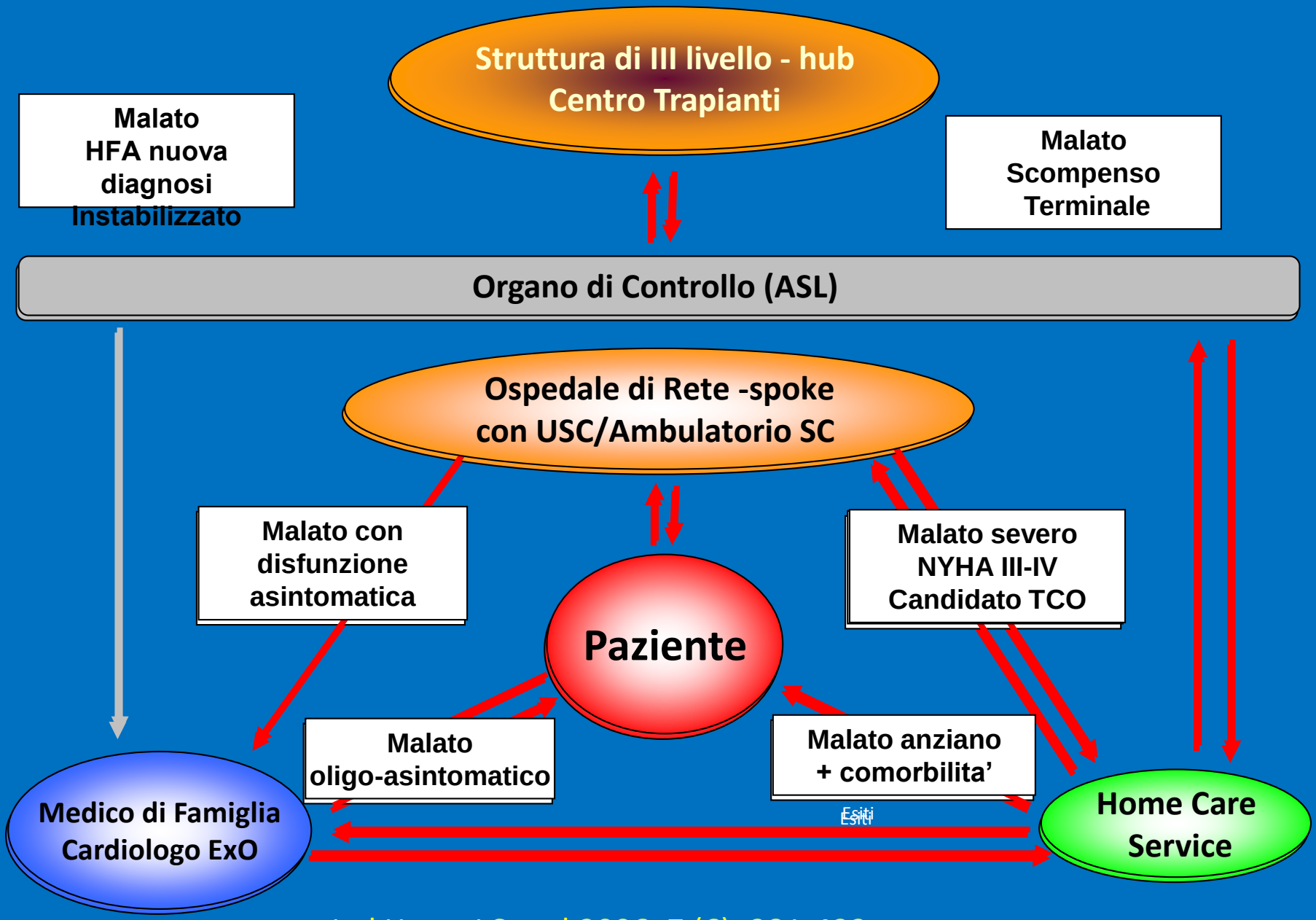
PA=Pressione Arteriosa; Glic=Glicemia; FC=Frequenza Cardiaca

Consensus Conference
Il percorso assistenziale del paziente con scompenso cardiaco

Ital Heart J Suppl 2006; 7 (6): 381-432

Heart failure (HF) is a highly prevalent, chronic disease that impacts heavily on patient survival, quality of life and results in escalating healthcare costs. Despite the considerable burden imposed by HF on healthcare systems, fragmented, uncoordinated care is still too common.

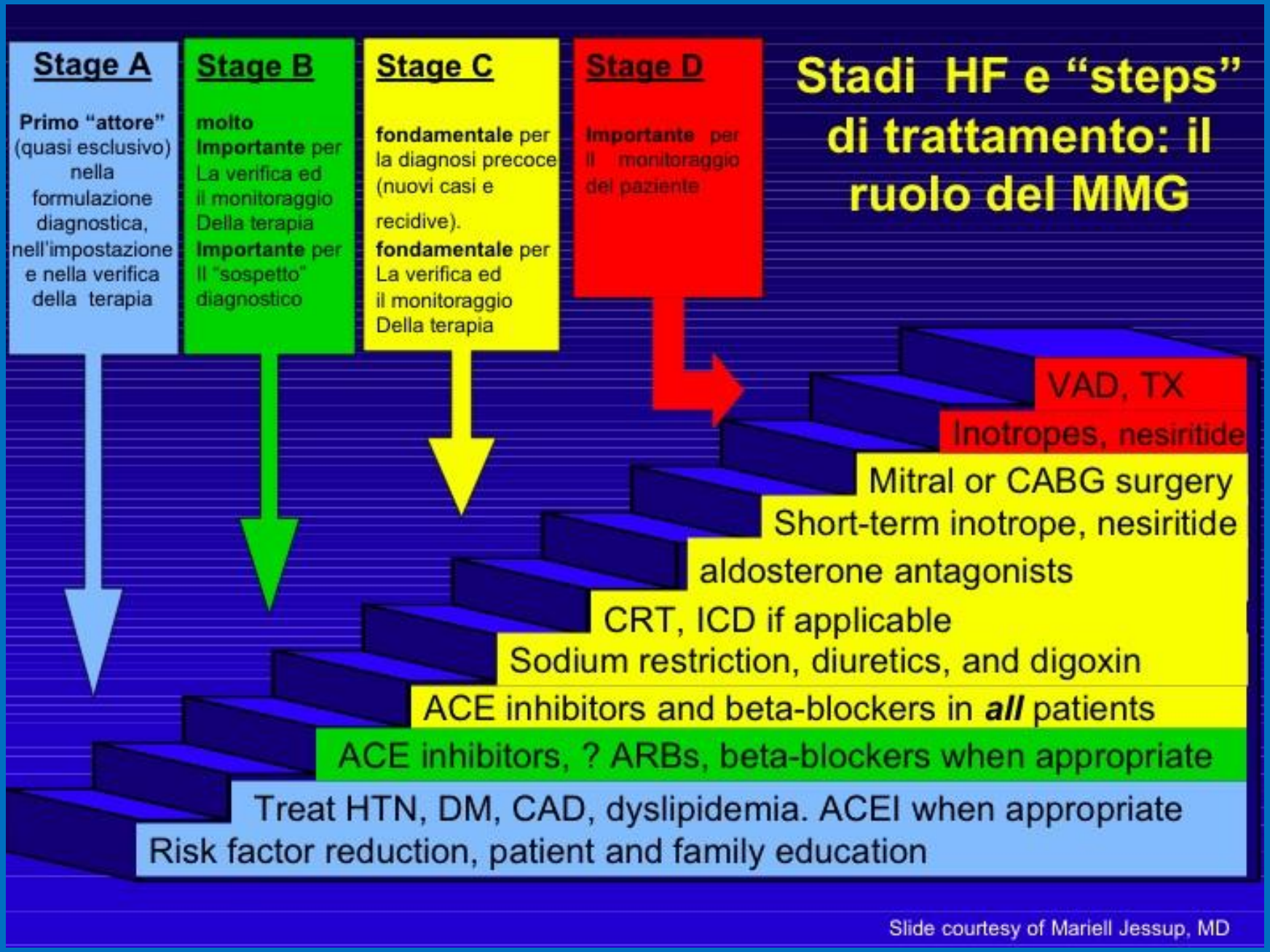
In order to redefine the role and core responsibilities of each health professionals involved in HF management in a novel integrated network, the Italian Association of Hospital Cardiologists promoted a Consensus Conference among professional Scientific Societies, targeted to improve patient care. A working group analyzed data on HF burden from available institutional sources. National data from the Ministry of Health indicate that, in 2003, HF was the leading medical cause of hospitalization, with 186 945 admissions. From record linkage analysis in five Italian regions among over 5 million residents, in 2004 HF prevalence was 1.2%, incidence 3.8/1000, lethality 16.2% and mean age of affected subjects was 75.8 years. Per capita direct HF costs, computed as sum of hospital admissions, drugs and specialist outpatient services, averaged 1.917 € and 75% was attributable to hospitalizations. This document reports the Conference proceedings and builds on existing guidelines to define care pathways for HF patients. An integrated and multidisciplinary network was defined as mainstay of HF management. The role of in-hospital and out-of-hospital services and health professionals in different clinical scenarios and specific pathways were defined. The implementation of communication and shared electronic database was recommended. The document is intended as guidance for health professionals and health authority representatives, whose support will be crucial to implement the proposed management strategies.



Ital Heart J Suppl 2006; 7 (6): 381-432

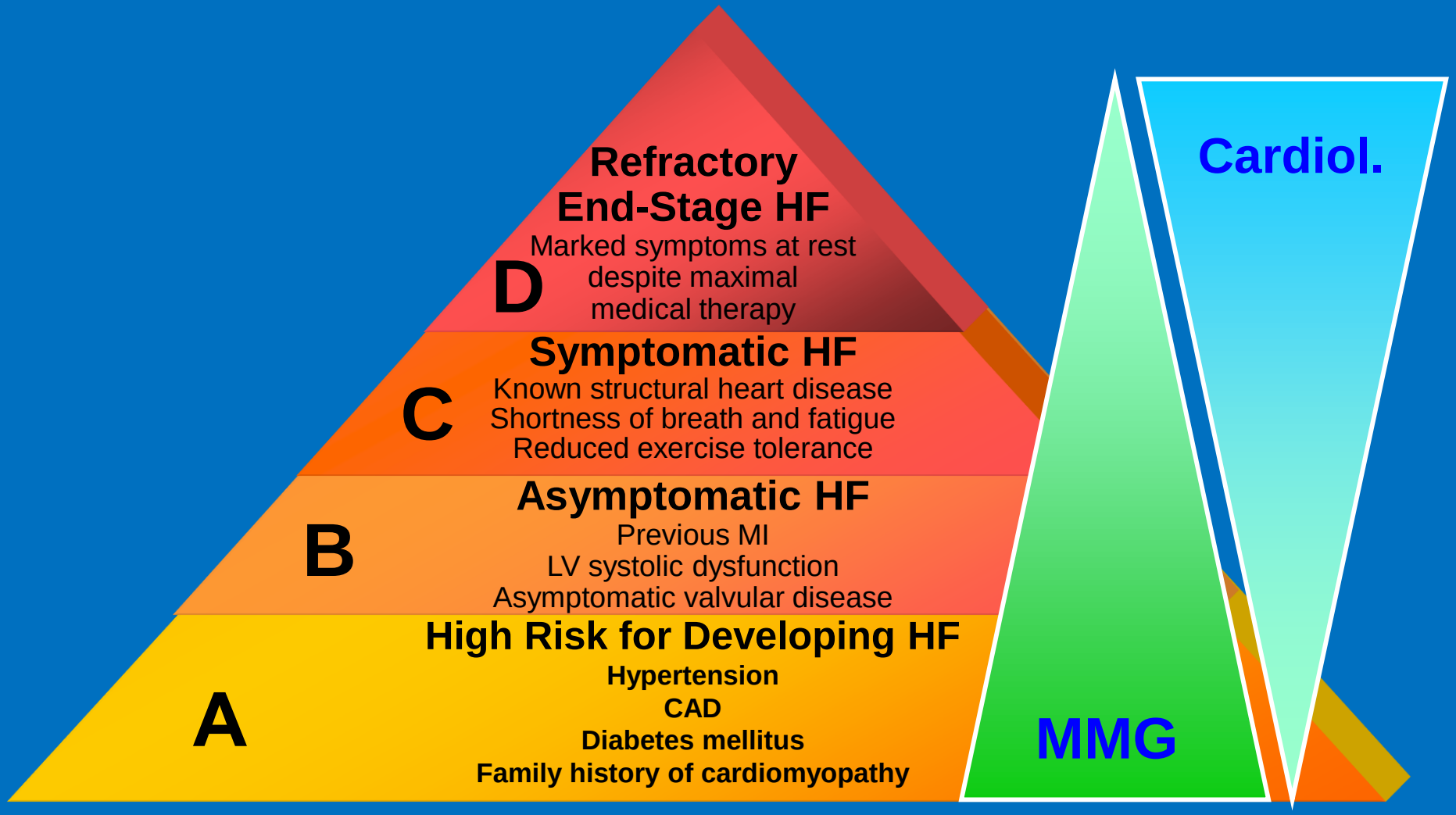
I modelli di gestione del paziente scompensato cronico utilizzati fino ad oggi sono essenzialmente di quattro tipi:

- 1. modello gestionale infermieristico: imperniato sulla figura dell'infermiere specializzato, con supervisione di un medico;
- 2. modello gestionale basato su contatti telefonici e visite di controllo programmate;
- 3. modelli a multicompetenza: infermiere specializzato, dietista, assistente sociale, cardiologo, assistenza domiciliare, contatti telefonici;
- 4. unità scompenso: ricoveri in unità specialistiche cardiologiche con impostazione di una terapia farmacologica intensiva, infermiere specializzato, dietista, assistenza sociale, fisioterapia con follow-up gestito dal cardiologo, dall'infermiere dell'unità, in solido con il medico di medicina generale.


Stage A
Primo "attore" (quasi esclusivo) nella formulazione diagnostica, nell'impostazione e nella verifica della terapia
Stage B
molto Importante per La verifica ed il monitoraggio Della terapia
Importante per Il "sospetto" diagnostico
Stage C
fondamentale per la diagnosi precoce (nuovi casi e recidive).
fondamentale per La verifica ed il monitoraggio Della terapia
Stage D
Importante per Il monitoraggio del paziente
Stadi HF e "steps" di trattamento: il ruolo del MMG
VAD, TX
Inotropes, nesiritide
Mitral or CABG surgery
Short-term inotrope, nesiritide
aldosterone antagonists
CRT, ICD if applicable
Sodium restriction, diuretics, and digoxin
ACE inhibitors and beta-blockers in all patients
ACE inhibitors, ? ARBs, beta-blockers when appropriate
Treat HTN, DM, CAD, dyslipidemia. ACEI when appropriate
Risk factor reduction, patient and family education
Slide courtesy of Mariell Jessup, MD

ACC/AHA Practice Guidelines

Pyramid Approach to HF Stages



Hunt SA et al. Circulation. 2005 Sep 20;112(12):e154-235 .

COSA SI PUO' FARE?

- PREVENIRE
- DIAGNOSTICARE
- CURARE
- FOLLOW-UP

TABLE 24
Recommended components of care and following programmes
(Class of recommendacion I, level of evidence C

Use of multisciplinary team approach

Vigilant follow-up, first FU within 10 days of discarge

Discharge planning

Increased access to health care

Optimizing medical therapy whit guidelines

Early attemtion to sign and symptoms

- Flexible diuretic regimen
- Intense education and counseling
- Inpatient and outpatient
- (Home-based)
- Attention to behavioural strategies
- Address barriers to compliance

ESC GUIDELINES FOR THE DIAGNOSIS AND TREATMENT OF CHF UPDATE 2005

Table 4.

Chronic Heart Failure

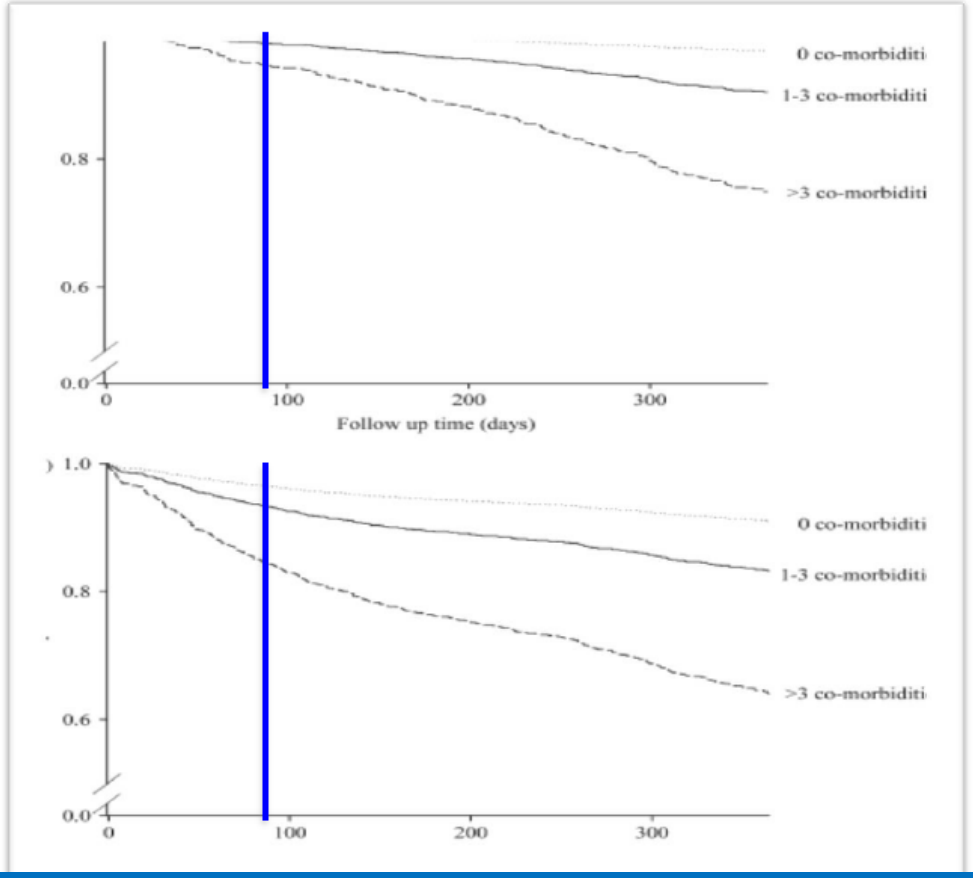
	Hazard Ratio	95% Confidence Interval	*P* Value
NYHA III–IV vs I–II	2.52	1.86–3.41	<0.0001
Hemoglobin <12 vs ≥12, g/dL	2.79	1.89–4.12	<0.0001
Age (per 5-year increase)	1.18	1.09–1.28	<0.0001
HR (per 5-beats per minute increase)	1.09	1.04–1.15	0.0007
Severe mitral regurgitation	2.03	1.31–3.15	0.002
β-Blockers	0.64	0.47–0.86	0.004
SBP (per 10-mm Hg increase)	0.90	0.83–0.98	0.012
BMI (per 1-kg/m^2 increase)	0.96	0.92–0.99	0.015
QRS ≥120 vs <120, ms	1.47	1.08–2.02	0.015
Digitalis	1.43	1.05–1.93	0.022
Creatinine >1.5 vs ≤1.5, mg/dL	1.57	1.06–2.34	0.026

- Independent predictors of all-cause 1-year mortality (ordered by χ^2 value)

Comorbidity Burden & Prognosis:

Impact of non-cardiac comorbidities on mortality and HF hospitalization

***>3 co-morbidities, higher mortality rate** (HR 9.33, 95% CI 5.14–16.96, P < 0.001) & re-hospitalized (HR 4.74, 95% CI 3.10–7.23, P < 0.001).*



26% no co-morbidity
43% > 2 co-morbidity

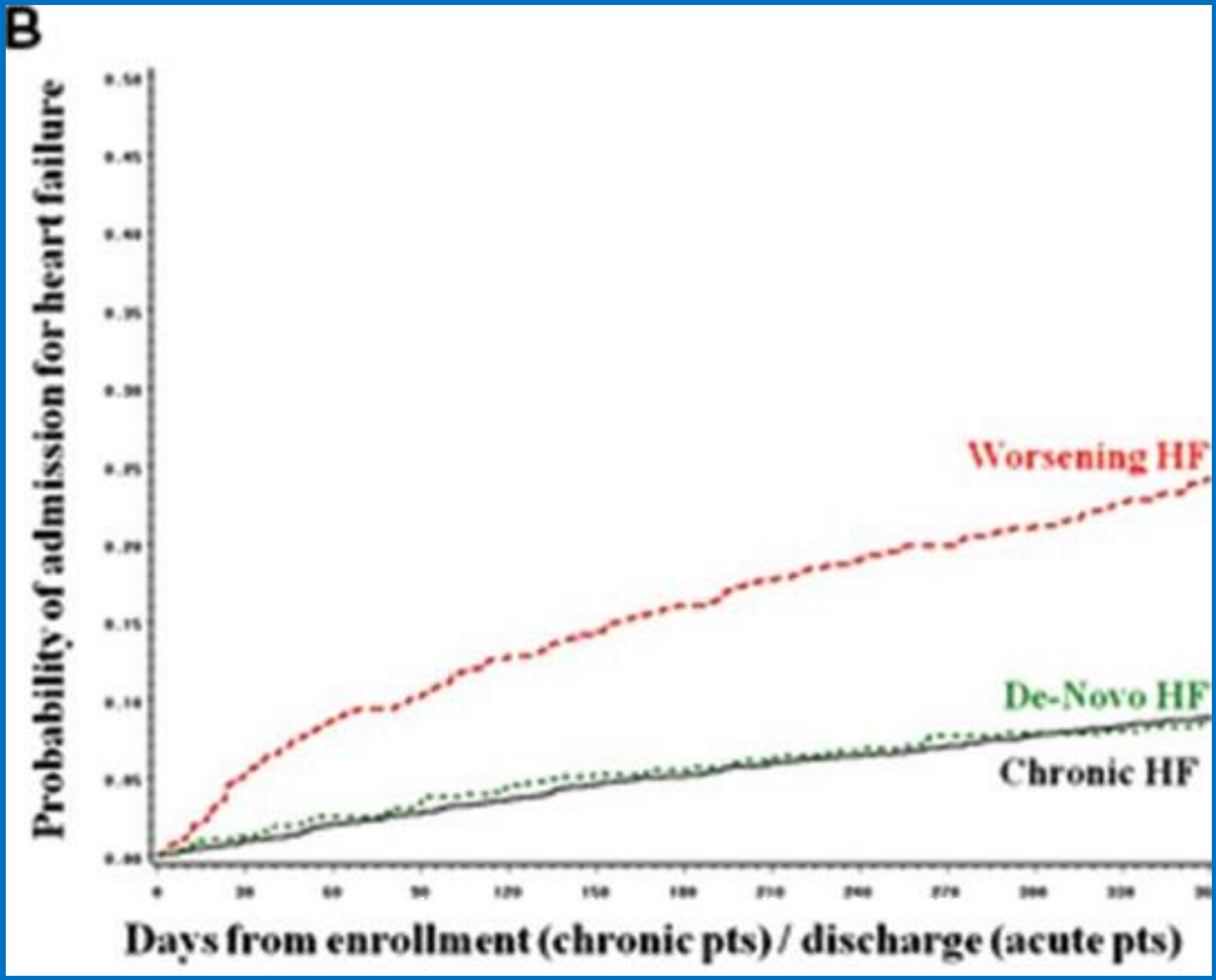
Deursen VM, EJHF 2014

LA GESTIONE SUL TERRITORIO

QUALI GLI OBIETTIVI

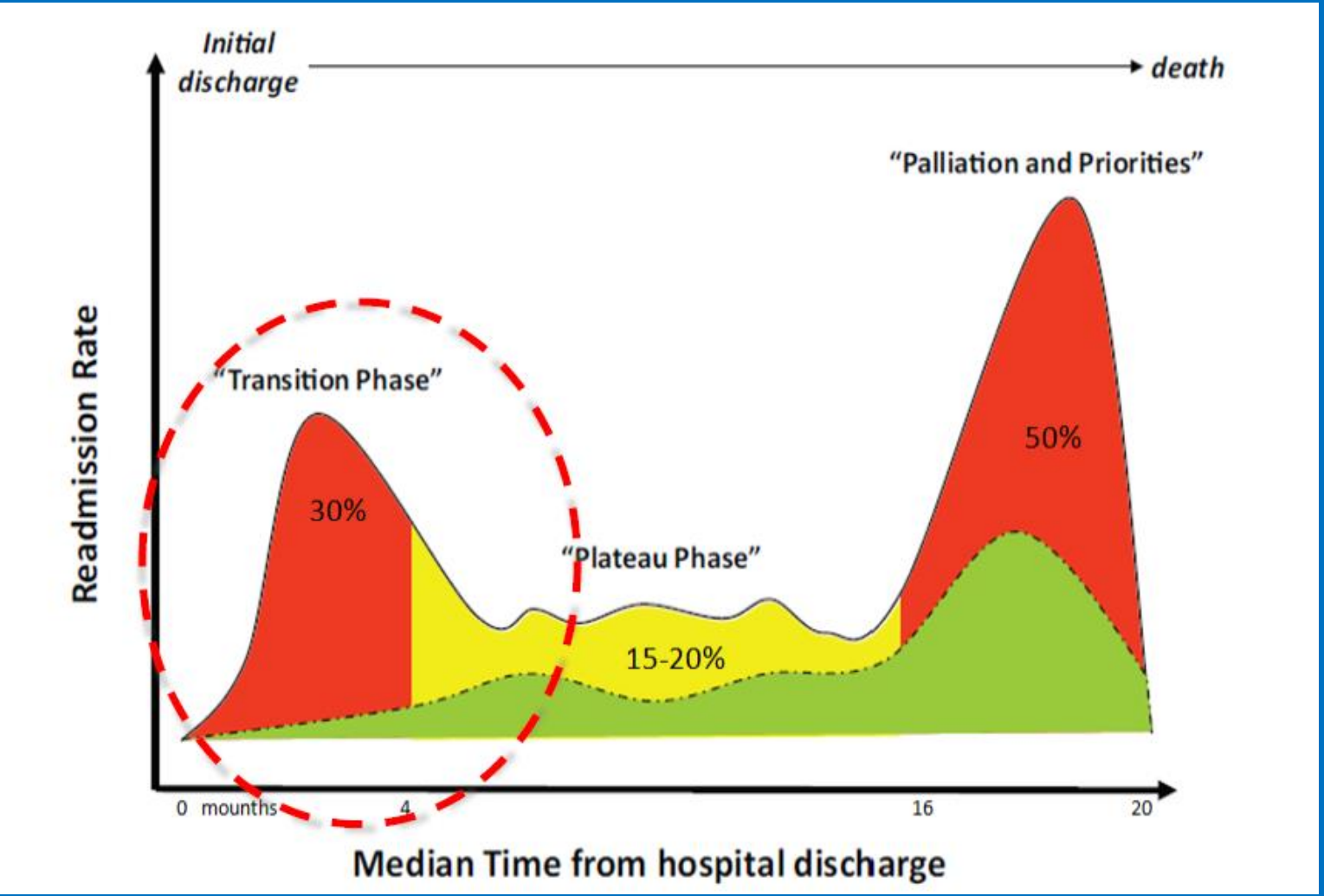
1. Il BENESSERE DEL PAZIENTE;
2. LA RIDUZIONE DEI RICOVERI:
3. LA RIDUZIONE DELLA MORTALITA'.

Kaplan–Meier curves for admission to hospital for HF



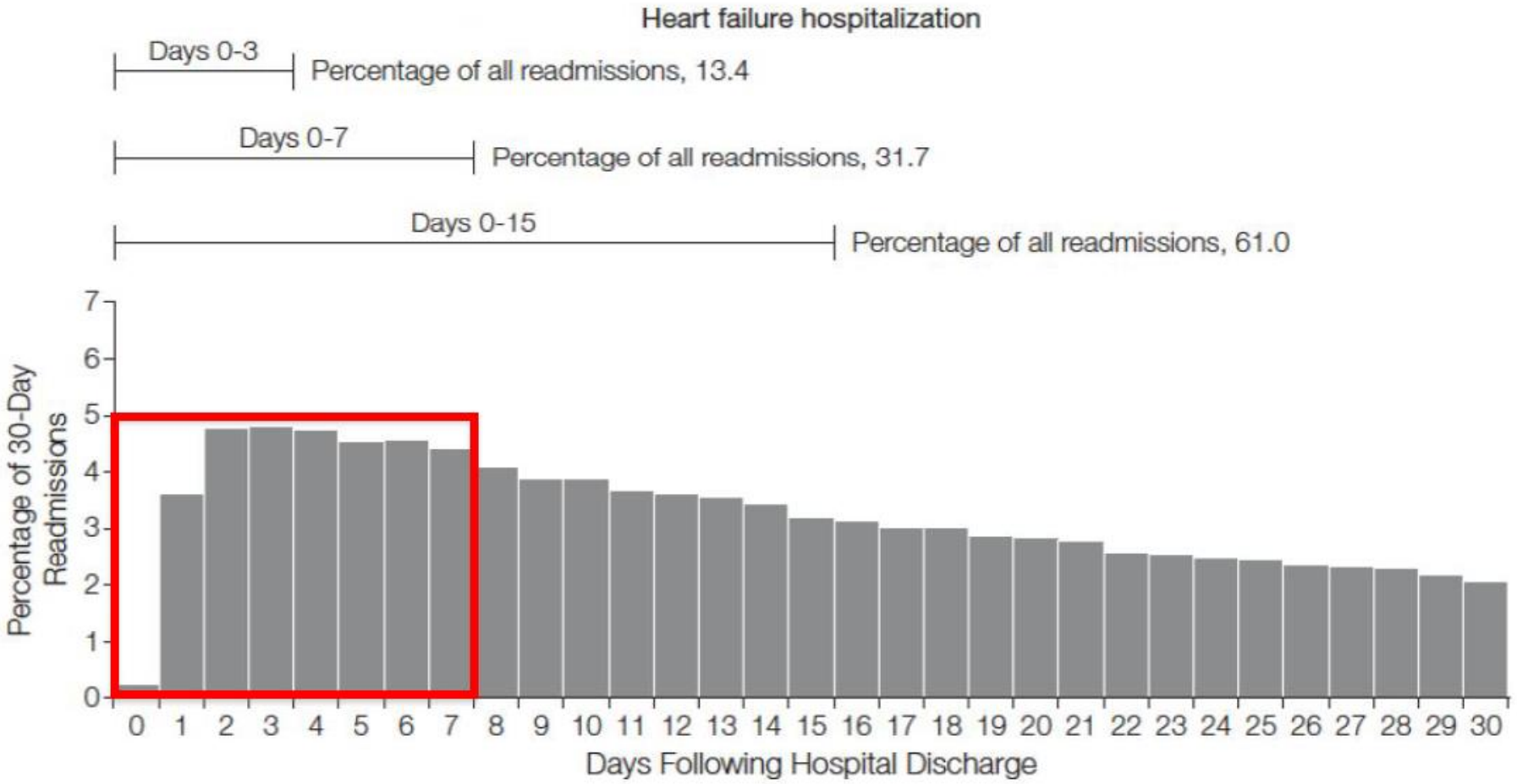
IN-HF *Outcome* *Tavazzi L, Circ HF 2013*

Rehospitalization is particularly high in the early phase after hospitalization



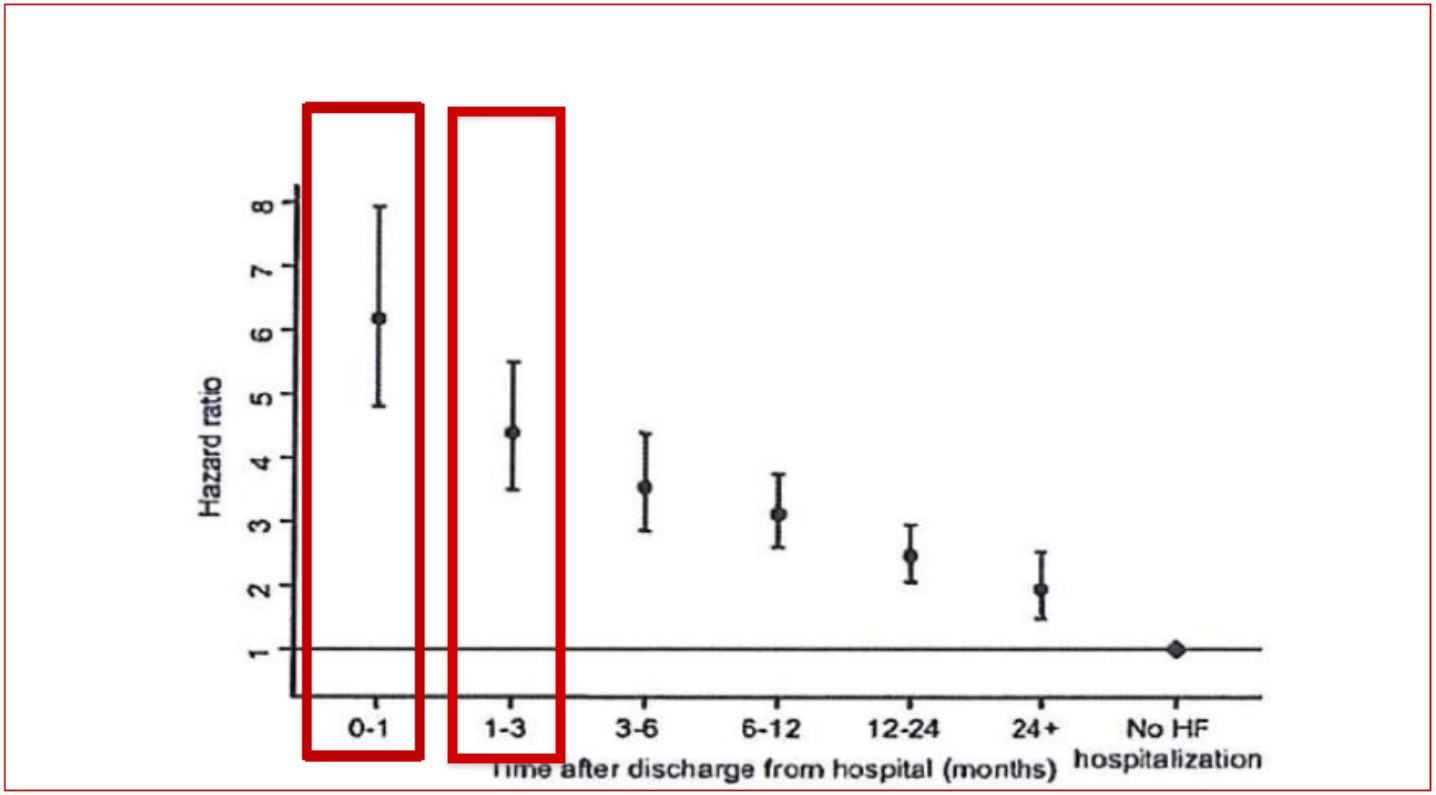
Alkshay D, Circ HF 2012

From 2007 through 2009, 329,308 30-day readmissions after 1,330,157 Medicare HF hospitalizations (24.8% readmitted)



Dharmarajan K, *et al. JAMA* 2013;309:355-63.

Mortality is particularly high in the early phase after hospitalization.

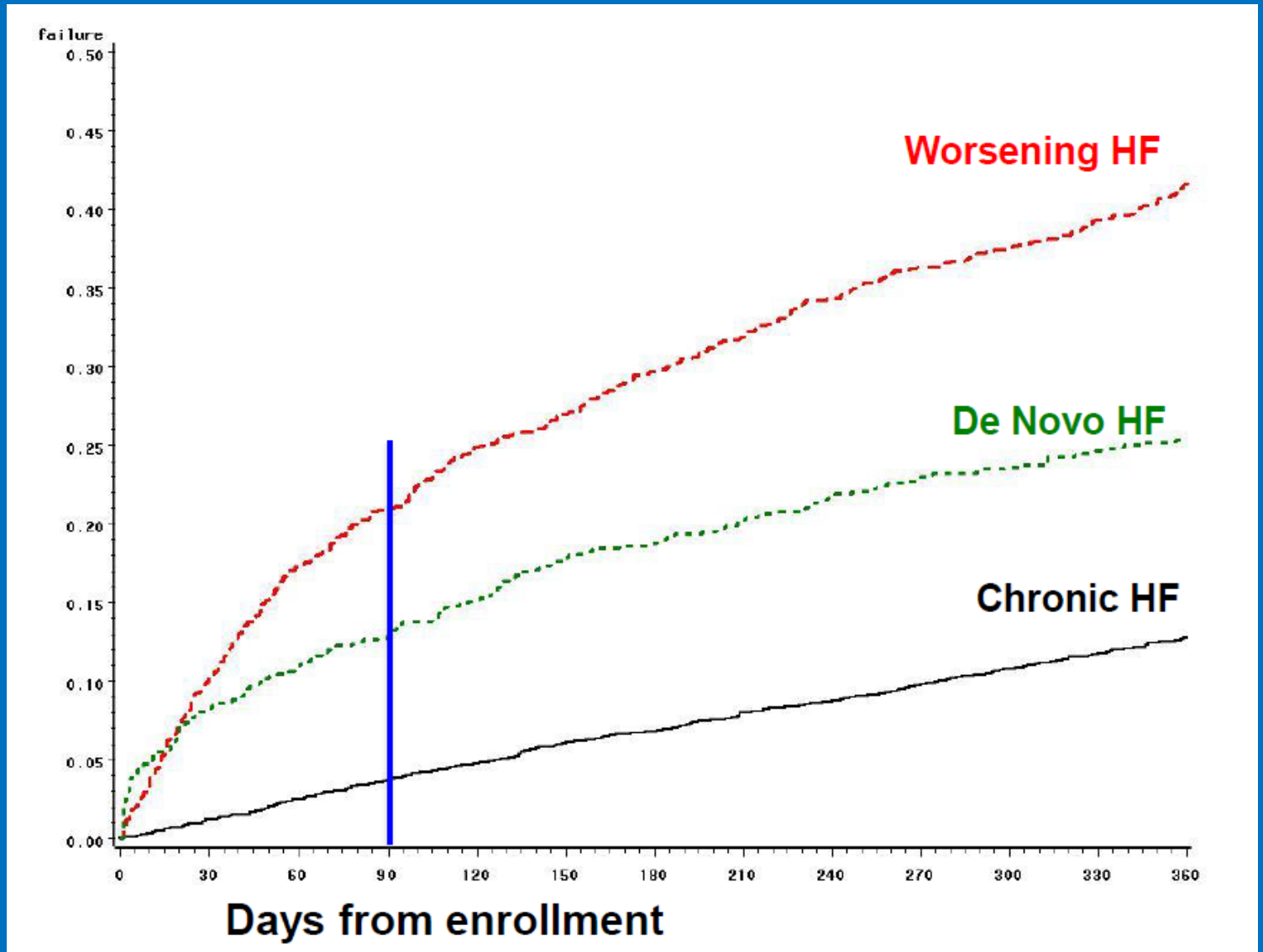


Hazard ratio of all-cause mortality after discharge from hospital for first hospitalization for heart failure

Marti NC, *Circ Heart Fail* 2013

All-cause death or HF hospitalization

Tavazzi L, Circ HF 2013



"Vulnerable Phase":
week to 1-3 months post-discharge

Marti NC, Circ HF 2013

Value of follow-up visit after discharge

52% of heart failure patients are not seen in the first 30 days after a hospitalization

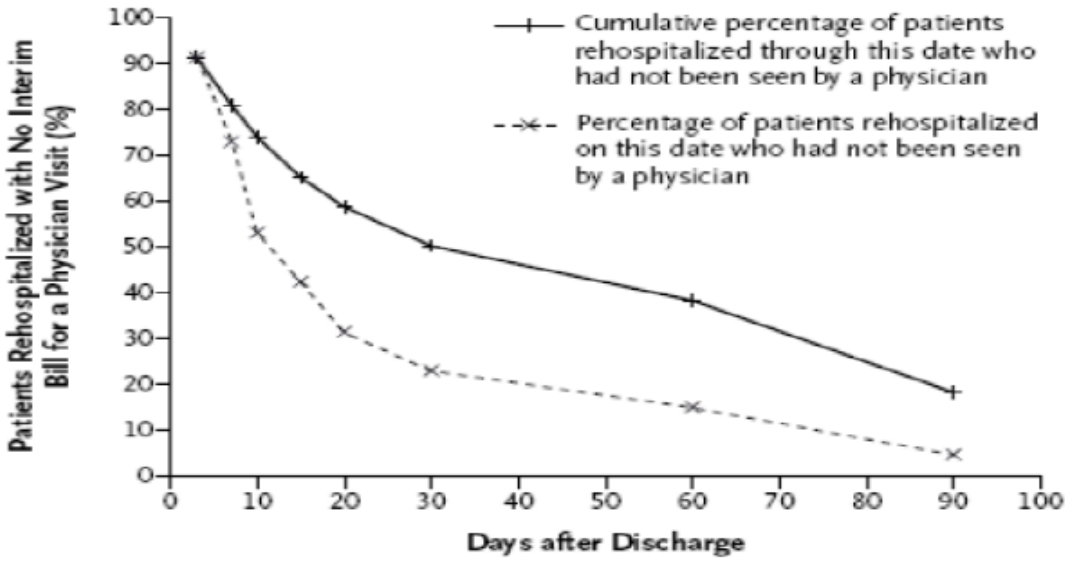


Figure 2. Patients for Whom There Was No Bill for an Outpatient Physician Visit between Discharge and Rehospitalization.

Data are for patients in fee-for-service Medicare programs who were discharged to the community between January 1, 2003, and December 31, 2003, after an index hospitalization for a medical condition. Data are derived from claims maintained in the Chronic Condition Data Warehouse of the Centers for Medicare and Medicaid Services.

2003

n *Jencks et al. N Engl J Med 2009;360:1418-28*

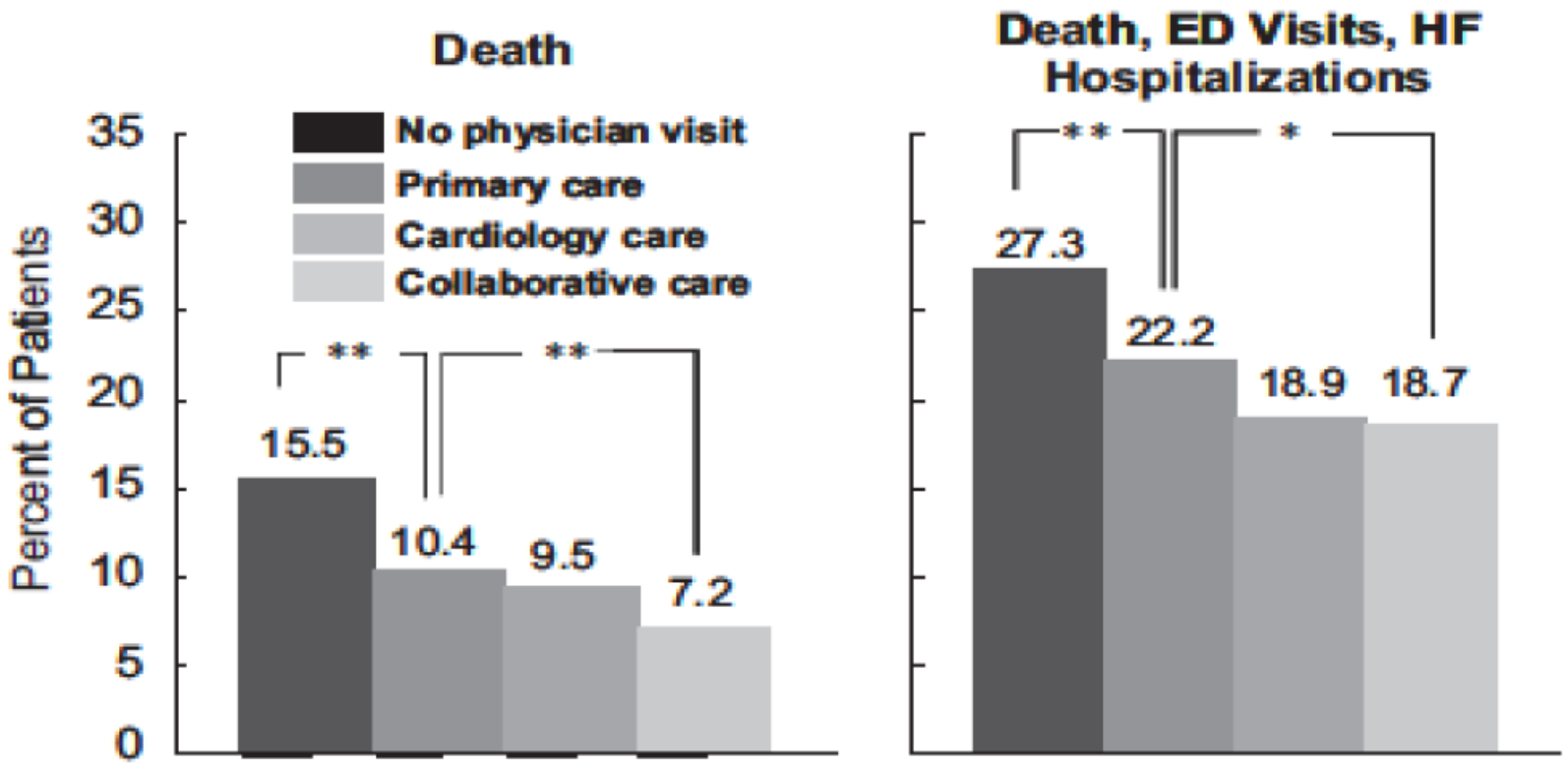

POLICE
POLICE

Editorial

Postdischarge Assessment After a Heart Failure Hospitalization

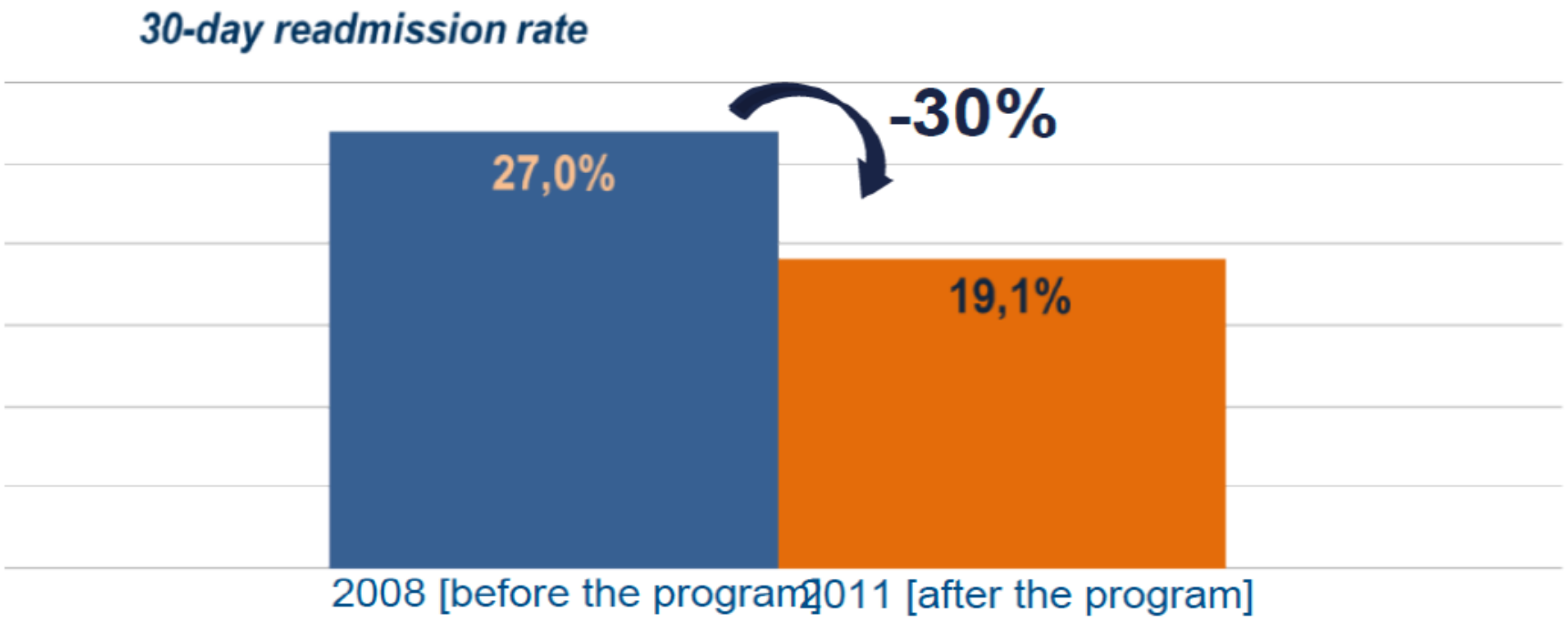
The Next Step Forward

Marco Metra, MD; Mihai Gheorghiade, MD; Robert O. Bonow, MD; Livio Dei Cas, MD



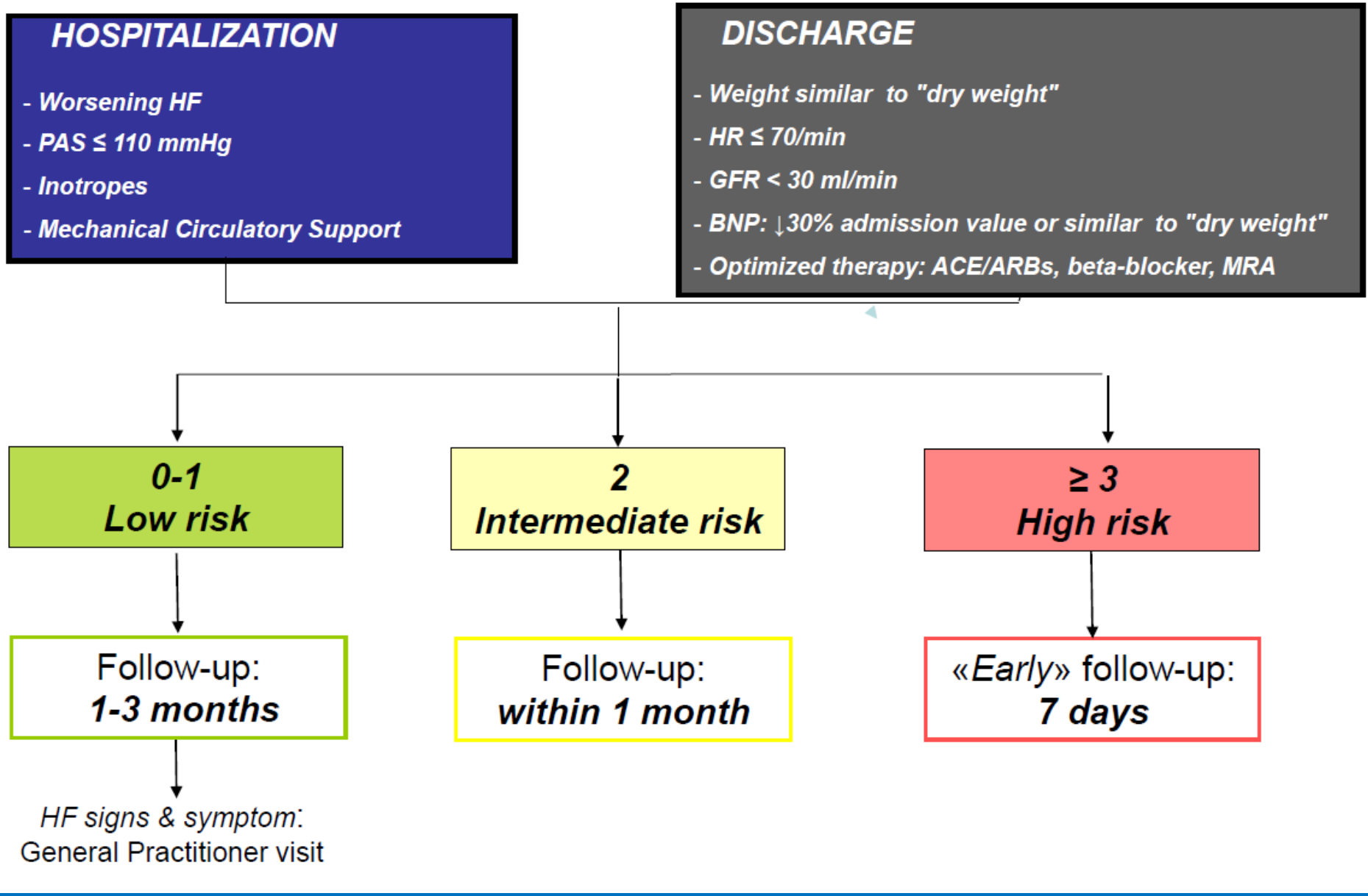
Circulation 2010

7-day follow-up visits programme in US: decrease of HF 30-day readmission rate



Ryan J, et al. *Am J Med*. 2013;126:989-994.

- RISK ASSESSMENT -



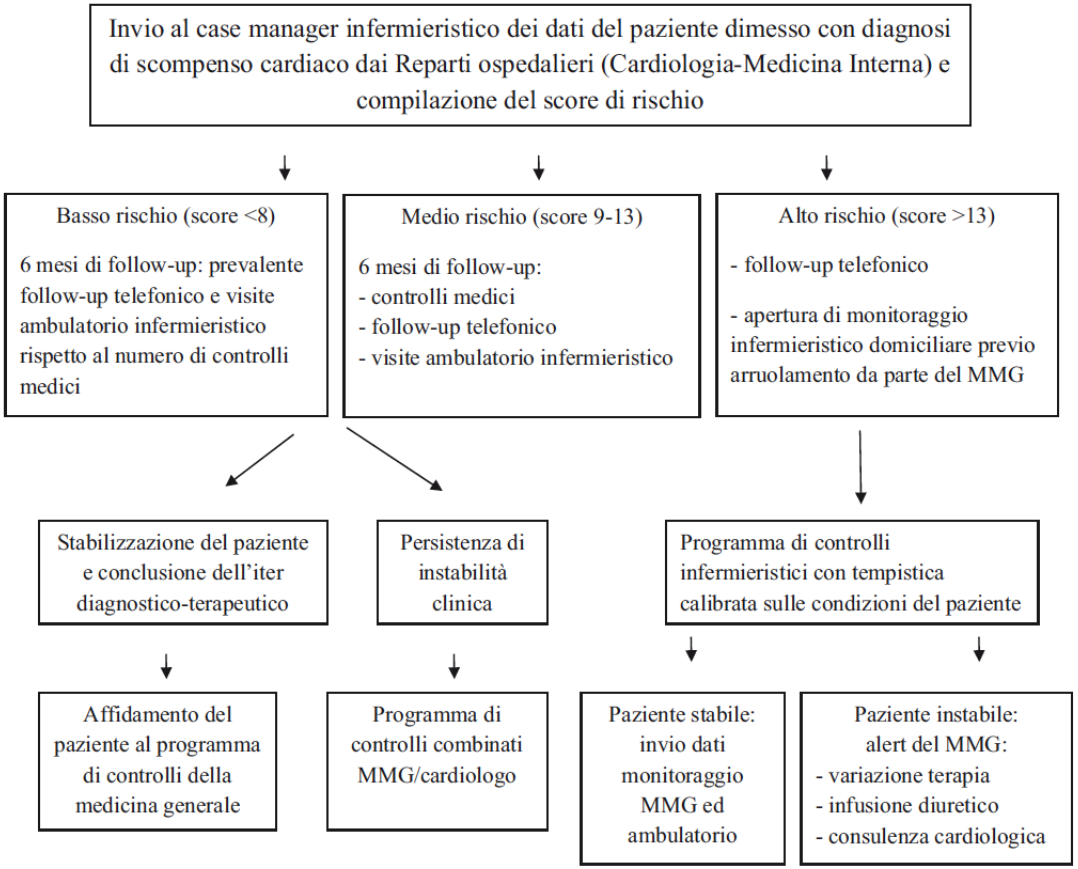
La gestione integrata fra ambulatorio scompenso e cure primarie per la personalizzazione del follow-up nel paziente con scompenso cardiaco

Renata De Maria[1], Gianfranco Misuraca[2], Massimo Milli[3], Alessandro Filippi[4]

[1]Istituto di Fisiologia Clinica del CNR, A.O. Niguarda Ca' Granda, Milano, [2]U.O. di Cardiologia, Ospedale SS. Annunziata, Cosenza, [3]U.O. di Cardiologia, Ospedale S. Maria Nuova, Firenze, [4]Area Cardiovascolare, Società Italiana di Medicina Generale (SIMG), Firenze

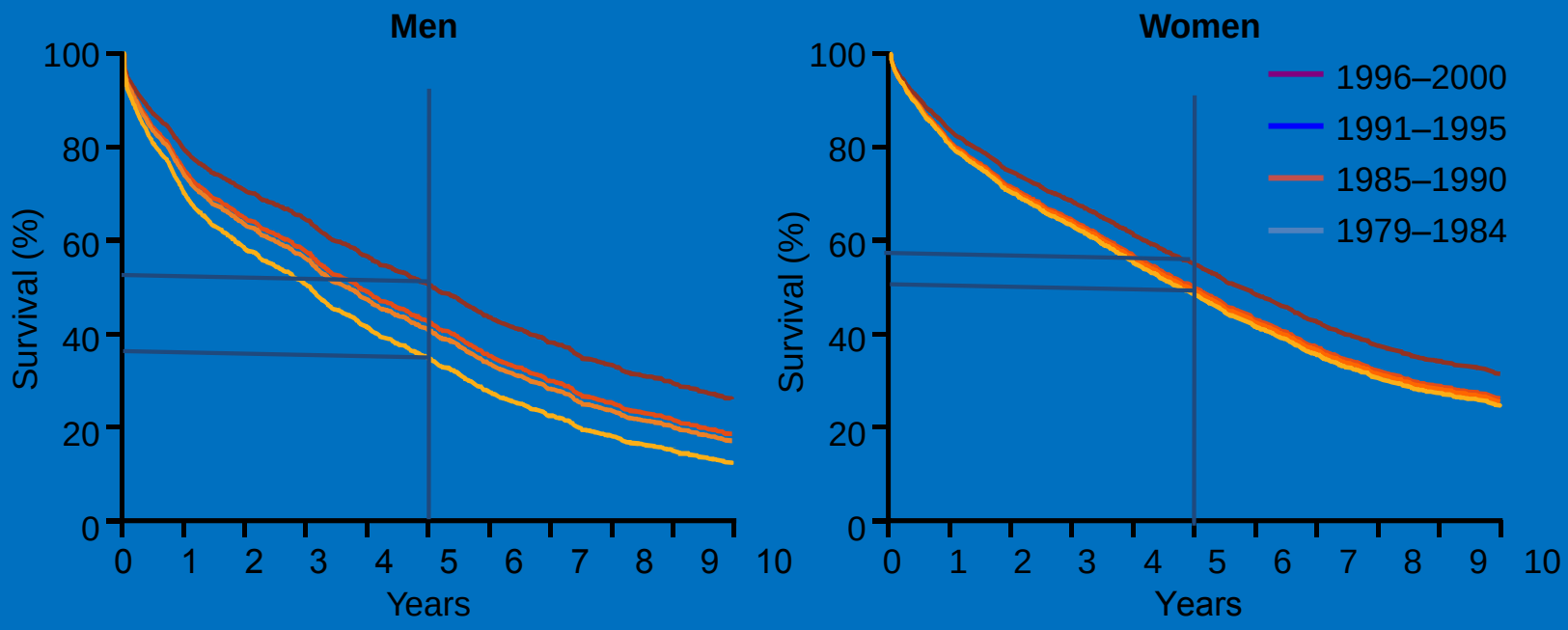
Variabili	Punteggio
BNP	
<350 pg/ml	1
350/1000 pg/ml	3
>1000 pg/ml	4
N. ricoveri per SC negli ultimi 6 mesi	
Nessun ricovero	1
1 ricovero	2
>1 ricovero	3
Classe NYHA	
II	1
II-III	2
III-IV	3
Frazione di eiezione	
>40%	1
30-40%	2
<30%	3
Funzionalità renale (clearance della creatinina)	
>60 ml/min	1
60-30 ml/min	2
<30 ml/min	3
Complessità assistenziale	
Bassa	1
Media	2
Alta	4
Score totale	
Basso rischio	<8
Medio rischio	9-12
Alto rischio	>13

SC = scompenso cardiaco.



Chronic HF survival rates have improved over time with the advent of new therapies

Temporal trends in 5-year mortality after the diagnosis of HF by gender show improvements in survival …

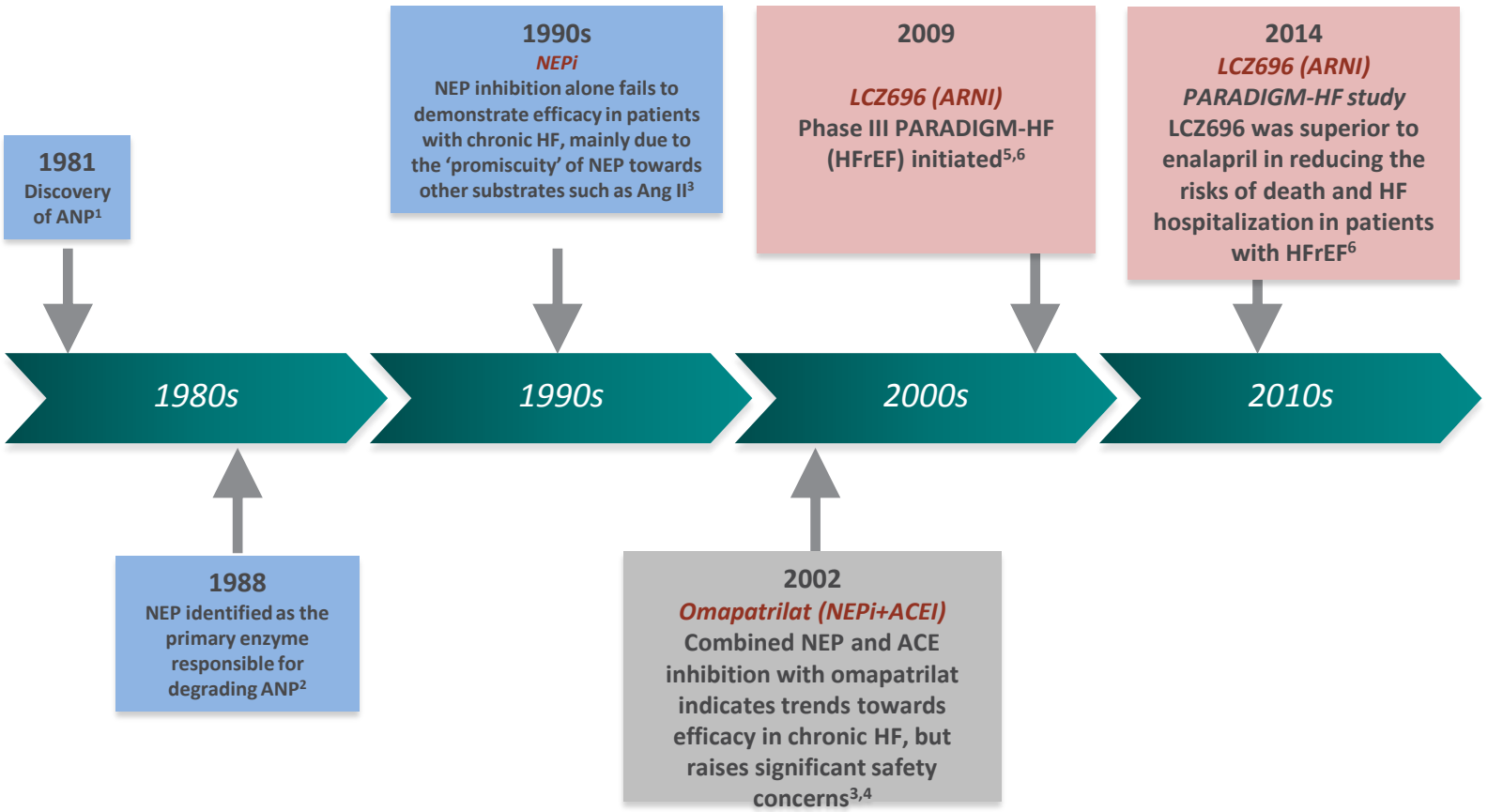


... nevertheless, the 5-year mortality rate remains high

Population-based cohort study analyzing data from the Rochester Epidemiology Project, Minnesota, USA. 4,537 patients with a diagnosis of HF between 1979 and 2000 were included. Framingham criteria and clinical criteria were used to validate the diagnosis.

Roger et al. JAMA 2004;292:344–50

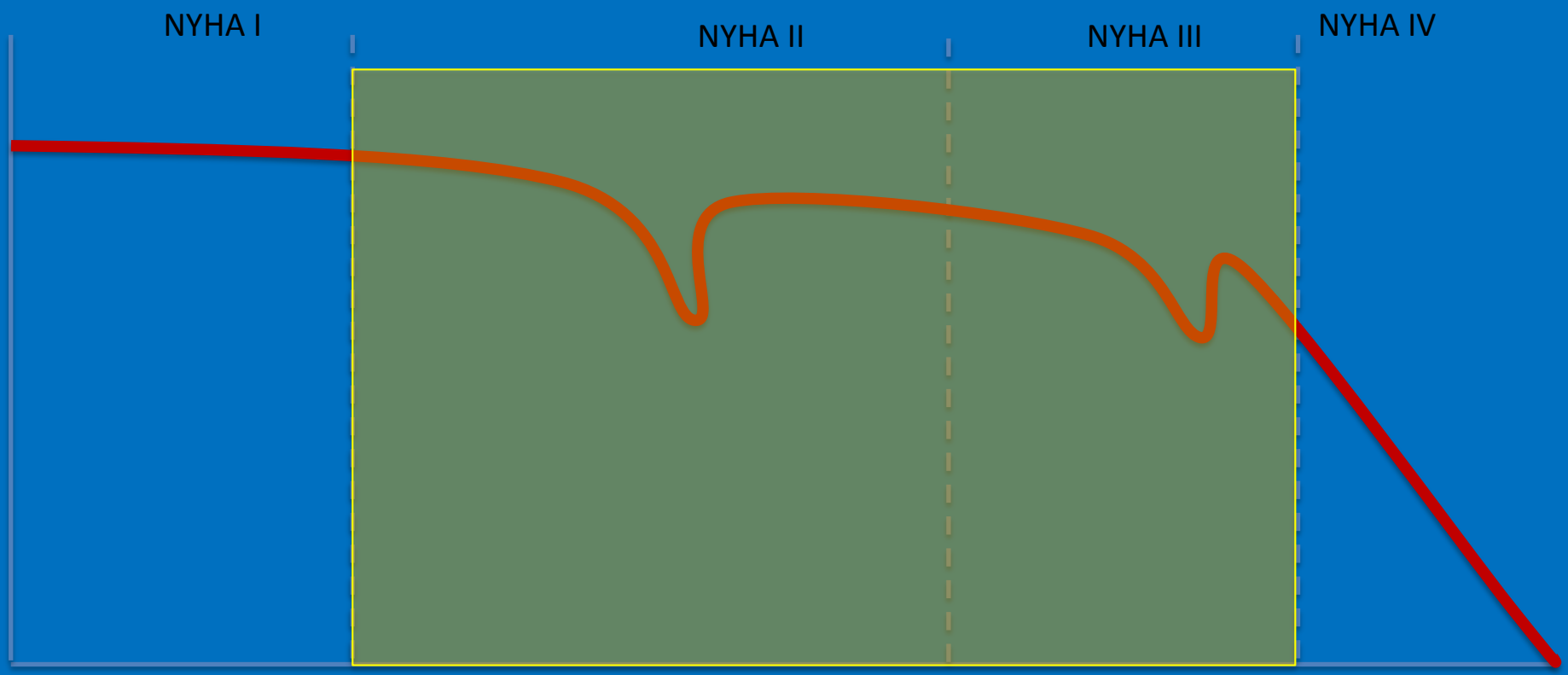
LCZ696 is the first agent to demonstrate a significant clinical benefit with NP system enhancement in chronic HF with reduced ejection fraction



ACE: angiotensin-converting enzyme; ACEI: angiotensin-converting-enzyme inhibitor; Ang: angiotensin; ANP: atrial natriuretic peptide; ARNI: angiotensin receptor neprilysin inhibitor; AT_1R: angiotensin II type 1 receptor; HF: heart failure; HFpEF: heart failure with preserved ejection fraction; HFrEF: heart failure with reduced ejection fraction; NEP: neprilysin; NEPi: neprilysin inhibition; NP: natriuretic peptide; NT-proBNP: N-terminal pro-B-type natriuretic peptide; PARADIGM-HF: Prospective comparison of ARNI with ACEI to Determine Impact on Global Mortality and morbidity in Heart Failure

1. de Bold et al. Life Sci 1981;28:89–94; 2. Sonnenberg et al. Peptides 1988;9:173–80; 3. Von Lueder et al. Pharmacol Ther 2014;144:41–9; 4. Packer et al. Circulation 2002;106:920–6; 5. McMurray et al. Eur J Heart Fail 2013;15:1062–73; 6. McMurray et al. N Engl J Med 2014;371:993–1004

EXPECTED DISEASE PROGRESSION BY ARNI

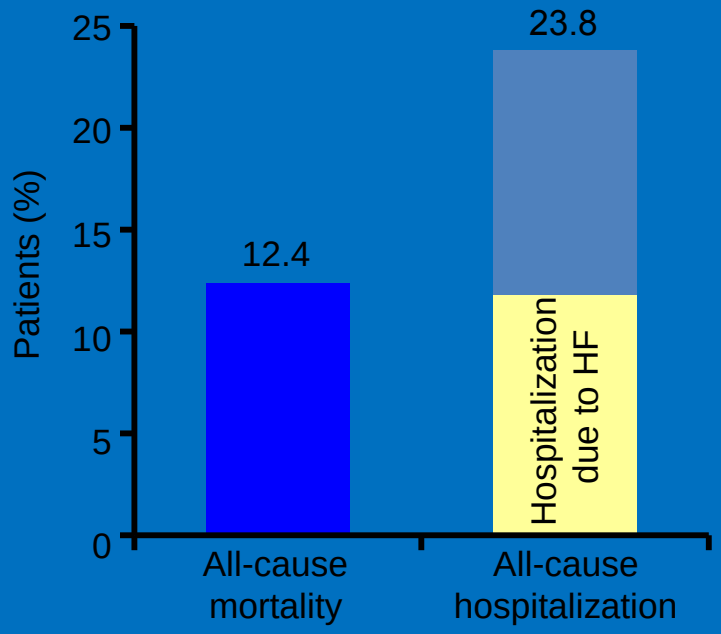


Outcomes for patients with HF are poor in clinical practice

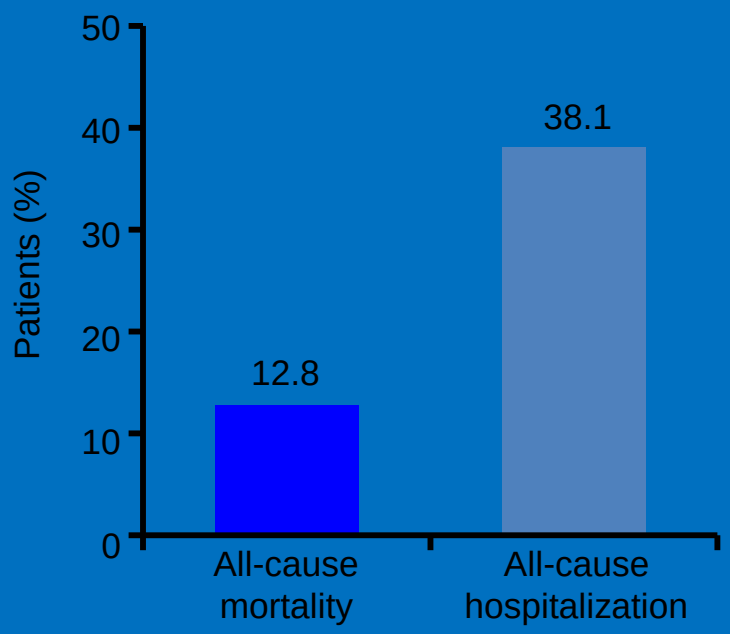
- HF mortality remains high, with ~50% of patients with HF dying within 5 years of diagnosis[1,2]

Chronic HF[3]

IN-CHF Registry
1-year follow-up (n=1,315 patients)



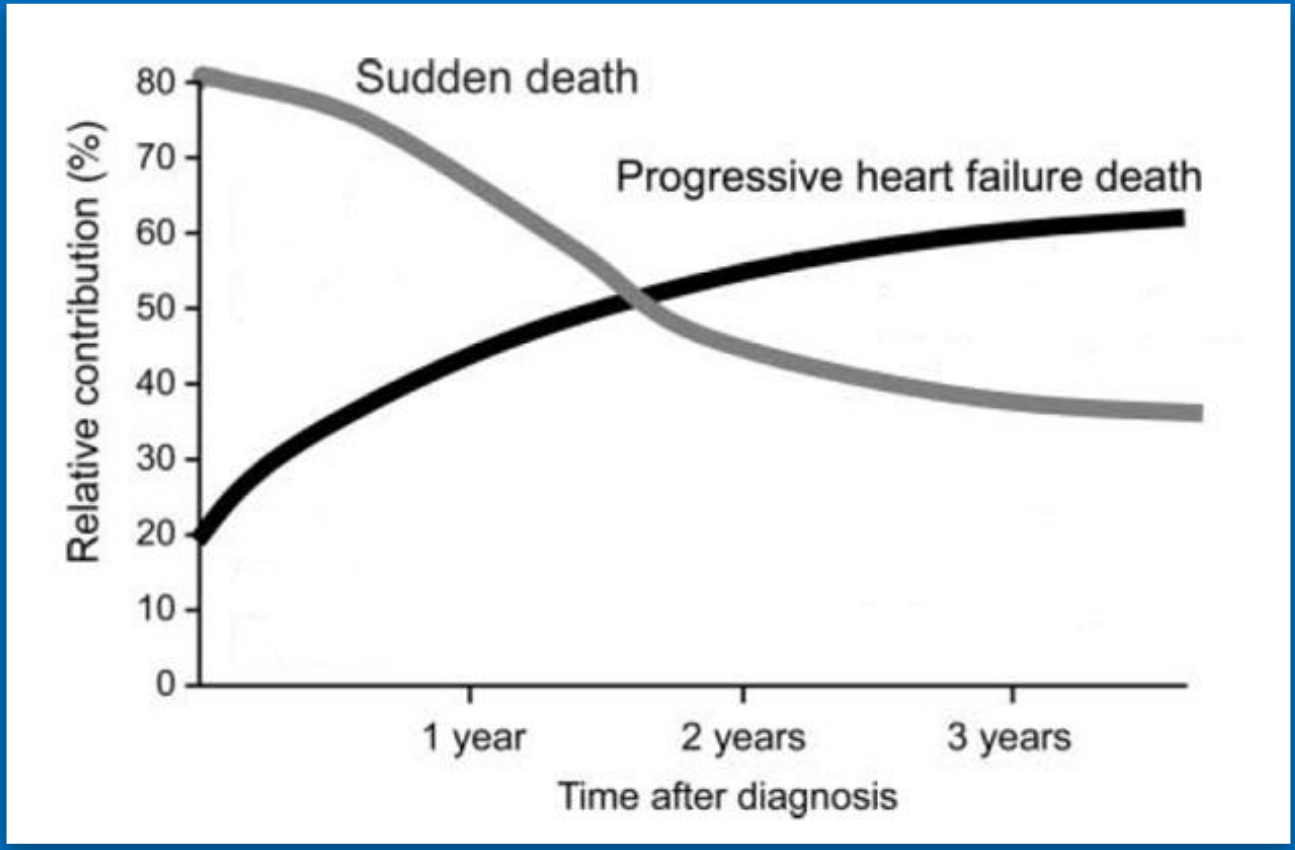
Acute HF[4]



*From hospital discharge; IN-CHF=Italian Network on Congestive Heart Failure

1. Roger et al. JAMA 2004;292:344–50; 2. Levy et al. N Engl J Med 2002;347:1397–402
3. Senni et al. J Cardiac Fail 2005;11:270–8; 4. Tavazzi et al. Eur Heart J 2006;27:1207–15

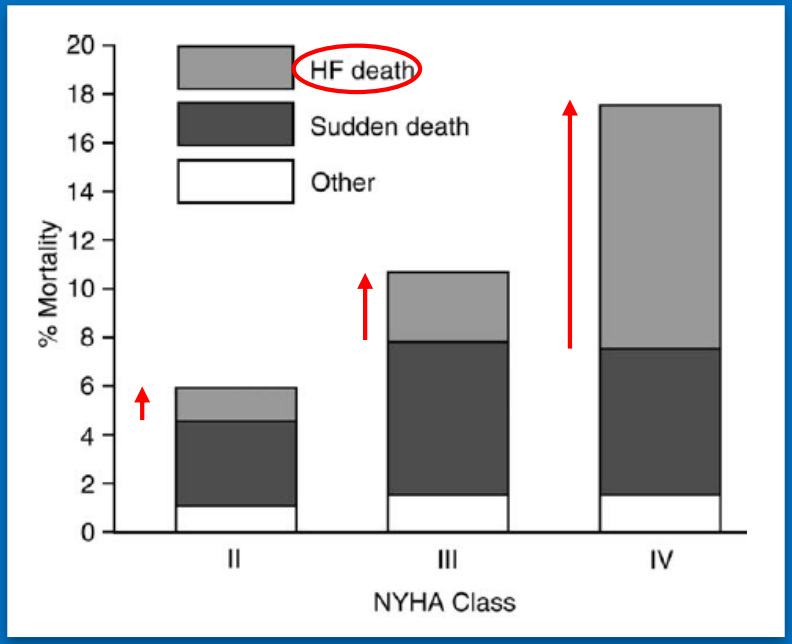
Morte improvvisa e per peggioramento di scompenso: incidenza relativa

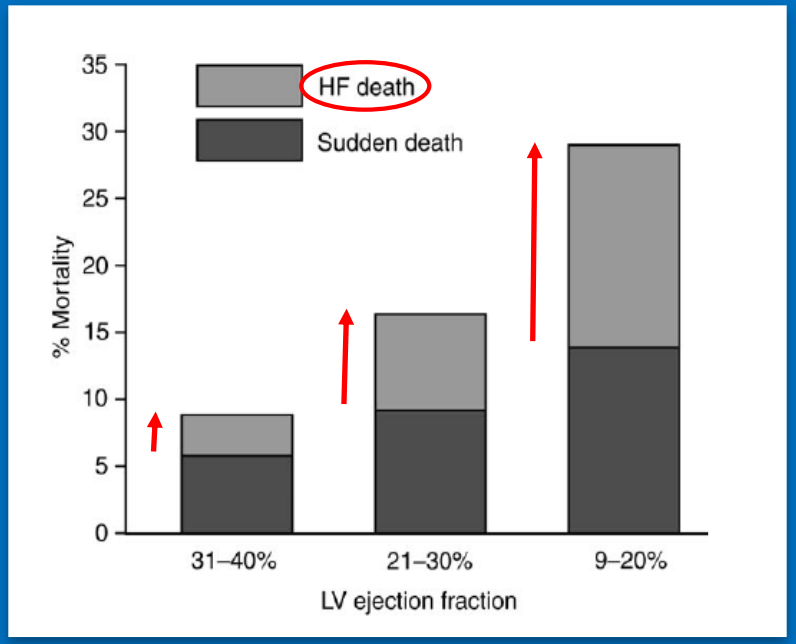


Willenheimer R. Eur. Heart J.Supplements 2006 (8) (Supplement C), C43-C50

Con il progredire della malattia

- Aumenta l'incidenza relativa della morte per peggioramento di scompenso

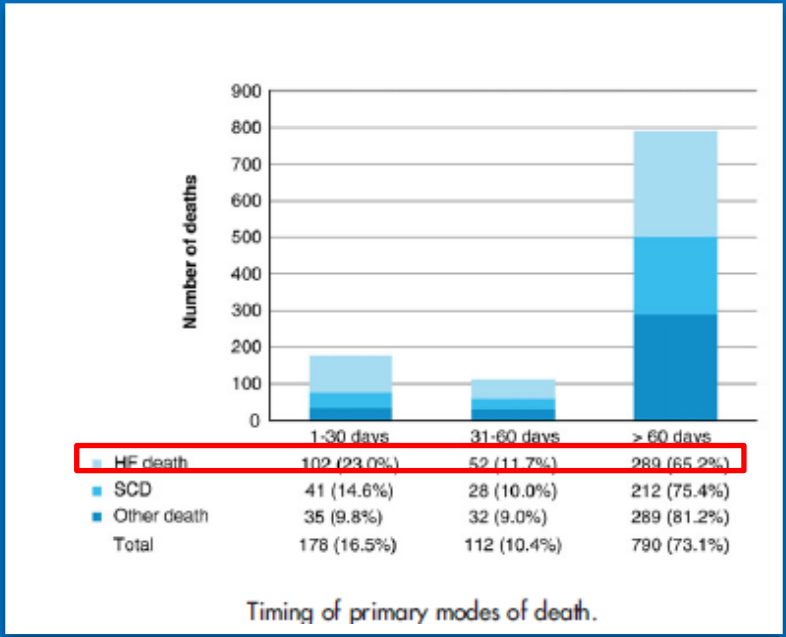




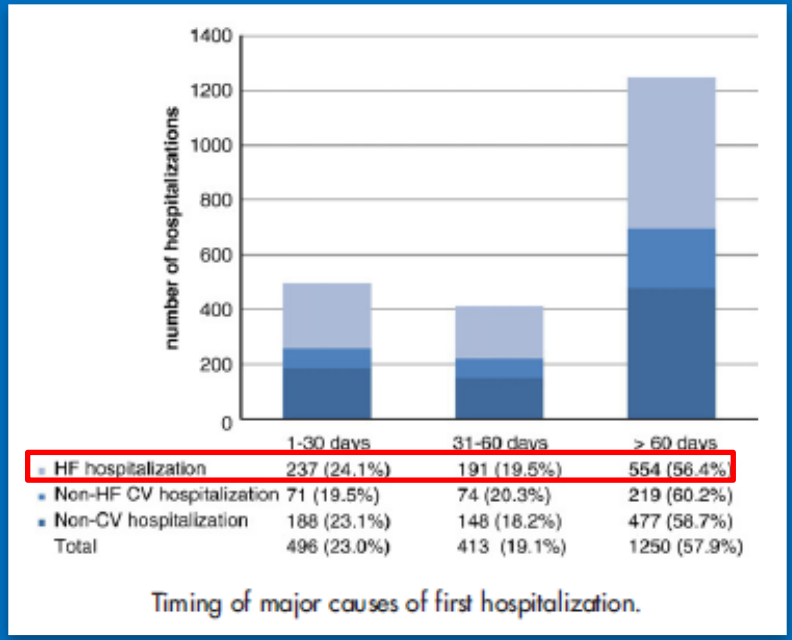
Vanoli et Al, Eur Heart Journal Suppl (2006) 8

Elevata incidenza di morte e ri-ospedalizzazioni post-dimissione nonostante le terapie ricevute in ospedale

- Causes of death and rehospitalization in patients hospitalized with worsening heart failure and reduced left ventricular ejection fraction: Results from efficacy of vasopressin antagonism in heart failure outcome study with tolvaptan (EVEREST) program.



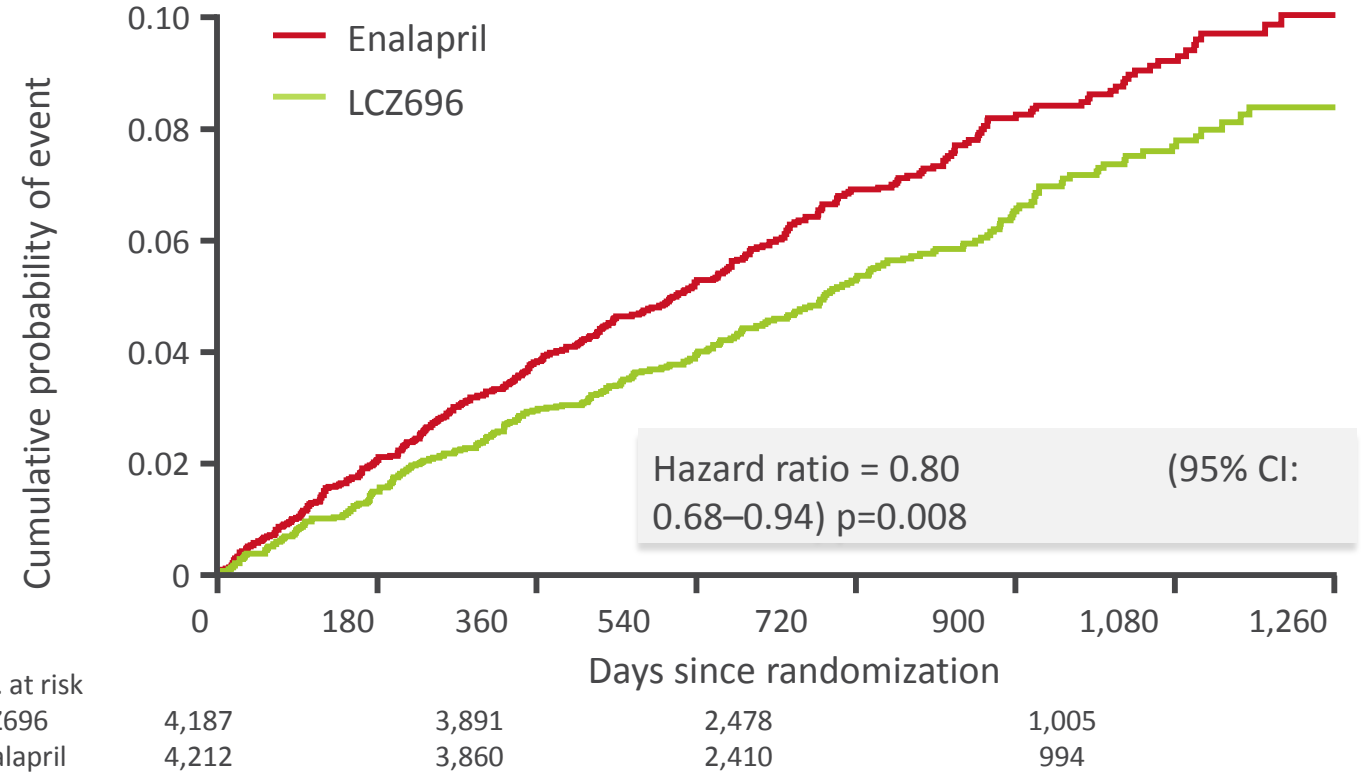
Timing of primary modes of death.



Timing of major causes of first hospitalization.

O'Connor C.M. et al Am. Heart J. 2010; 159:841-849.e1

LCZ696 significantly reduced the number of sudden cardiac deaths compared with enalapril



No. at risk				
LCZ696	4,187	3,891	2,478	1,005
Enalapril	4,212	3,860	2,410	994

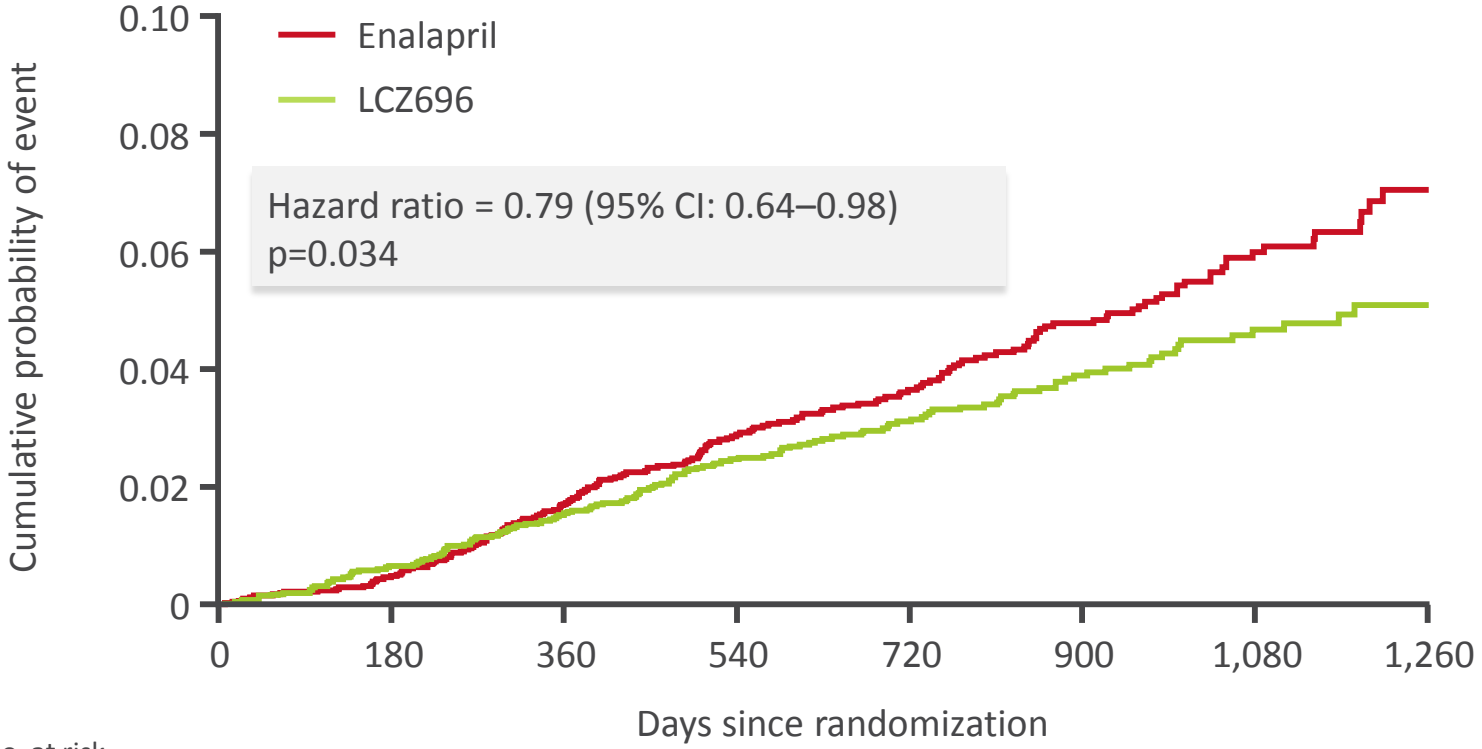
- Resuscitated sudden deaths* occurred in 16 patients receiving LCZ696 versus 28 patients receiving enalapril (HR 0.57, 95% CI: 0.31–1.04, p=0.07). Further, LCZ696 significantly reduced the risk of combined resuscitated and non-resuscitated sudden deaths by 22% when compared with enalapril (HR 0.78, 95% CI: 0.66–0.92, p=0.002)

*Resuscitated sudden deaths were defined as successful resuscitation following cardiac arrest

CI=confidence interval; HR=hazard ratio

Desai et al. Eur Heart J 2015

Death due to worsening of heart failure was significantly reduced by LCZ696 treatment compared with enalapril



No. at risk				
LCZ696	4,187	3,891	2,478	1,005
Enalapril	4,212	3,860	2,410	994

CI=confidence interval

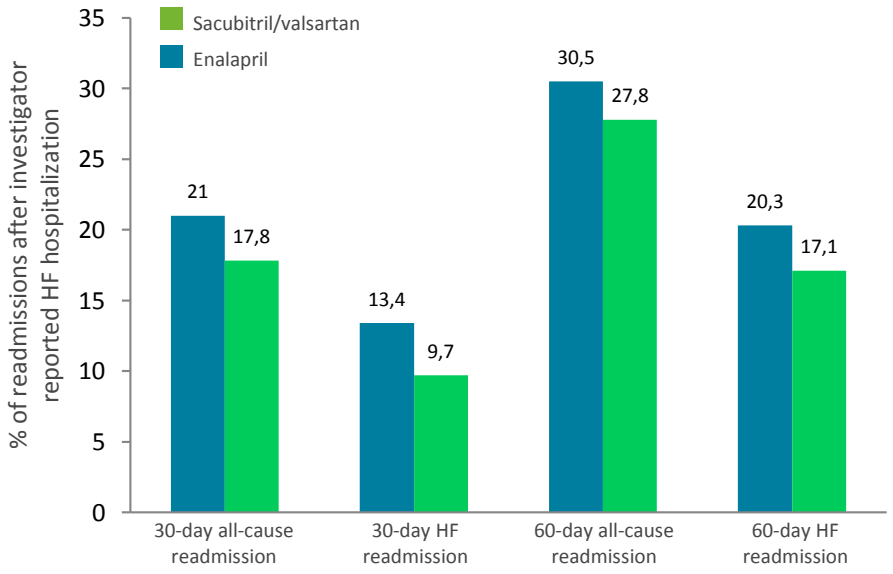
Desai et al. Eur Heart J 2015;

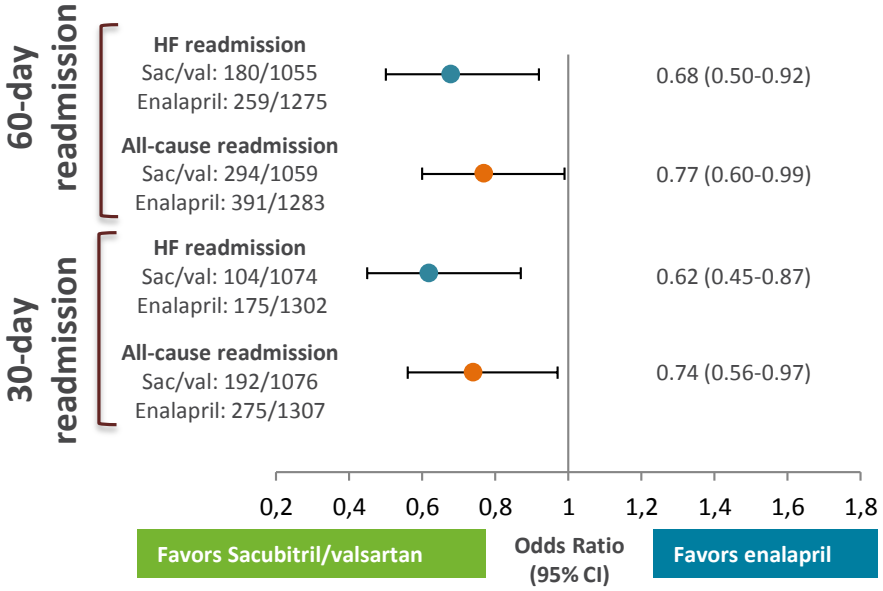
ESC GL objective: Prevent hospital admission

LCZ696 significantly reduced the rates of all-cause and HF readmissions

- Compared with enalapril, sacubitril/valsartan treatment significantly decreased the rates of readmission for any cause at 30 days (p=0.031) and readmission for HF at 30 days (p=0.006)
- Rates of both all-cause (p-0.045) and HF readmission (p=0.01) at 60 days were also significantly reduced with sacubitril/valsartan versus enalapril

Effect of sacubitril/valsartan treatment on readmission rates after investigator reported HF hospitalization





HF, heart failure

Desai et al., J Am Coll Cardiol. 2016;68(3):241-8


iStock
by Getty Images

SEMBRA FACILE….

- Autorizzazione del Servizio Farmaceutico
- Scheda del MMG
- Piano terapeutico
- Ritiro in Farmacia ASP
- Controlli clinici ed ematochimici

Conclusioni I°

La gestione dello scompenso cardiaco è un atto che deve prevedere la partecipazione sul territorio di diverse figure professionali (mediche e non-mediche).

Una attenta valutazione prognostica è la condizione indispensabile per una corretta gestione del follow-up del paziente con insufficienza cardiaca.

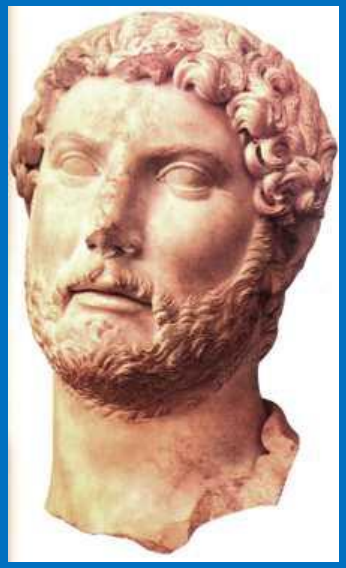
La differenzazione e l'individuazione di soggetti a basso ed alto rischio ci aiuterà nell'ottimizzazione della terapia e nel ricorso oculato al ricovero ospedaliero responsabile principale dei costi economici della IC.

Conclusioni II°

LA COMPETENZA dovrebbe essere ascoltata dagli amministratori per ottimizzare risorse e percorsi assistenziali.

Dovrebbero essere ascoltati gli **operatori di prima linea**, che hanno un chiaro quadro di cio' che accade sul territorio e negli ospedali, per adattare le risorse alla realta' locale.

Si dovrebbe finalmente strutturare una **rete per lo scompenso cardiaco**, in quanto non meno pericoloso dell'IMA…



“……Avrò in sorte di essere il più curato dei malati. Ma nessuno può superare i limiti prescritti dalla natura; le gambe gonfie non mi sostengono più nelle lunghe cerimonie di Roma;
mi sento soffocare; ed ho sessant’anni”.

da “Memorie di Adriano”, M. Yourcenar


GRAZIE
DELLA
ATTENZIONE