Gruppo di ricerca geriatrica

Journal Club, 23 agosto 2013

L'evoluzione del modello di ospedale negli ultimi 10 anni

Renzo Rozzini

Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- L'ospedale e innovazioni medico-sanitarie: missione e realtà
  - L'ospedale di oggi
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

Sommario

- **L'ospedale per acuti: scenari di ieri e attualità**
- L'ospedale e innovazioni medico-sanitarie: missione e realtà
  - L'ospedale di oggi
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

Shaping the future NHS: Long Term Planning for Hospitals and Related Services

Response to the Consultation Exercise on the Findings of The National Beds Inquiry

DH Department of Health

1. Maintain Current Direction

The balance of service objectives and settings would be maintained broadly as at present. There would be no attempt to transfer services from hospital into community settings and bed capacity in the acute sector would be maintained at current levels (in contrast to the historic trend of reducing hospital beds). In line with current policy however, available additional investment would go towards a higher rate of growth in elective surgery and a moderate increase in primary and community services beyond that required simply to respond to demographic pressures.

2. Acute bed focused Services

There would be an active policy to increase the number of hospital beds with a view to providing more responsive emergency and specialist care and avoiding premature discharge. In so far as resources permitted the delivery of a wider range of services (including rapid assessment and rehabilitation), these would be provided mainly in the hospital setting, the assumption being that co-ordination of services is best achieved by locating them together. Within given resource constraints, an increase in hospital beds would inevitably mean a slow-down in the expansion of primary and community services.

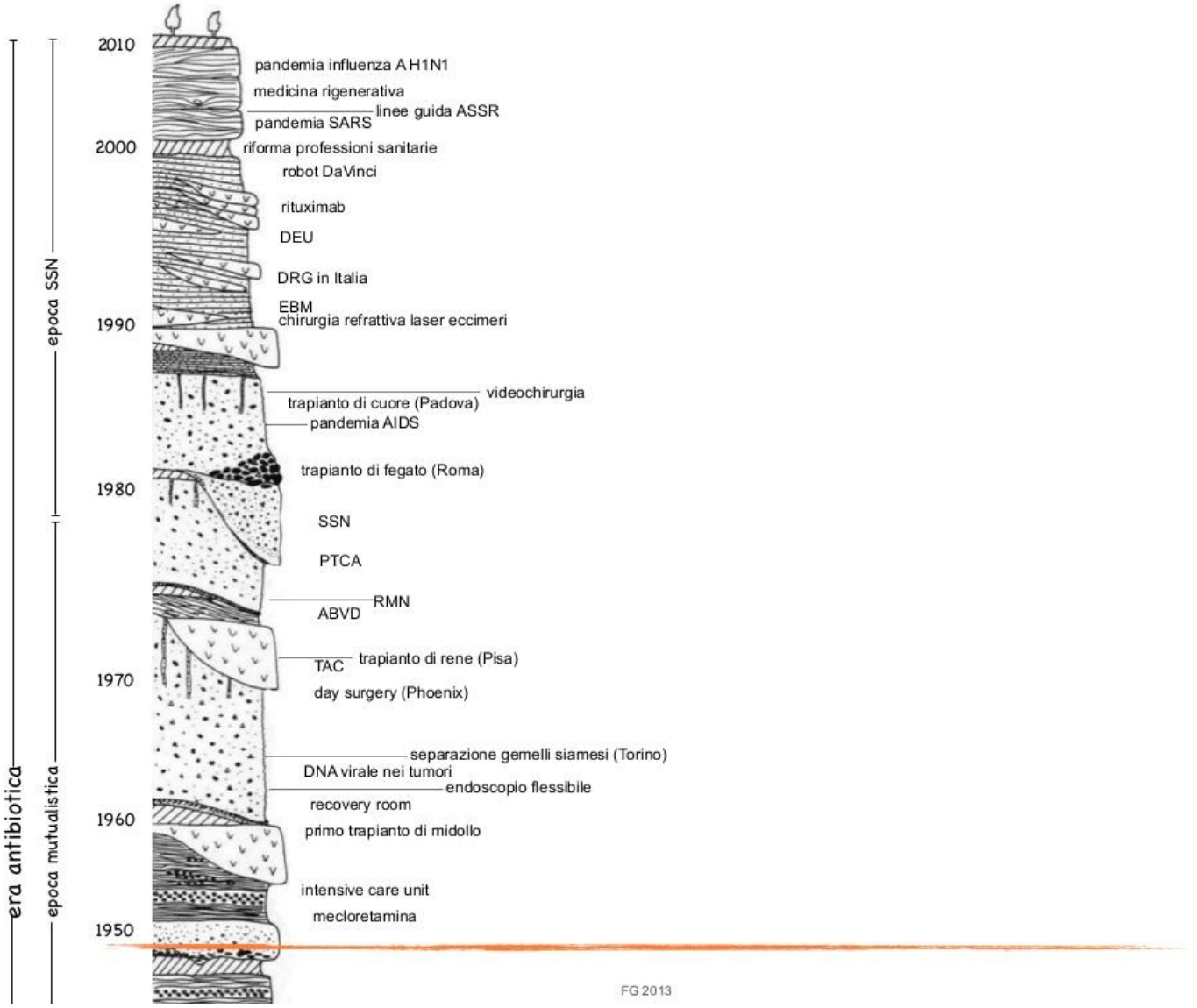
3. Care closer to home

There would be an active policy to build up Intermediate Care services (i.e. services designed to prevent avoidable hospital admissions to acute settings and to facilitate the transition from hospital to home and from medical dependence to functional independence). There would be a major expansion of both community health and social care. In contrast, acute hospital services would be focused on rapid assessment. Hospital day units and community based services would be aimed at maintaining people in their home communities in good health, thus preventing avoidable admissions, facilitating early discharge and active rehabilitation post-discharge and supporting a return to normal community-based living wherever possible. Over time "places" in community schemes might replace some acute hospital beds.

Sommario

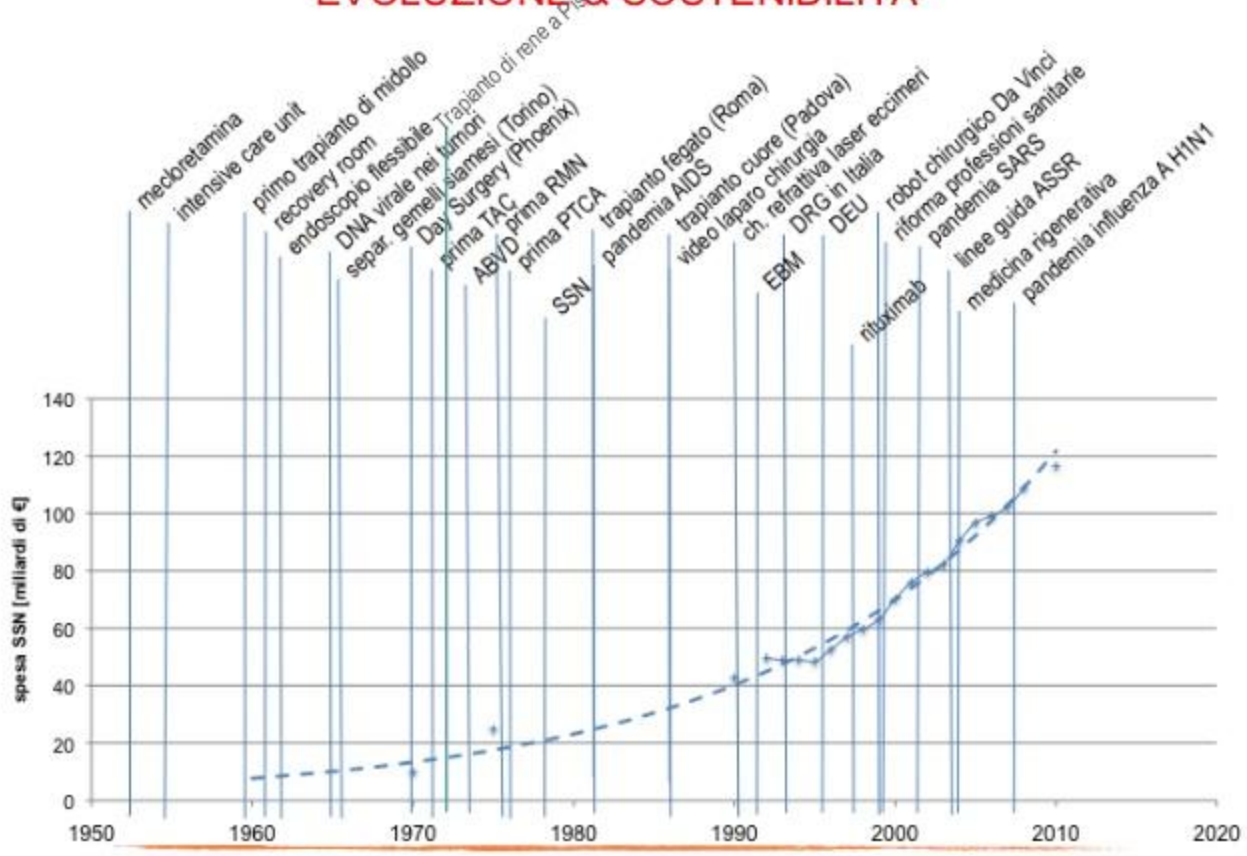
- L'ospedale per acuti: scenari di ieri e attualità
- **L'ospedale e innovazioni medico-sanitarie: missione e realtà**
  - L'ospedale di oggi
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

JULIO DE 1932 F.K.
HENRY FORD HOSPITAL DETROIT


era antibiotica
epoca mutualistica
epoca SSN
2010
2000
1990
1980
1970
1960
1950
pandemia influenza A H1N1
medicina rigenerativa
linee guida ASSR
pandemia SARS
riforma professioni sanitarie
robot DaVinci
rituximab
DEU
DRG in Italia
EBM
chirurgia refrattiva laser eccimeri
videochirurgia
trapianto di cuore (Padova)
pandemia AIDS
trapianto di fegato (Roma)
SSN
PTCA
RMN
ABVD
trapianto di rene (Pisa)
TAC
day surgery (Phoenix)
separazione gemelli siamesi (Torino)
DNA virale nei tumori
endoscopio flessibile
recovery room
primo trapianto di midollo
intensive care unit
mecloretamina

Farrow
RMC
KMBR
ARCHITECTS PLANNERS INC
DUNT

EVOLUZIONE & SOSTENIBILITÀ



Inoltre….

L'ospedale del futuro è senza carta e penna

Addio alle vecchie cartelle cliniche cartacee: i dispositivi elettronici migliorano la qualità del servizio contenendo i costi.

Il primo Report "The Future Hospital. The progressive case for change" (NHS-12) illustra i necessari cambiamenti nella rete ospedaliera, con effetti di ampia portata sulla localizzazione e sulle funzioni degli ospedali "distrettuali".

Gli obiettivi dell'Ospedale del futuro sono:

-l'approccio di public value: si riconosce all'Ospedale del NHS un public value, vale a dire un valore che riguarda sia il momento attuale che per le generazioni future. Esempi di public value sono lo sfruttamento di un terreno di proprietà collettiva, oppure la televisione pubblica (BBC), espressione dell'equilibrio fra gli interessi immediati dell'ascoltatore, i costi sostenuti dal cittadino che paga le tasse e la funzione educativa rispetto alla popolazione.

-I risultati in termini di salute (outcome), attraverso il soccorso, l'azione vera e propria del "salvare" vite umane, il miglioramento dei risultati dei trattamenti, l'aumento dell'efficienza e dell'appropriatezza clinica e la necessità di affrontare i bisogni futuri adattandosi al mutamento degli scenari socio-demografici ed epidemiologici.

-La qualità e l'accessibilità dei servizi, la possibilità di scegliere e di personalizzare l'assistenza.

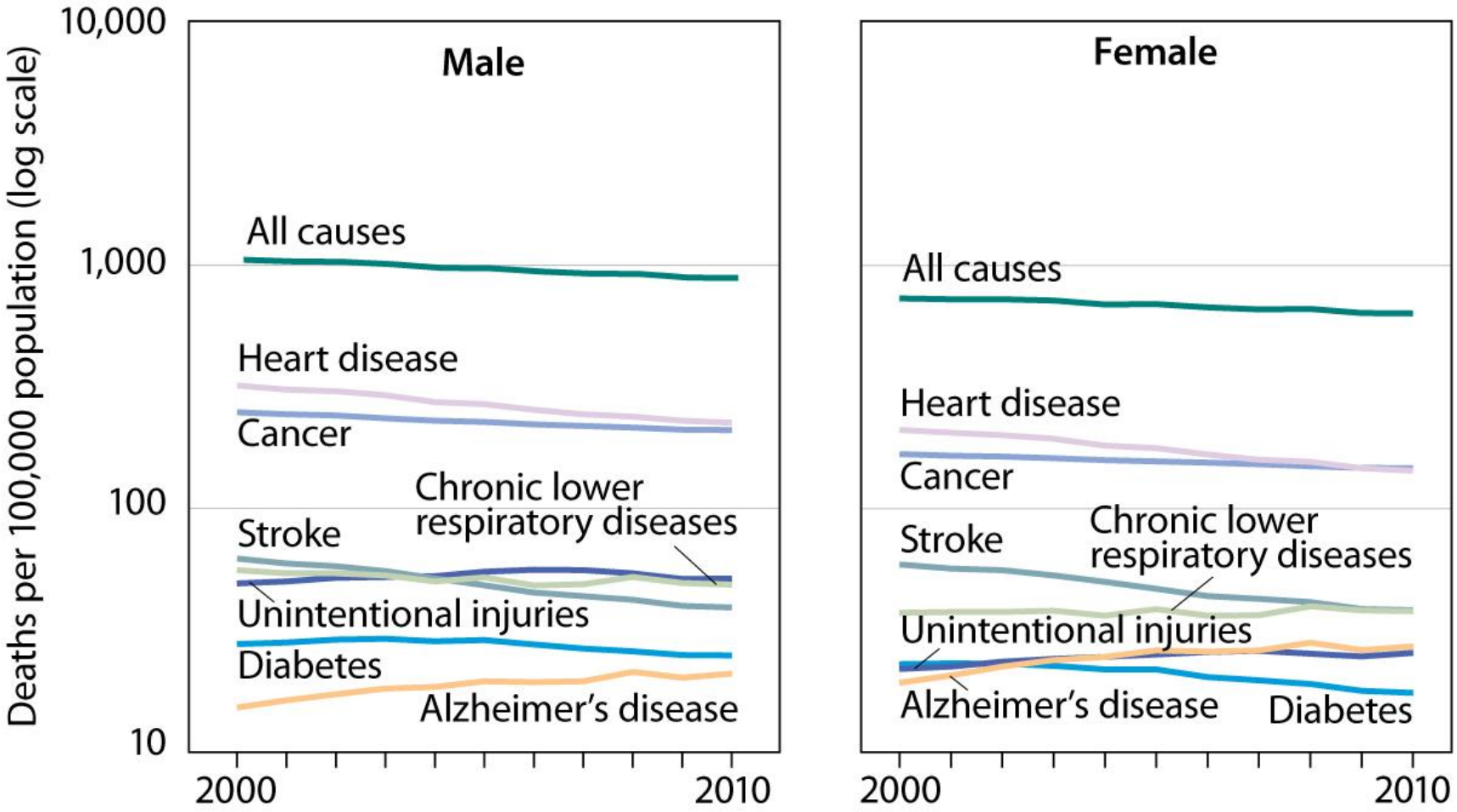
-L'equità e la fiducia: nonostante il NHS si basi sul principio di eguaglianza ed equità, è noto, anche nel nostro paese, come il livello socio-economico e culturale sia ancora determinante in termini di accesso ai servizi sanitari; inoltre potersi "fidare" ed "essere soddisfatti" del NHS contribuisce ad inserire il sistema sanitario in un ambito più ampio che ha a che fare con l'identità nazionale e locale, con le alleanze socio-politiche, con il coinvolgimento e le aspettative dei cittadini, dei pazienti e degli operatori.

Pertanto i cambiamenti che il sistema deve affrontare sono relativi al miglioramento della sicurezza e dell'accesso, all'aumento dell'efficienza e della responsabilità, al rafforzamento della prevenzione, alla riduzione dell'iniquità e delle disuguaglianze.

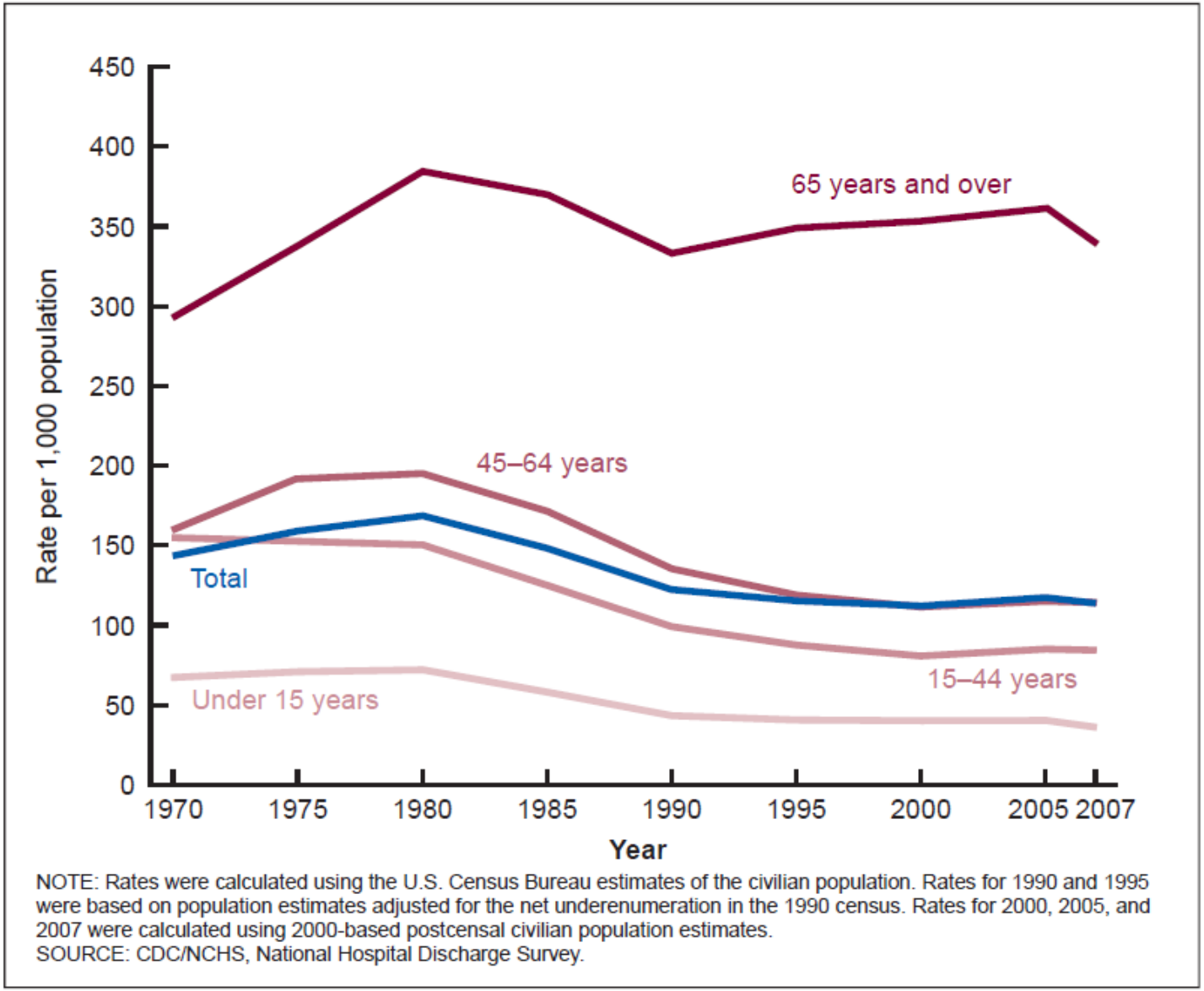
Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- **L'ospedale e innovazioni medico-sanitarie: missione e realtà**
  - **L'ospedale di oggi**
    - **Epidemiologia nosografica**
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

Death rates for all ages



NOTES: Rates are age-adjusted. Cause of death is coded according to ICD–10.
SOURCE: CDC/NCHS, *Health, United States, 2012*, Figure 3. Data from the National Vital Statistics System.



NOTE: Rates were calculated using the U.S. Census Bureau estimates of the civilian population. Rates for 1990 and 1995 were based on population estimates adjusted for the net underenumeration in the 1990 census. Rates for 2000, 2005, and 2007 were calculated using 2000-based postcensal civilian population estimates.
SOURCE: CDC/NCHS, National Hospital Discharge Survey.

Figure 1. Hospitalization rates, by age: United States, 1970–2007

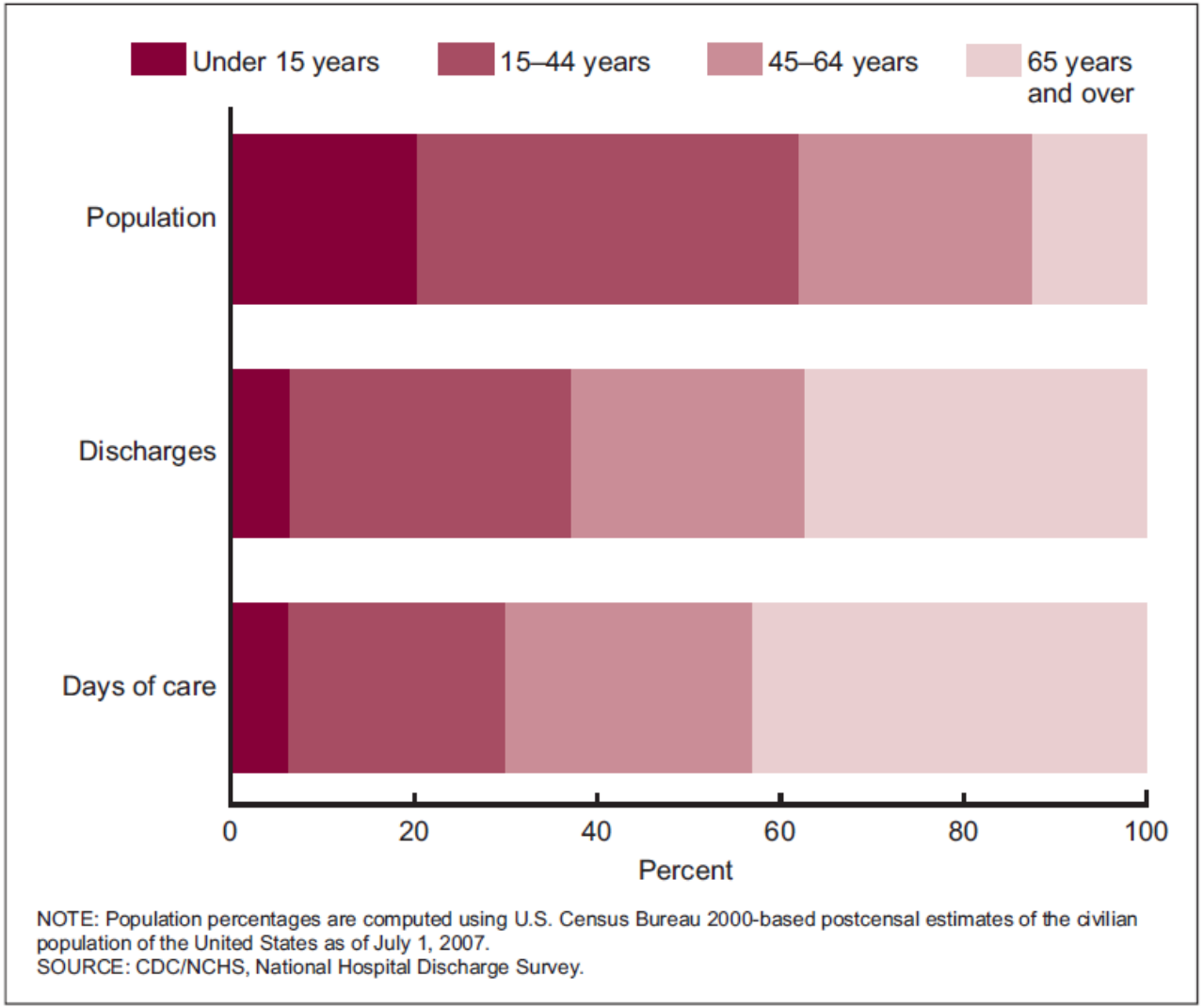
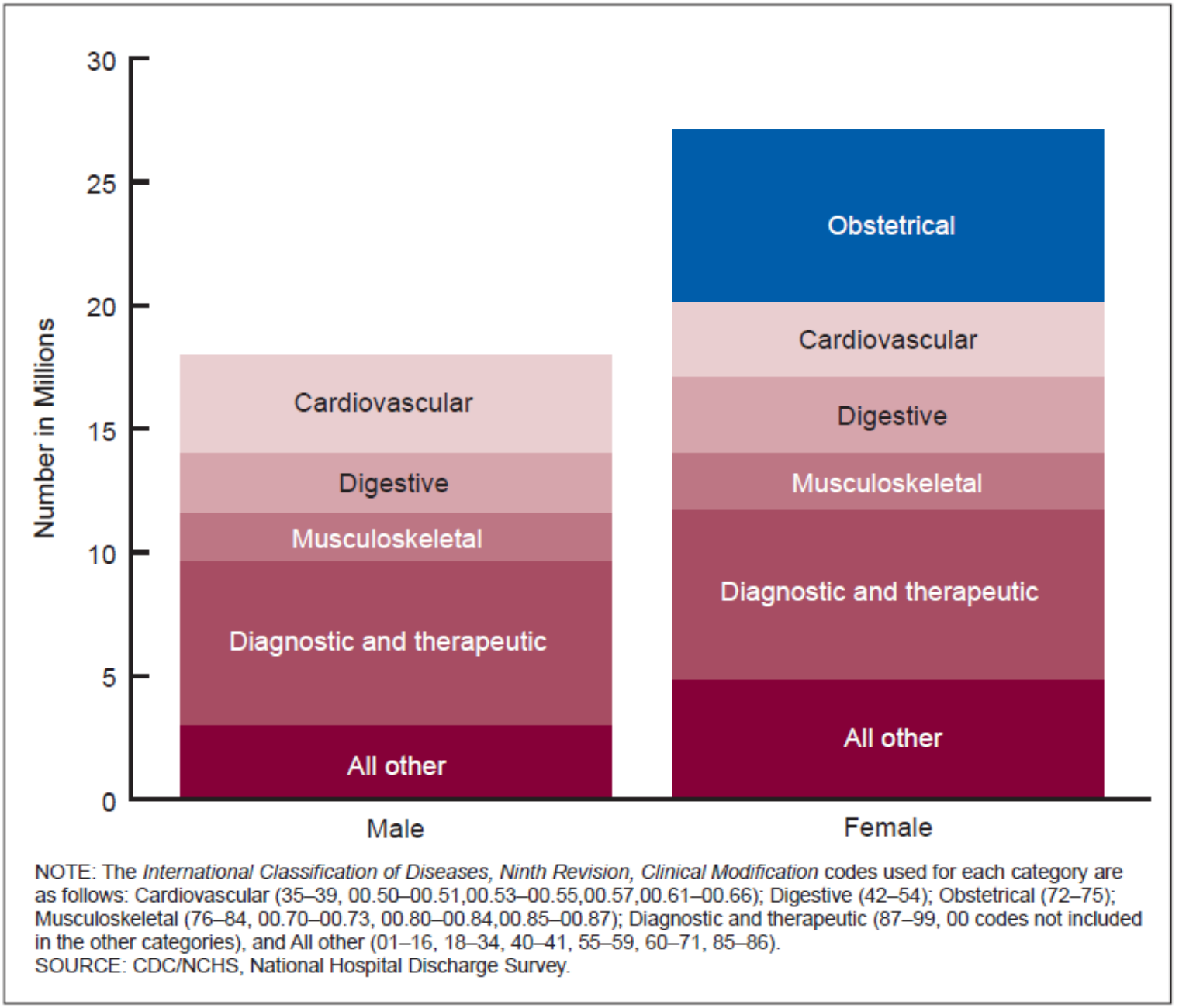


Figure 2. Distribution of civilian population, hospital discharges, and days of care, by age: United States, 2007



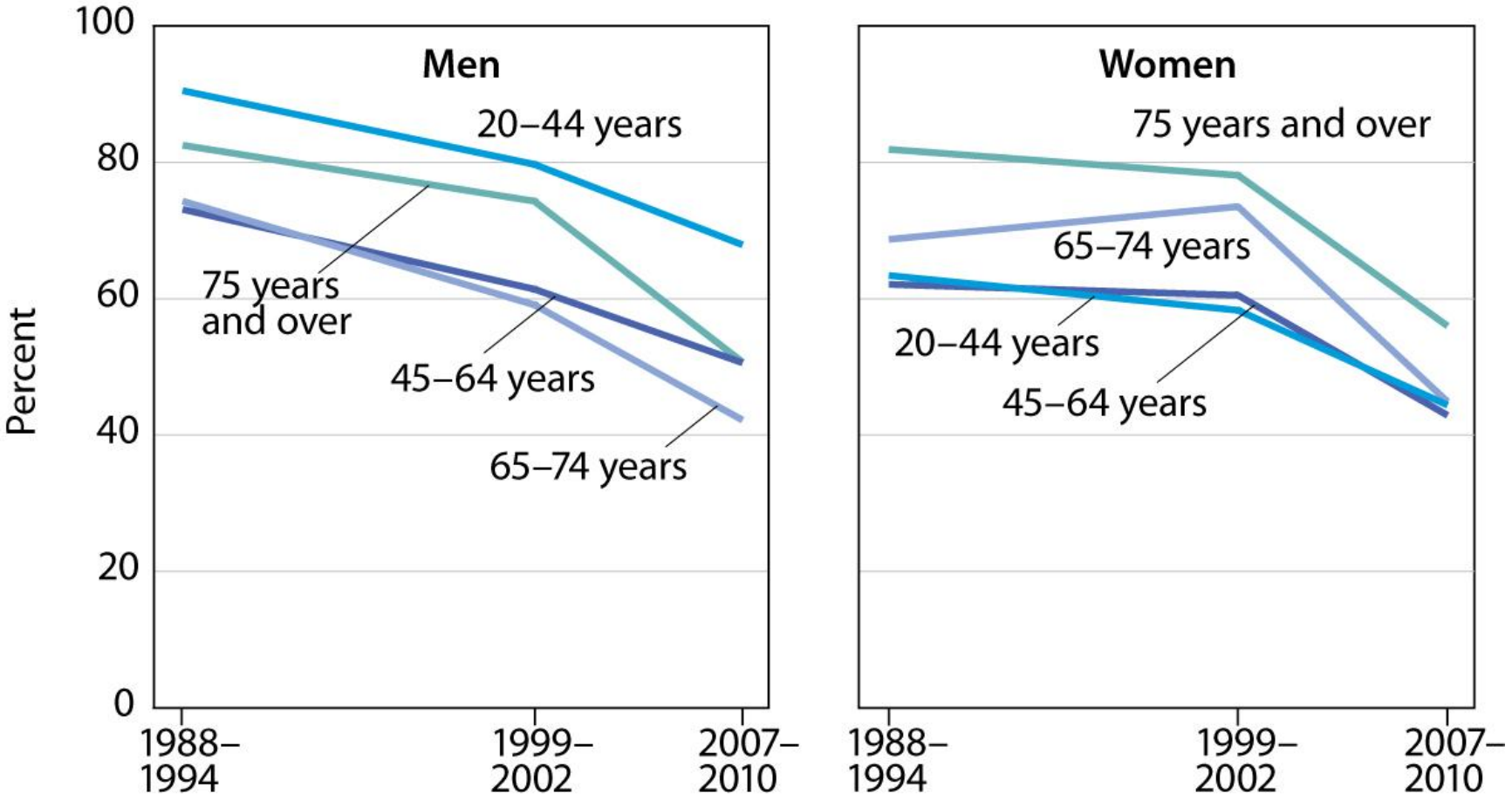
NOTE: The *International Classification of Diseases, Ninth Revision, Clinical Modification* codes used for each category are as follows: Cardiovascular (35–39, 00.50–00.51,00.53–00.55,00.57,00.61–00.66); Digestive (42–54); Obstetrical (72–75); Musculoskeletal (76–84, 00.70–00.73, 00.80–00.84,00.85–00.87); Diagnostic and therapeutic (87–99, 00 codes not included in the other categories), and All other (01–16, 18–34, 40–41, 55–59, 60–71, 85–86).
SOURCE: CDC/NCHS, National Hospital Discharge Survey.

Figure 4. All-listed inpatient procedures, by sex: United States, 2007

Sommario

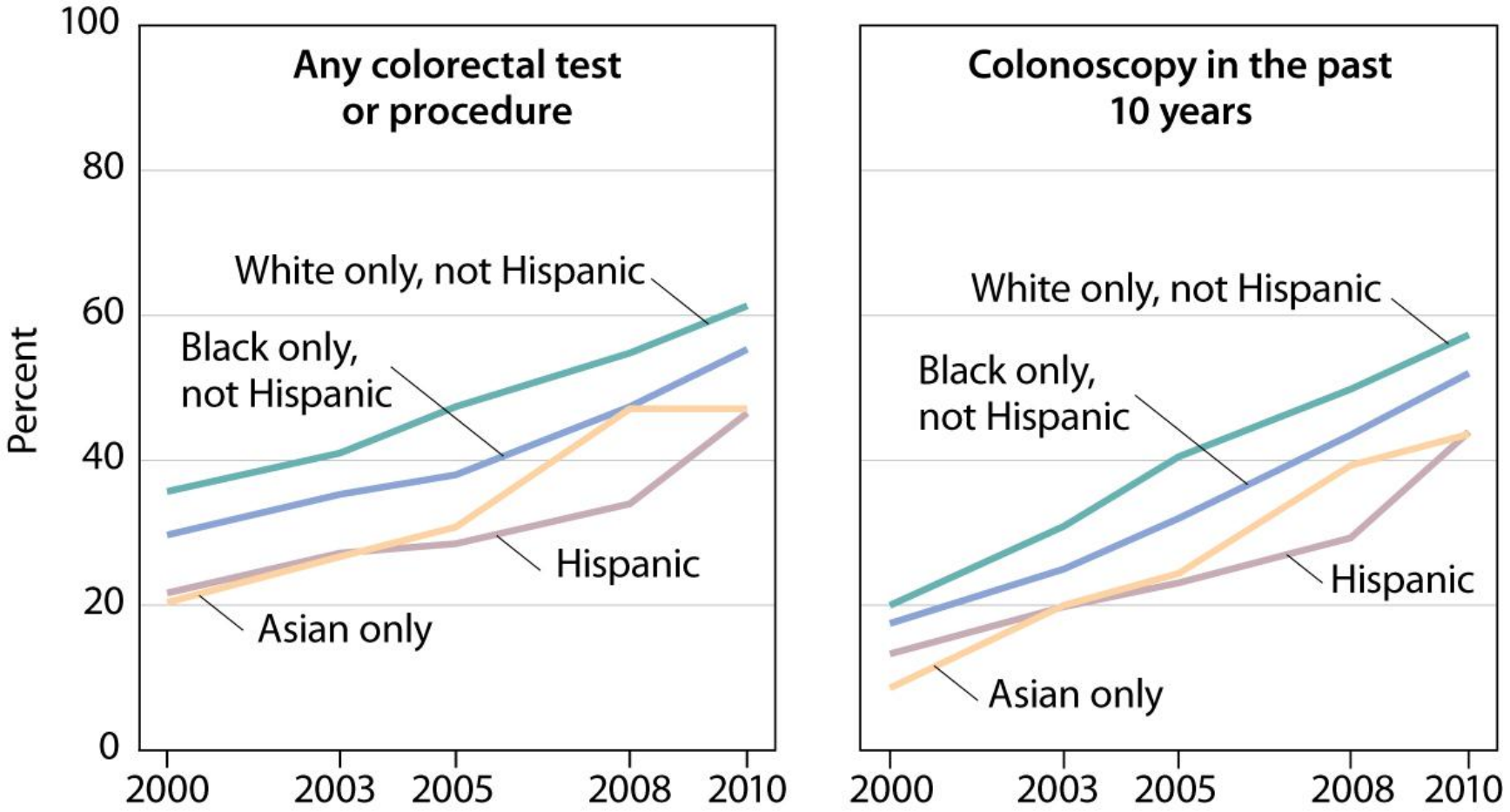
- L'ospedale per acuti: scenari di ieri e attualità
- **L'ospedale e innovazioni medico-sanitarie: missione e realtà**
  - **L'ospedale di oggi**
    - Epidemiologia nosografica
    - **Territorio e prevenzione**
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

Uncontrolled high blood pressure for adults with hypertension



NOTE: Uncontrolled high blood pressure is a measured systolic blood pressure of at least 140 mm Hg or a measured diastolic blood pressure of at least 90 mm Hg among those with measured high blood pressure or who reported taking antihypertensive medication.
SOURCE: CDC/NCHS, *Health, United States, 2012*, Figure 9. Data from the National Health and Nutrition Examination Survey.

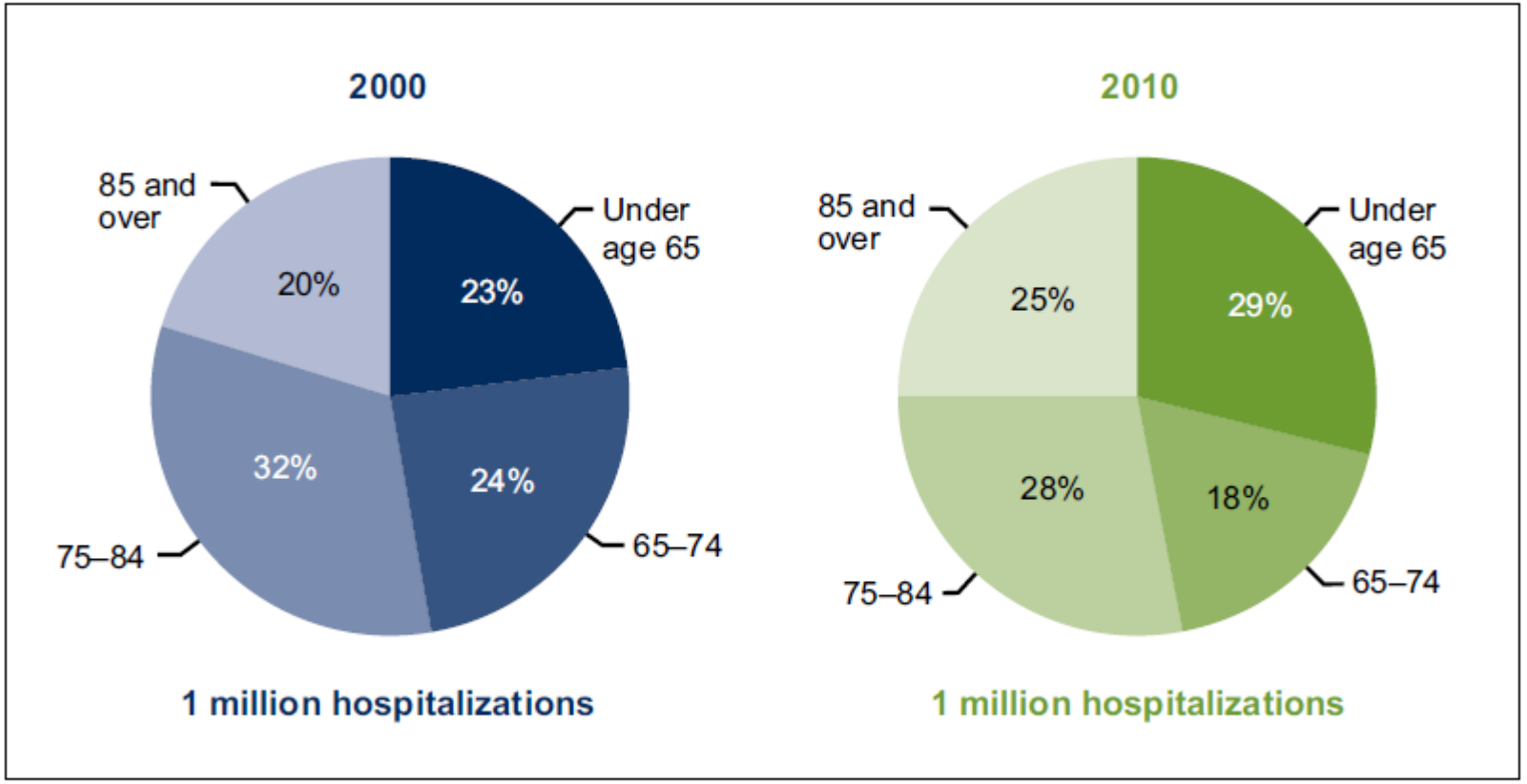
Colorectal tests or procedures



NOTE: The colonoscopy estimate for Asian adults in 2000 has a relative standard error of 20%–30%.
SOURCE: CDC/NCHS, *Health, United States, 2012*, Figure 13. Data from the National Health Interview Survey.

Did the number and age distribution of patients hospitalized for CHF change from 2000 to 2010?

Figure 1. Percent distribution of hospitalizations for congestive heart failure, by age in years: United States, 2000 and 2010



NOTES: Changes in the percentages for each age group shown were statistically significant at the 0.05 level using a weighted least squares regression method to measure linear trends over time. Data from all years were included in this test. Estimates may not add to 100% due to rounding.

SOURCE: CDC/NCHS, National Hospital Discharge Survey, 2000–2010.

Did the rate of hospitalization for CHF change from 2000 to 2010?

Table. Rates for congestive heart failure hospitalization, by age in years: United States, 2000 and 2010

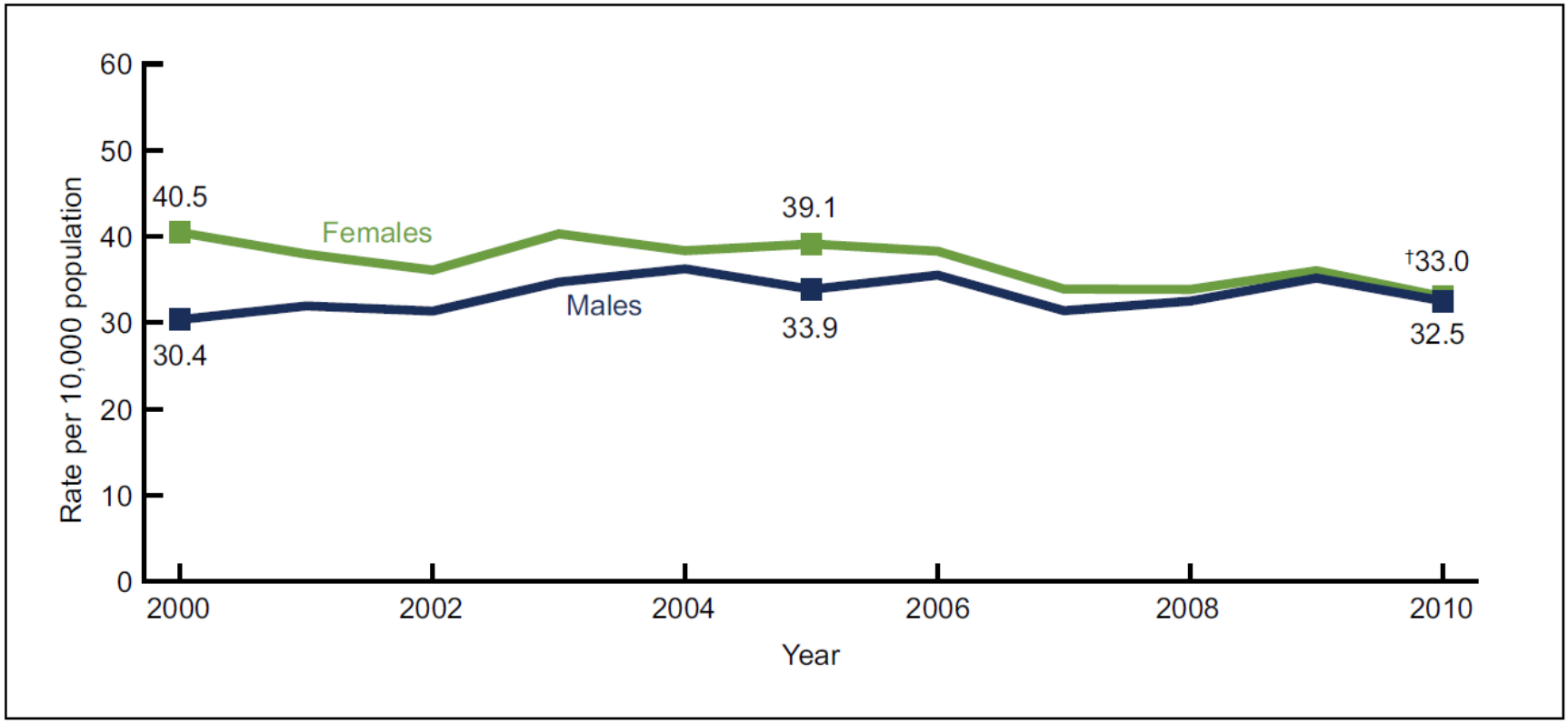
	2000	2010
	Rate per 10,000 population	
Total	35.5	32.8
Under age 65†	9.4	10.8
65 and over†	218.6	177.7
65–74†	130.3	85.7
75–84	260.2	214.6
85 and over†	475.9	430.7

† Change from 2000 to 2010 was statistically significant at the 0.05 level using a weighted least squares regression method, including all years of data, to measure linear trends over time.

SOURCE: CDC/NCHS, National Hospital Discharge Survey, 2000–2010.

Did trends in congestive heart failure hospitalization rates differ for males and females from 2000 to 2010?

Figure 2. Congestive heart failure hospitalization rates for males and females: United States, 2000–2010

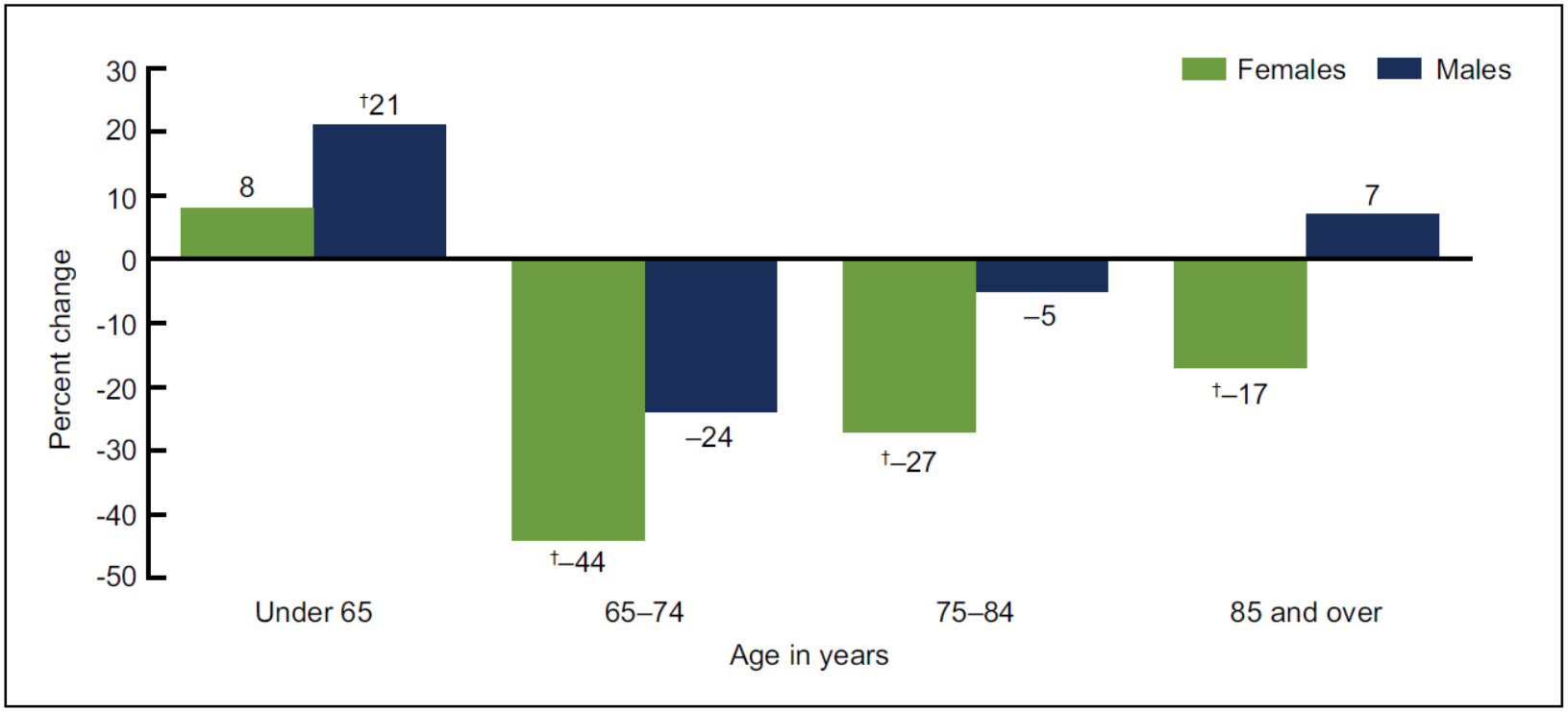


† Change was statistically significant at the 0.05 level using a weighted least squares regression method, including data from all years, to measure linear trends over time from 2000 to 2010.

SOURCE: CDC/NCHS, National Hospital Discharge Survey, 2000–2010.

Were the changes in the rate of congestive heart failure hospitalization the same for males and females under and over age 65?

Figure 3. Percent change in congestive heart failure hospitalization rates, by sex and age: United States, 2000 to 2010

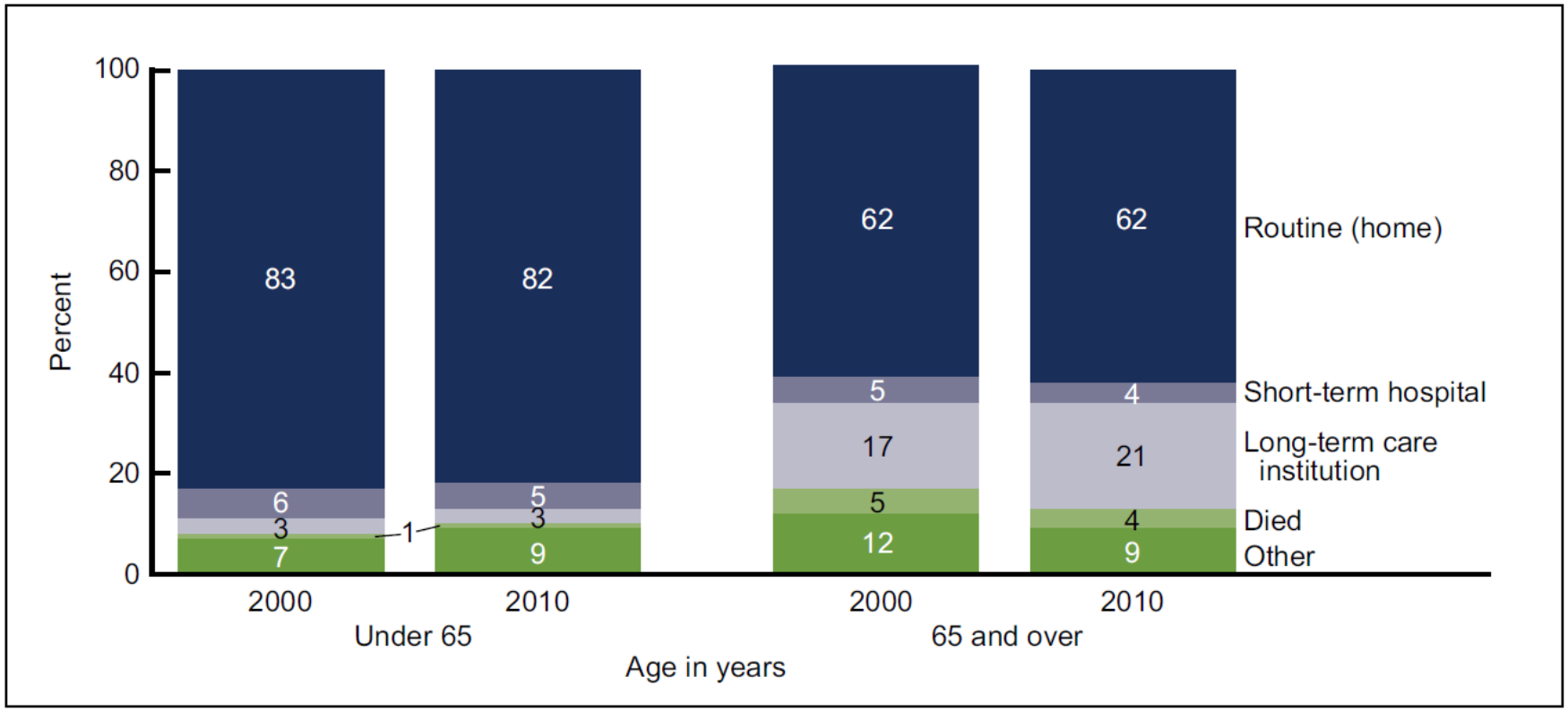


† Change from 2000 to 2010 was statistically significant at the 0.05 level using a weighted least squares regression method to measure linear trends over time. Data for every year were included in this test.

SOURCE: CDC/NCHS, National Hospital Discharge Survey, 2000–2010.

Was there a change in discharge status of congestive heart failure patients from 2000 to 2010?

Figure 4. Discharge disposition of inpatients hospitalized for congestive heart failure, by age: United States, 2000 and 2010

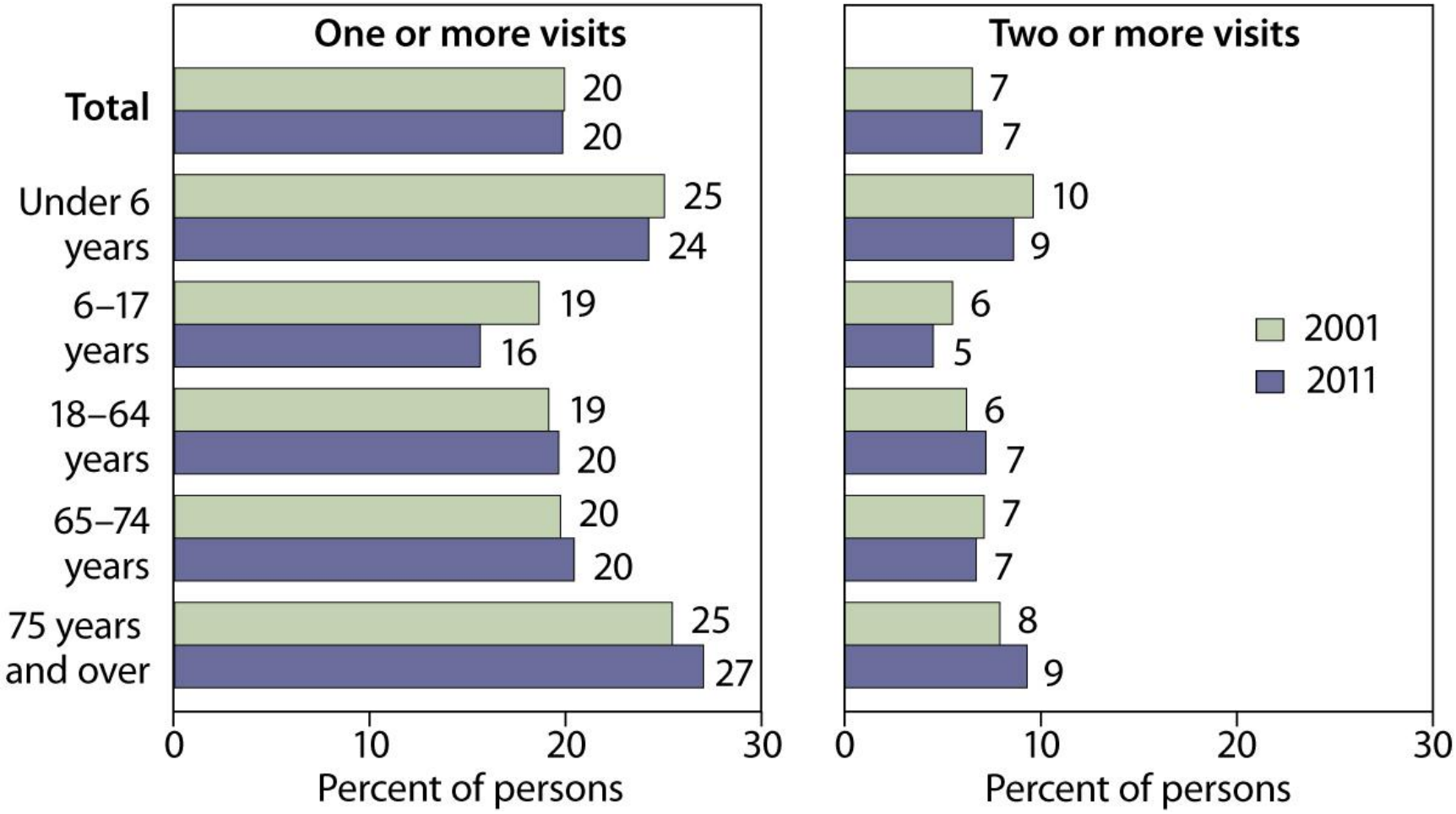


NOTE: Estimates may not add to 100% due to rounding.
SOURCE: CDC/NCHS, National Hospital Discharge Survey, 2000–2010.

Sommario

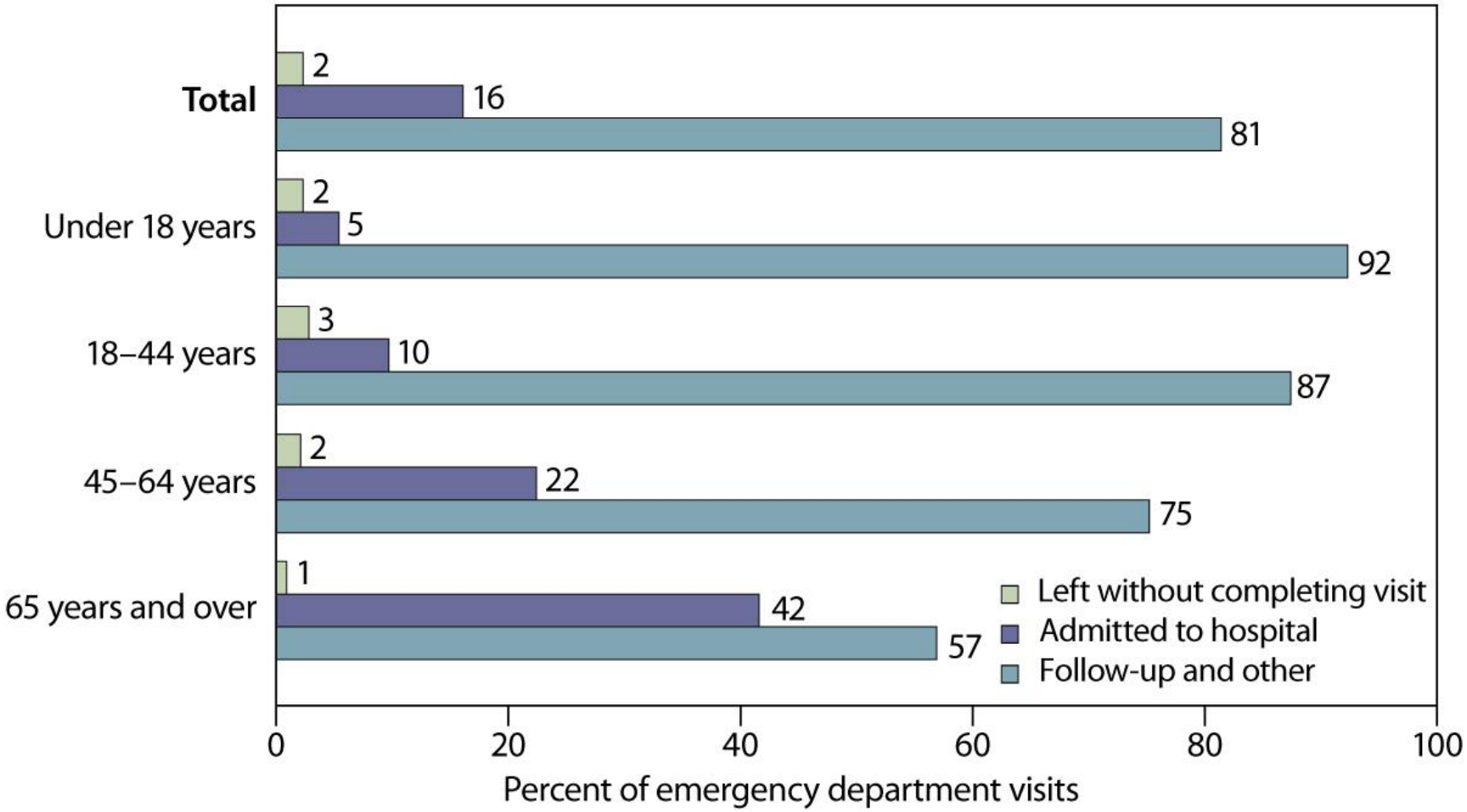
- L'ospedale per acuti: scenari di ieri e attualità
- **L'ospedale e innovazioni medico-sanitarie: missione e realtà**
  - **L'ospedale di oggi**
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - **DEA**
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

Emergency department visits in the past 12 months



SOURCE: CDC/NCHS, *Health, United States, 2012*, Figure 20. Data from the National Health Interview Survey.

Discharge status of emergency department visits, average annual, 2009–2010



NOTE: A small percentage of visits result in death.
SOURCE: CDC/NCHS, *Health, United States, 2012*, Figure 27. Data from the National Hospital Ambulatory Medical Care Survey, Emergency Department Component.

Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- **L'ospedale e innovazioni medico-sanitarie: missione e realtà**
  - **L'ospedale di oggi**
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - **Re-ricoveri ospedalieri**
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

Medicare's Readmissions-Reduction Program — A Positive Alternative

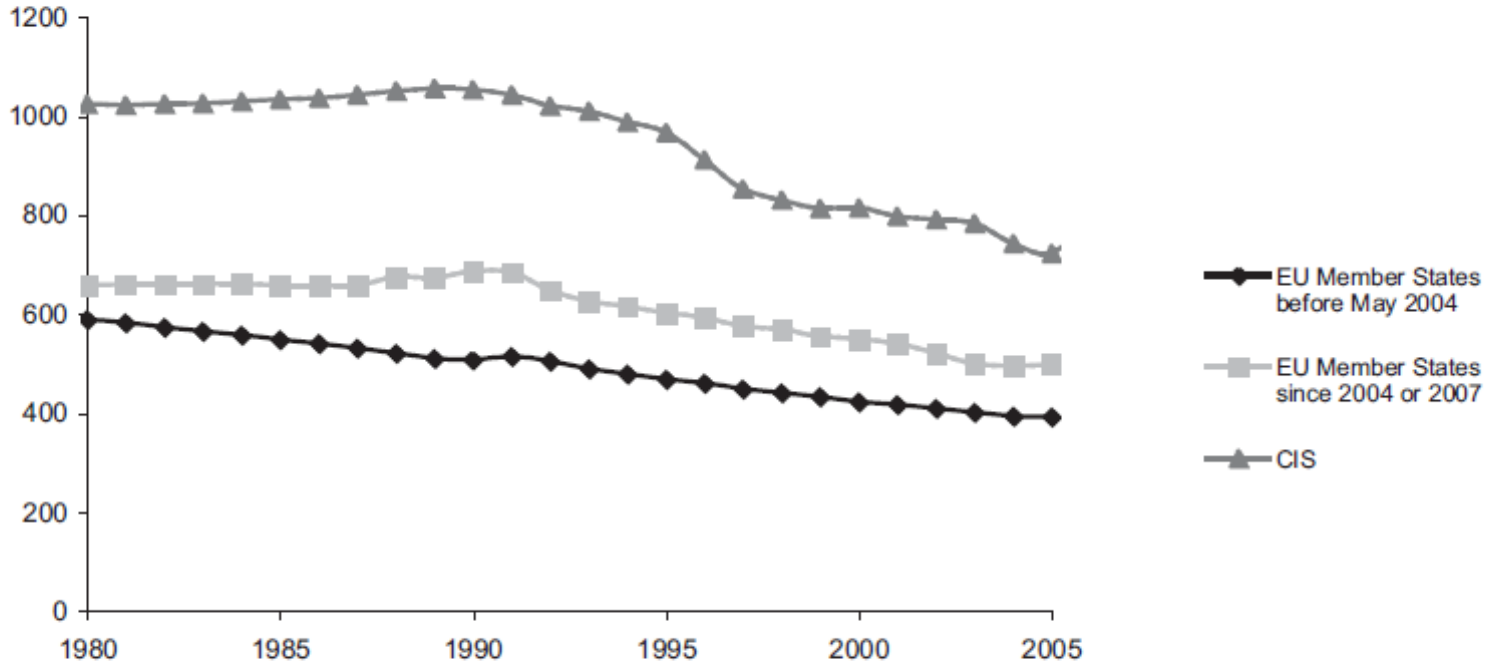
Robert A. Berenson, M.D., Ronald A. Paulus, M.D., M.B.A., and Noah S. Kalman, B.A.

N ENGL J MED 366;15 NEJM.ORG APRIL 12, 2012

Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- **L'ospedale e innovazioni medico-sanitarie: missione e realtà**
  - **L'ospedale di oggi**
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - **Riduzione dei posti letto**
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

Fig. 1.2 *Acute care hospital beds per 100 000 population*



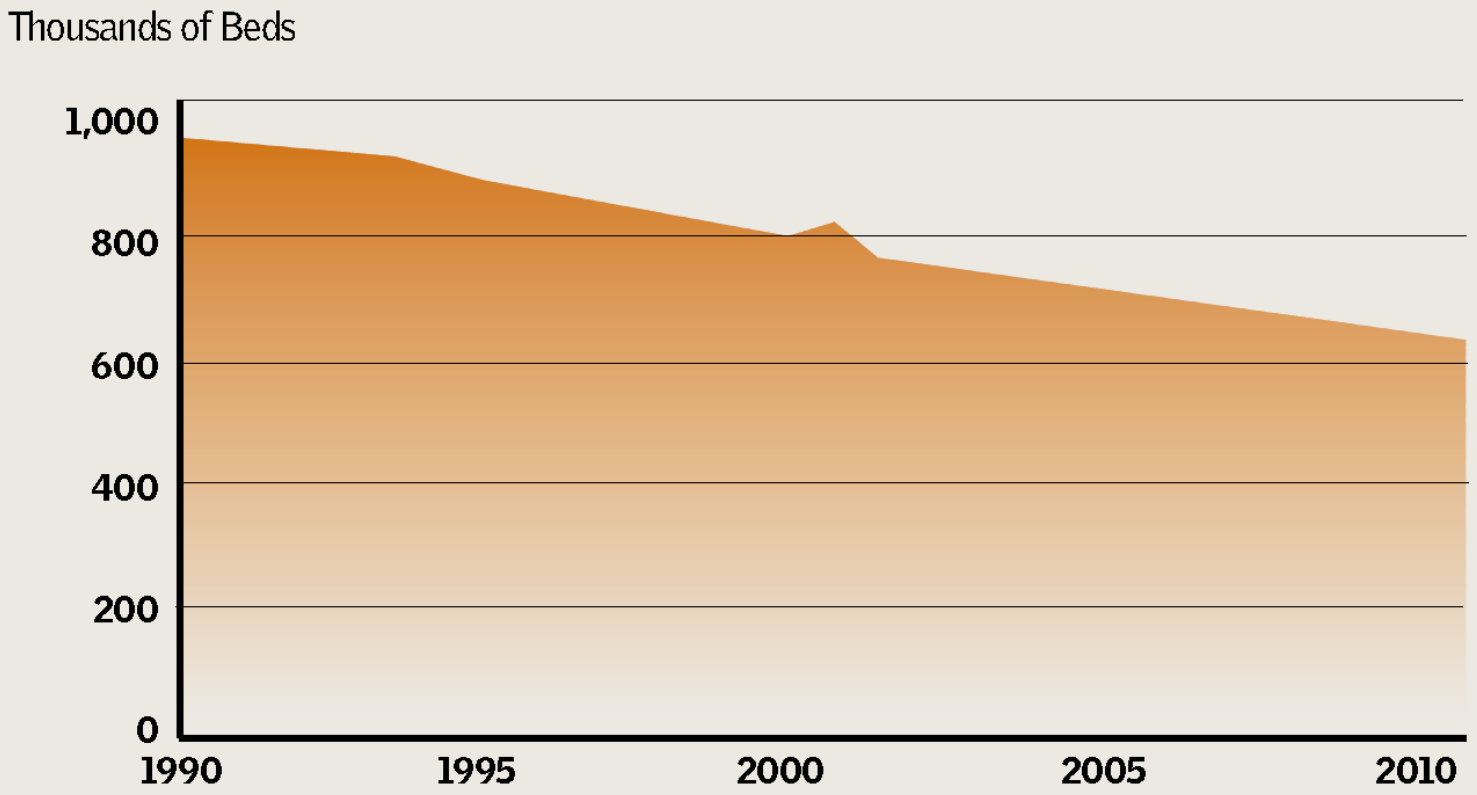
Source: WHO Regional Office for Europe 2008.

Notes: EU: European Union; CIS: Commonwealth of Independent States.

THE DWINDLING NUMBER OF HOSPITAL BEDS

According to a recent study, 2 percent of all hospital beds have closed each year since 1997, when there were 850,000 beds.

Total Beds in Community Hospitals



SOURCE: Institute for the Future

Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- **L'ospedale e innovazioni medico-sanitarie: missione e realtà**
  - **L'ospedale di oggi**
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - **Modificazione della LOS**
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

Table 18. Number of days and average length of stay by patients discharged, by hospitalized condition[1] and whether or not the condition was surgically treated: Short-Stay Hospitals, United States, July 1957-June 1958

[Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Hospitalized condition	Number of days in thousands			Average length of stay in days		
	Total	Surgically treated	Not surgically treated	Total	Surgically treated	Not surgically treated
All conditions	143,322	75,442	67,880	8.6	7.5	10.3
Infective and parasitic diseases	5,637	890	4,748	18.9	33.0	17.5
Malignant neoplasms	4,166	3,034	1,132	16.1	16.2	15.7
Benign and unspecified neoplasms	5,846	5,443	403	7.9	7.8	9.6
Allergic, endocrine, and metabolic disorders	4,183	817	3,366	9.4	12.8	8.8
Mental and personality disorders	4,895	218	4,677	16.0	24.2	15.7
Intracranial lesions	3,393	60	3,333	36.5	12.0	37.9
Diseases of nervous system and sense organs	4,811	2,342	2,469	8.9	8.3	9.7
Heart diseases	8,289	577	7,712	15.3	22.2	15.0
Hemorrhoids	1,917	1,788	129	8.0	7.9	10.8
Other circulatory diseases	4,604	1,786	2,818	11.2	13.3	10.1
Upper respiratory conditions	2,666	1,878	787	2.2	1.8	4.0
Other respiratory conditions	8,111	448	7,663	8.3	16.6	8.1
Ulcer of stomach and duodenum	3,156	1,598	1,558	11.2	19.3	7.9
Appendicitis	2,709	2,502	207	6.5	6.9	4.1
Hernia	4,120	3,839	281	9.1	9.1	9.4
Diseases of the gallbladder	4,694	3,462	1,232	11.1	14.1	7.1
Other digestive system conditions	6,544	2,651	3,892	8.8	8.6	8.9
Female breast and genital disorders	3,700	3,105	595	6.3	6.3	6.3
Other genitourinary conditions	6,677	4,085	2,591	9.3	11.6	7.0
Deliveries	15,885	15,885	...	4.5	4.5	...
Pre- and post-natal conditions	2,080	935	1,145	3.8	4.3	3.4
Diseases of the skin	2,379	910	1,468	11.8	7.6	17.7
Arthritis	2,769	224	2,545	17.4	13.2	17.9
Other musculoskeletal disorders	5,999	3,289	2,710	12.8	14.2	11.5
Fractures and dislocations	10,179	9,698	481	15.3	15.9	9.1
Other current injuries	5,489	2,253	3,236	7.7	10.6	6.5
All other conditions	7,731	1,706	6,025	12.0	8.2	13.9
Observation only	694	18	676	5.2	2.0	5.5

[1] See Appendix II for a list of conditions included in each category.

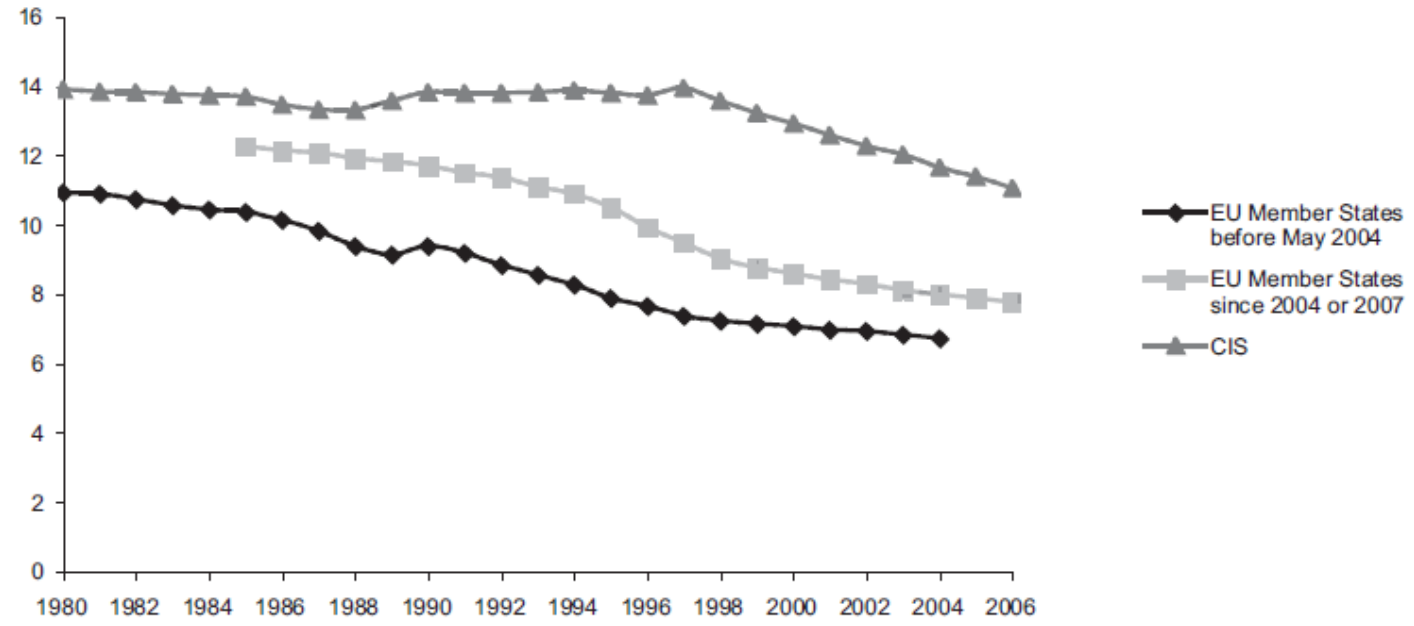
Table 5. Number of patients discharged, number per 1,000 persons per year, and average length of stay by sex, age, and race: Short-Stay Hospitals, United States, July 1957-June 1958

[Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II.]

Sex and age	Number of discharges in thousands			Number per 1,000 persons			Average length of stay in days		
	Total	White	Non-white	Total	White	Non-white	Total	White	Non-white
Both sexes									
All ages	16,738	15,473	1,265	99.4	103.3	68.2	8.6	8.4	10.2
Under 15	2,801	2,580	221	53.2	56.5	31.6	5.5	5.2	10.0
15-24	2,901	2,624	278	137.5	142.3	104.7	6.5	6.5	6.8
25-44	5,868	5,377	492	128.5	131.6	102.8	7.2	6.9	10.4
45-64	3,413	3,195	218	99.0	101.9	70.0	12.0	11.9	13.9
65+	1,754	1,698	56	120.9	125.7	55.9	14.7	14.8	12.2

This report was prepared by Augustine Gentile, of the U. S. National Health Survey staff.

Fig. 1.3 *Average length of stay (acute care hospitals only)*



Source: WHO Regional Office for Europe 2008.

Notes: EU: European Union; CIS: Commonwealth of Independent States.

Table 10. Number and rate of discharges from short-stay hospitals, with average length of stay, for patients 65 years of age and over, by age and selected first-listed diagnostic categories: United States, 2005—Con.

[Discharges of inpatients from nonfederal hospitals. Diagnostic groupings and code numbers are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM)]

Category of first-listed diagnosis and ICD–9–CM code		65 years and over	65–74 years	75–84 years	85 years and over
		Average length of stay in days			
All conditions[1]		5.5	5.3	5.6	5.7
Heart disease	391–392.0,393–398,402,404,410–416,420–429	4.7	4.4	4.7	4.9
Acute myocardial infarction	410	6.0	5.8	6.2	5.8
Coronary atherosclerosis	414.0	3.5	3.5	3.7	3.3
Cardiac dysrhythmias	427	3.6	3.3	3.4	4.2
Congestive heart failure	428.0,428.2–428.4	5.1	4.9	5.1	5.3
Pneumonia	480–486	5.7	5.4	5.8	5.9
Cerebrovascular disease	430–438	4.9	4.5	5.1	5.3
Malignant neoplasms	140–208,230–234	6.9	6.7	7.3	6.8
Fractures, all sites[2]	800–829	5.7	5.5	5.7	5.7
Fracture of neck of femur[2]	820	6.4	7.1	6.7	5.8
Osteoarthrosis and allied disorders	715	3.8	3.7	3.9	4.1
Chronic bronchitis	491	5.4	4.9	5.9	5.4
Urinary tract infection	599.0	4.7	4.4	4.6	5.0
Certain complications of surgical and medical care	996–999	6.4	6.6	6.2	6.2
Septicemia	038	7.8	8.1	8.0	7.1
Volume depletion	276.5	4.2	3.9	4.1	4.7
Psychoses	290–299	8.6	9.4	7.8	8.5
Diabetes mellitus	250	5.3	5.2	5.6	5.4
Cellulitis and abscess	681–682	5.3	4.9	5.5	5.6
Diverticula of intestine	562	5.8	5.7	5.5	6.3
Intestinal obstruction	560	6.9	6.9	7.3	6.3
Anemias	280–285	4.0	3.5	3.9	4.6
Cholelithiasis	574	4.8	4.2	4.9	6.1
Essential hypertension	401	2.6	2.3	2.7	2.8
Asthma	493	4.7	4.4	4.9	5.0
Noninfectious enteritis and colitis	555–558	5.1	5.1	4.8	5.9

[1]Includes data for diagnostic conditions not shown in table.

[2]Excludes fractures coded as 733.1, pathologic fracture.

[3]Rates were calculated using U.S. Census Bureau 2000-based postcensal estimates of the civilian population as of July 1, 2005.

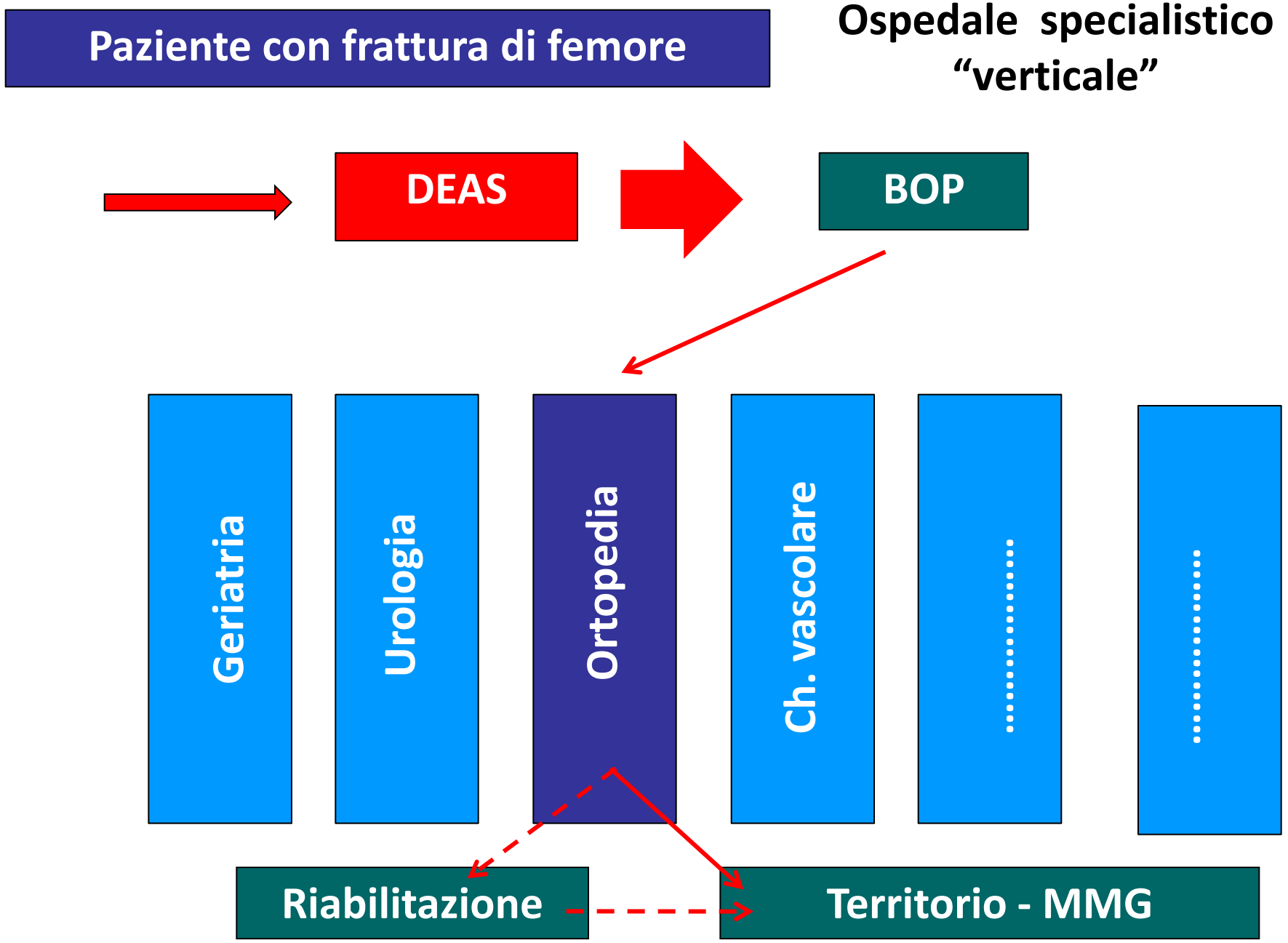
Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- L'ospedale e innovazioni medico-sanitarie: missione e realtà
  - L'ospedale di oggi
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- **La transizione dei modelli assistenziali**
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

L'Ospedale di ieri

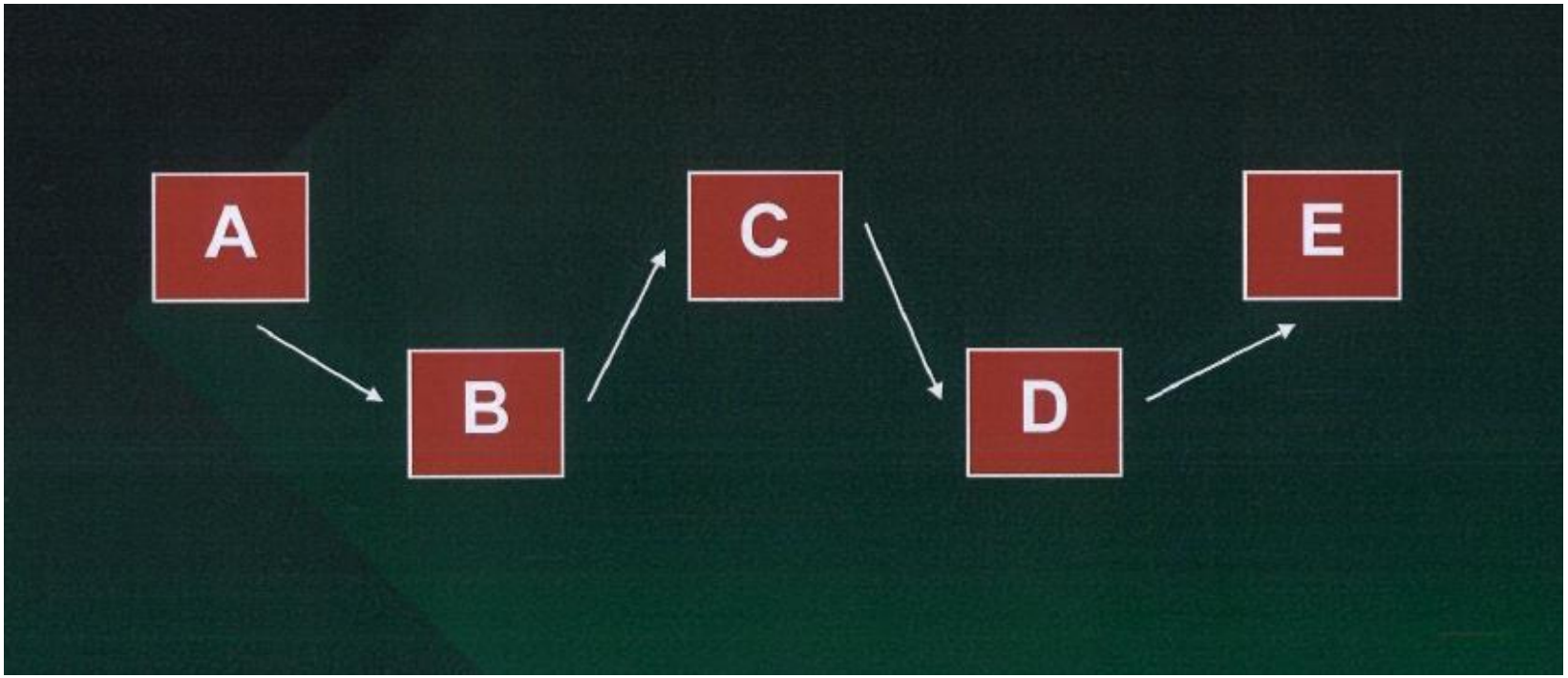
Organizzato intorno al sapere medico

	Organizzazione	*Architettura*	*Profili professionali*
Omnicompetente	**Medicina "generale"**	**Ospedale a "padiglioni"**	**IL PRIMARIO**
Specialisticamente differenziato	**Cardiologia Neurologia Pneumologia Nefrologia ……**	**Padiglioni collegati Monoblocco ……**	**I "PRIMARI"**


Paziente con frattura di femore
Ospedale specialistico "verticale"
DEAS
BOP
Geriatria
Urologia
Ortopedia
Ch. vascolare
.....
.....
Riabilitazione
Territorio - MMG

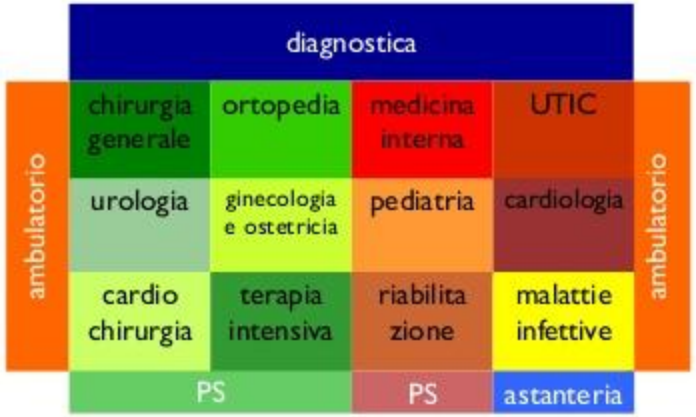
- ✓ medico ---------- paziente
- ✓ patologia ---------- specialista
- ✓ malattia ---------- reparto di degenza

Relazioni di causalità lineare
- *sistema non complesso* -



B succede ad A
C succede a B
D succede a C
ecc…

parola d'ordine: SPECIALIZZAZIONE

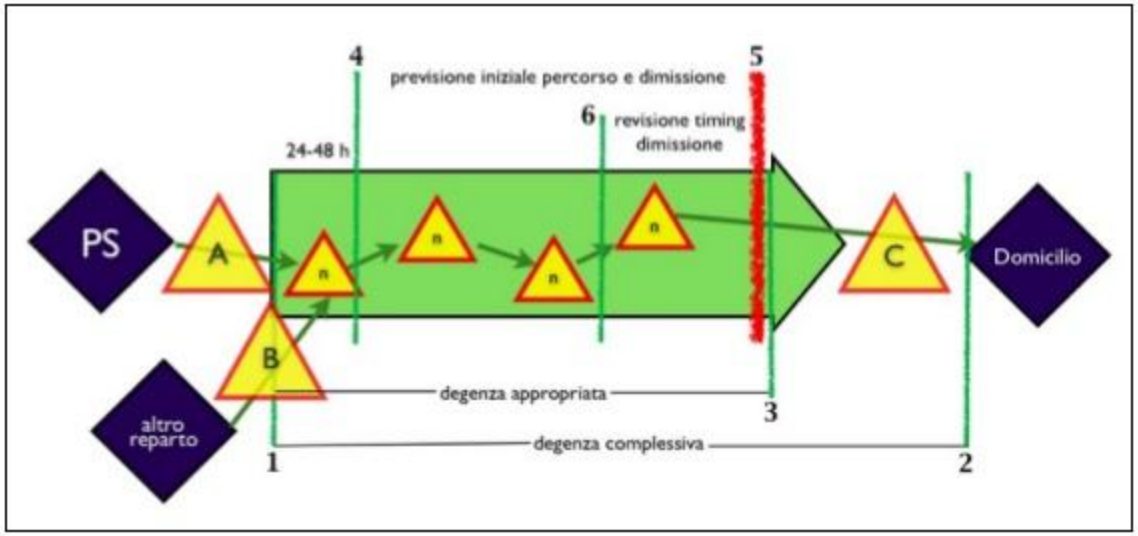


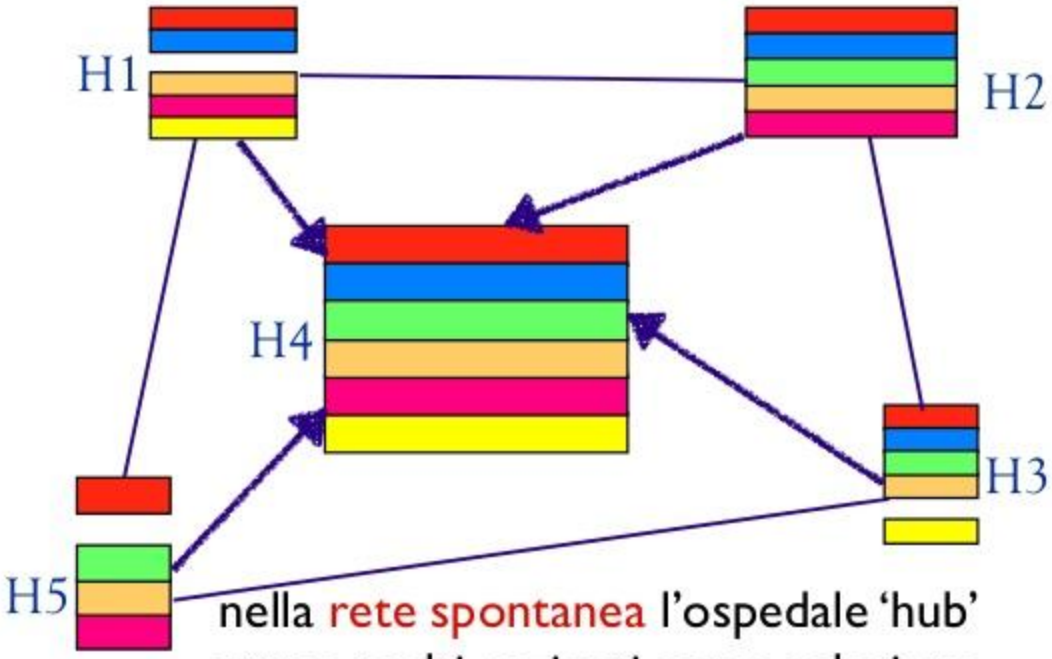
parola d'ordine: INTERAZIONE

#3 appropriatezza

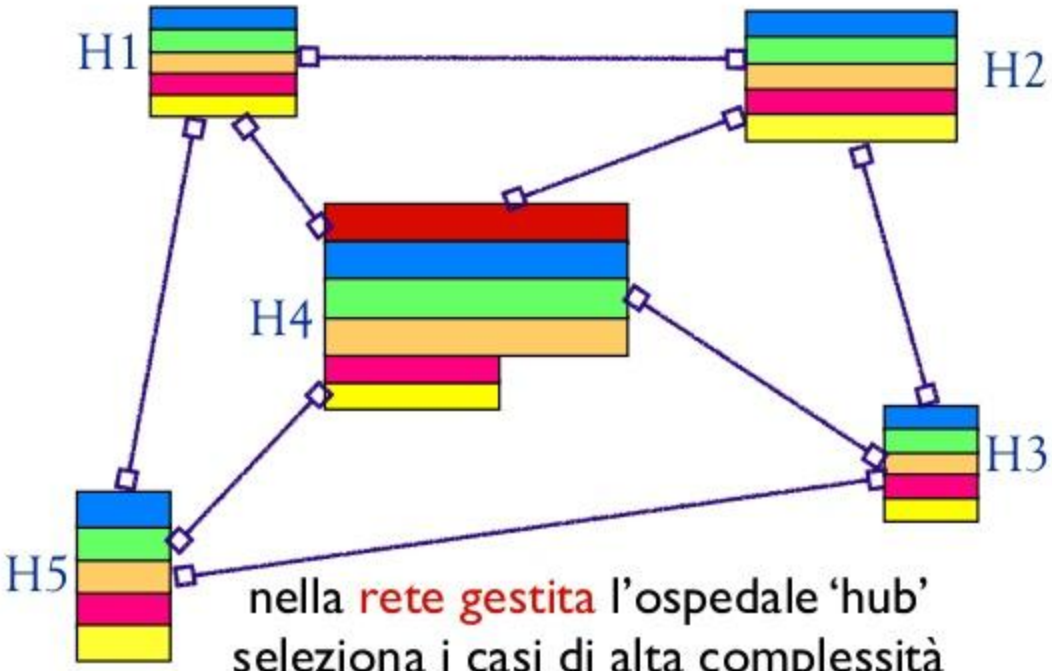
clinica:
benefici attesi superiori alle eventuali conseguenze negative

organizzativa:
intervento erogato in condizioni tali da consumare un'appropriata quantità di risorse

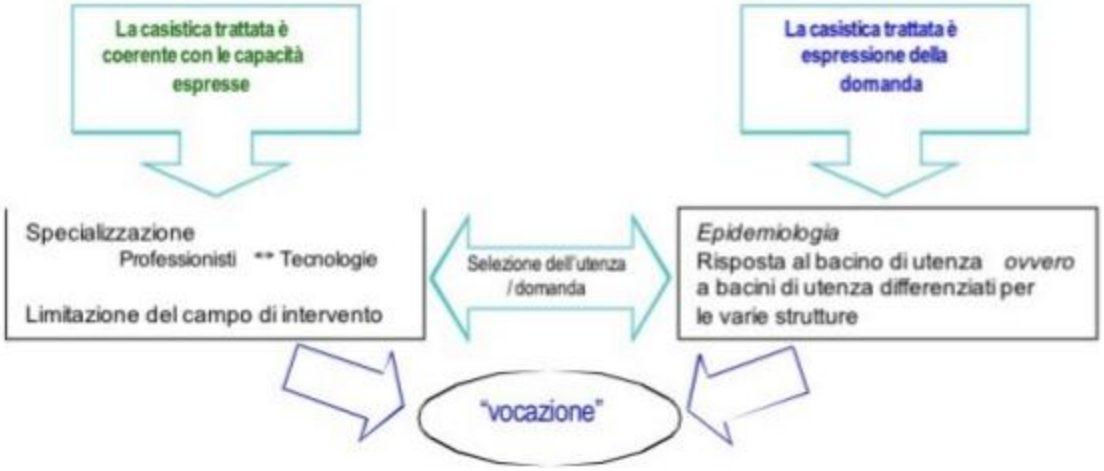

4
previsione iniziale percorso e dimissione
5
6
revisione timing
dimissione
24-48 h
PS
A
n
n
n
n
C
Domicilio
B
altro
reparto
degenza appropriata
3
degenza complessiva
1
2



nella rete spontanea l'ospedale 'hub'
attrae molti pazienti senza selezione
gli altri ospedali si svuotano



nella rete gestita l'ospedale 'hub'
seleziona i casi di alta complessità
e restituisce pazienti agli altri ospedali



Specializzazioni differenti in ospedali confrontabili per caratteristiche strutturali e logistiche determinano la diversificazione del network ospedaliero

Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- L'ospedale e innovazioni medico-sanitarie: missione e realtà
  - L'ospedale di oggi
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- **Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)**
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

EuHPN European Health Property Network

European Observatory on Health Systems and Policies

Hospitals are not only sites to provide health care: they carry out extensive programmes relating to research and development, education and training, and in their own right they are critical components of the urban fabric. Thus, although there are sure to be major evolutions in the nature and role of hospitals, the institutions themselves are unlikely to be displaced soon.

If only as a result of its importance as the place where scientific health care is focused, the hospital sector typically absorbs up to 50% of national expenditure on the health care system. This highlights the critical nature of the decision to invest capital in the construction of a hospital, given that this action commits society to a stream of future running costs which dwarf the original – already considerable – capital cost.

© World Health Organization 2009, on behalf of the European Observatory on Health Systems and Policies

"MOST PEOPLE EVALUATE A HOSPITAL BY THEIR PERCEPTION OF HIGH-QUALITY SERVICE AND FAIR TREATMENT. THEY JUDGE WHETHER IT WAS A GREAT SERVICE EXPERIENCE, WHETHER THEY AND THEIR FAMILY WERE TREATED NICELY."

—RICHARD J. FLANIGAN JR.

: HOSPITALS OF THE FUTURE

Design: Designit

: IN THE FUTURE, SOCIO-ECONOMIC CHANGES WILL PLACE UNPRECEDENTED PRESSURE ON PUBLIC HOSPITALS.

: PUBLIC HOSPITALS WILL HAVE TO DEAL WITH A GROWING ELDERLY POPULATION AND INCREASED INCIDENCE OF LIFESTYLE DISEASE – USING FEWER STAFF AND RESOURCES.

Table 1.1 *Potential changes in the way that patients use services*

Old approach	New (idealized) approach
Patients use the system in a series of unconnected episodes	Need is anticipated and hospitals and health systems develop methods to manage the whole pathway of disease, support patients in their own home and have electronic records that help to ensure continuity of care
Patients are passive recipients of care	Patients are involved in the management of their own care
Patients are dealt with in batches and spend most of their time within the system waiting – this is because it is important to keep expensive staff and assets busy	Patients flow through the system with minimal waits. Sweating the assets and having staff busy is less important than achieving a smooth flow through the system
Patients are treated as though their time is free and are required to undertake significant amounts of unpaid work and movements for the convenience of the providers	Consumerism and the increasing time poverty of many people mean that a premium will be placed on convenience and speed The pressure for efficiency and the need to eliminate unnecessary steps in the process will also mean that moving information and staff – rather than patients – becomes a more accepted principle
Services are designed around the historic way providers are structured	Services are designed to meet the requirements of patients
Patients go to hospital for routine monitoring	Home-based technology and diagnostic equipment outside the hospital reduce the use of hospitals
Interaction is face to face and on a one-to-one basis	E-mail and telephone can be used and group visits seem to work for some issues
Providers determine follow-up and re-referral	Patients can initiate follow-up and have a right of return or direct access to specialist help if they think they need it – even if they have been discharged
Patients often die in hospital when they would have preferred to die at home	Patients have plans for end-of-life care

Table 1.2 *Potential changes to the way staff work*

Old approach	New (idealized) approach
See a junior member of staff who escalates	See a senior member who makes decisions and delegates – this should reduce the number of patients admitted to hospital and reduce the length of stay of those that are admitted
See a doctor	See the most appropriate professional
Reduce the skill mix to save money	Increase the skill mix to improve efficiency and outcomes
Staff develop "work-arounds" for problems	Staff undertake root cause analysis to create sustainable solutions
Large amounts of time are wasted by poor work process design – safety may also be compromised	Unnecessary staff movement can be reduced by the proper design of work processes and the work environment as well as the use of IT systems
Many services stop at weekends and in the evenings	Specialist consultation, diagnostics and other support services are available for much longer than the traditional working week
Beds are a mark of prestige and a source of income	Beds are a cost centre and emergency non-surgical admissions are seen as a sign of system failure

Table 2.1 *Models of care*

Care setting
From: Hospital-based care (accident and emergency, inpatient wards, day-case surgery, outpatient clinics) and general practice
To: A community-based outpatient clinic which operates openly as a multi-agency one-stop shop
Nature of intervention
From: Specialized clinical treatment
To: Remote IT monitoring, secondary prevention and psychosocial support
Duration of care
From: Extended inpatient admission
To: Health provision from multiple service settings, including health and social care and the voluntary sector
Social construction of the patient
From: Passive and dependent
To: An engaged co-producer with rights and responsibilities

Much depends on how people with long-term conditions are "managed" in primary care (Wilson, Buck & Ham 2005). Noteworthy here are findings, illustrated in Fig. 2.1, which show how the rate of repeat emergency admissions for patients with chronic obstructive pulmonary disease (COPD) varies by general practice. These variations cannot be accounted for by factors, such as deprivation, list size or the demographics of individual practices (CCMD et al. 2005). In somewhat more circumspect terms, the National Public Health Service in Wales noted that "poor management of chronic conditions can lead to avoidable emergency admissions to hospitals … (that) … could be prevented if patients … are well managed in primary, community and intermediate care" (National Public Health Service for Wales 2005).

"Avoidable admissions" are important because of the way that their occurrence impacts on the lives of people and carers, as well as on the wider health system. For a person with a long-term condition, an admission to hospital marks not merely an inconvenient disruption to their daily lives (as well as the lives of their carers), but may also represent a further decline in their general well-being (Chu et al. 2004; United Kingdom DoH 2004a). It is likely that their admission to hospital will have been occasioned by an acute exacerbation of their underlying condition. The repeated occurrence of such exacerbations can contribute to accelerating the deterioration of the condition (Chu et al. 2004).

Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- L'ospedale e innovazioni medico-sanitarie: missione e realtà
  - L'ospedale di oggi
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- **L'ospedale nella rete dei servizi**
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

Finding the Right Level of Posthospital Care

"We Didn't Realize There Was Any Other Option for Him"

Robert L. Kane, MD

Many families considering posthospital care options are

Kane, R. L. JAMA 2011;305:284-293

JAMA

Box 1. The Physician's Role in Managing Care Transitions and Addressing Placement Options

- **Manage underlying medical conditions, considering patient goals, life expectancy, and comorbid conditions.**
- **Consider the functional implications of the patient's medical conditions (Table 1).**
- **Communicate with those working in supportive roles (eg, home care and nursing home staff).**
- **Communicate with families and patients. Use family conferences to discuss end-of-life decisions.**
- **Assess whenever an older person is making a major care transition. Are there any conditions that can be controlled better, any medications that can be reduced or discontinued?**
- **Advocate for patients and families getting an opportunity to make thoughtful decisions.**
- **Facilitate families getting access to their own advocates/case managers.**
- **Be alert for signs of neglect and abuse.**
- **Appreciate the high-risk nature of caregiving.**

Table 2. Types of Long-term Care

Type	Description	Public Third-party Coverage	Basis for Medicare Payment	Cost Range, $/d	Predominant Physician Type
Postacute care					
Inpatient rehabilitation facilities	Facilities specifically licensed to provide active rehabilitation. Patients must receive at least 3 h a day of PT and/or OT and must show progress to be kept on Medicare.	Medicare (must have a qualifying condition) Medicaid	Prospective payment per episode based on case mix	1000-2000	Physiatrist
Skilled nursing facility	Many nursing homes certified to provide posthospital care under Medicare. Skilled needs include complex medication schedules, wound care, or rehabilitation.	Medicare Medicaid	Daily rate based on case mix (100 d but copayment after 20 d)	150-300	Primary care clinician (physician, nurse practitioner, both), medical director
Long-term care hospital	Facility certified by Medicare to handle complex care (eg, ventilator care and weaning) of patients discharged from hospitals.	Medicare	Variation of hospital payment DRG	1500-3000	Hospitalist
Home health care	Medicare-certified care supervised by registered nurses. Other core staff: physical, occupational, and speech therapists, and social workers.	Medicare Medicaid (limited)	Payment per episode based on case mix	100-300	Primary care clinician
Outpatient rehabilitation	May be certified to conduct active rehabilitation.	Medicare Medicaid	Payment per visit	100-200	Primary care clinician
Hospice/ palliative care	Intended for those at terminal phase of life with expected prognosis ≤6 mo. Hospice care is a specific benefit under Medicare; as such, it is predicated on primarily nonhospital care. Palliative care provides active support like hospice care but without the expectation of avoiding other medical care.	Medicare (hospice; palliative care options vary)	Payment per day	200-300	Primary care clinician or palliative care specialist

Kane, R. L. JAMA 2011;305:284-293

JAMA

Table 2. Types of Long-term Care

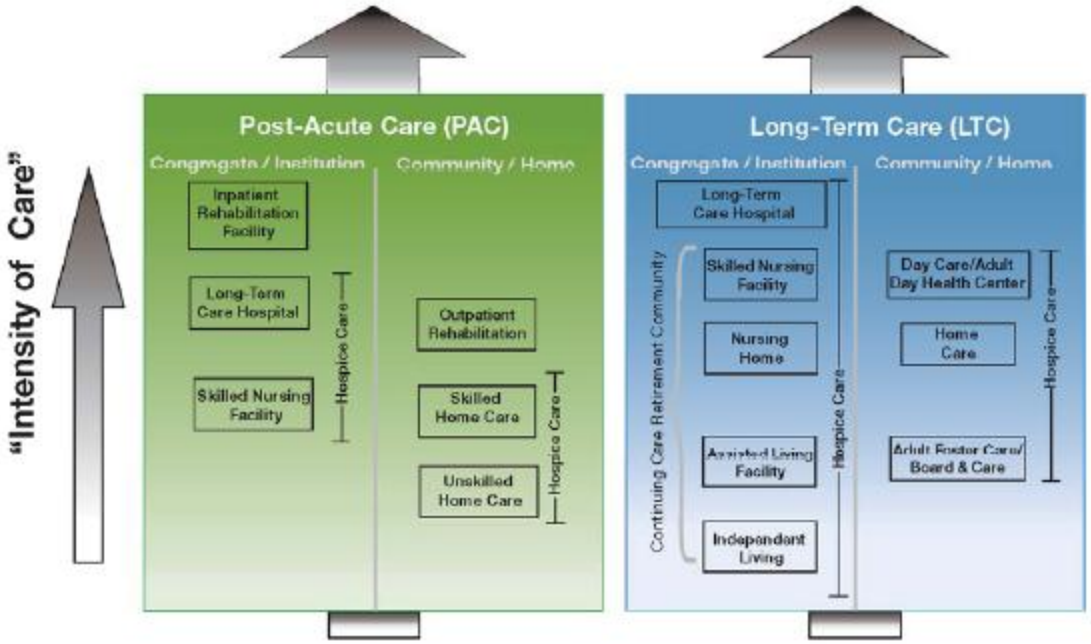
Long-term care					
Home care/ personal care	Services to support frail person who needs assistance in meeting various ADL or IADL care.	Medicaid (state plan and waivers)	Payment per hour (sometimes minimum number of hours)	75-150	Primary care clinician
Nursing home	Certified to provide long-term care; some offer specialized units for persons with dementia.	Medicaid	Payment per day	75-300	Primary care clinician (physician, nurse practitioner, both), medical director
Assisted living	Institutional care with self-contained units including living quarters, a private bathroom, and some modest cooking and food storage facilities; heterogeneous and minimally regulated. Serve less disabled clientele than nursing homes. Some offer specialized units for persons with dementia.	Medicaid in some states (waivers)	Payment per day or month	60-300	Primary care clinician
Day care or adult day health center	Care provided in centralized facilities for various periods of the day. Some also have medical or nursing services (ie, adult day health care vs social adult day care).	Medicaid (in some states)	Payment per use	60-120	Primary care clinician
Adult foster care	Small group living settings with care by nonprofessionals; more homelike than larger institutions.	Medicaid in some states (waivers)	Payment per month	50-100	Primary care clinician
Independent living	Room and board and some housekeeping; may have social activities and amenities.	None		50-100	Primary care clinician
Board and care	Variant of independent living, with room and some meals.	None		50-75	Primary care clinician

Abbreviations: ADL, activities of daily living; DRG, diagnosis-related group; IADL, instrumental activities of daily living; OT, occupational therapy; PT, physical therapy.

Kane, R. L. JAMA 2011;305:284-293

JAMA

eFigure. Levels of Posthospital Care



Different levels of care meet different personal needs. Levels of care are classified according to three domains: **Acuity of Care**, **Post-Acute Care** (PAC; i.e., after hospitalization) or **Long-Term Care** (LTC); **Site of Care**, in a **congregate setting or institution**, or in the **community or a home**; and the **Intensity of Care**, from care for vital functions such as ventilation to care for activities of daily living and instrumental activities of daily living, to care to prevent injury because of cognitive impairment to care to promote social interaction and function. In this schematic, the location of a specific level of care along the spectrum from more care to less care is representative and may differ in individual cases. For example, a person receiving 3 hours of inpatient rehabilitation daily may receive more paid care than a person receiving intravenous antibiotics in a skilled nursing facility after hospitalization for pneumonia. Continuing Care Retirement Communities are organizations that provide a broad spectrum of levels of care in congregate living, usually from independent living to skilled nursing facility.

The goals of care may also differ from rapid rehabilitation to more gradual restoration to maintenance to palliation. Hospice and palliative care can be provided at virtually every level of care.

Note that some of the hierarchy is open to question. For example, day care does not necessarily provide more intensive care than home care.

Source: Created by Seth Landefeld and Lisa Leiva.

© 2011 American Medical Association. All rights reserved.

Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- L'ospedale e innovazioni medico-sanitarie: missione e realtà
  - L'ospedale di oggi
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- **L'ospedale di domani (modelli di cambiamento)**
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

Hospitals of the Future – Ubiquitous Computing support for Medical Work in Hospitals

Jakob E. Bardram

Centre for Pervasive Healthcare
Department of Computer Science, University of Aarhus
Aabogade 34, 8200 Århus N, Denmark
bardram@daimi.au.dk

Abstract. This paper describes the visions and on-going research within creating ubiquitous computing support for medical work in the hospitals of the future. Today, clinical computer systems seldom play any role in in the execution of clinical work as such. Electronic Patient Records (EPR) are more often located in offices at a hospital rather than at patients' bedside, or in operating theaters. The are a number of challenges to the hardware and software design of contemporary computer systems that make them unsuitable for clinical work. It is, for example, difficult to operate a keyboard and a mouse while operating a patient. Research within UbiComp provides a range of new conceptual and technological possibilities, which enable us to move clinical computer support closer to the clinical work setting. An important branch of the research at the Danish Center for Pervasive Healthcare is to design and develop such new ubicomp computer technologies for clinical work.

2 Vision – The Hospital of the Future

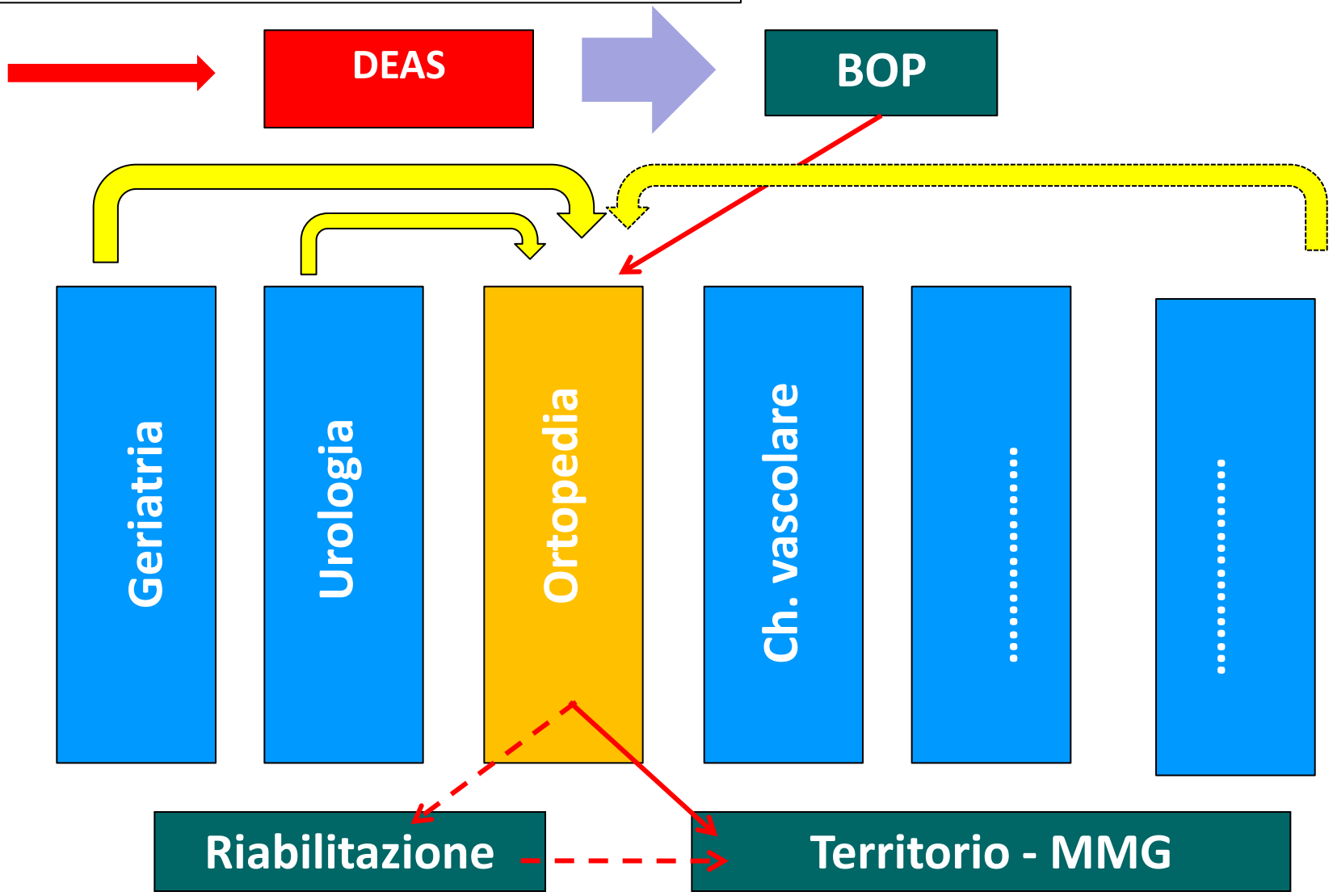
The Hospital of the Future is a vision of a highly *interactive hospital*, where clinicians can access relevant medical information and can collaborate with colleagues and patient independent of time, place, and whatever they are doing. Other researchers have used the term 'intelligent hospitals' [11]. We prefer, however, the term 'interactive hospital', because it in a better way covers the goals we are pursuing, and because we are not embedding any kind of artificial intelligence in the hospital. The vision of an interactive hospital can be divided into different research themes, of which we will consider some here. Examples from our vision videos can be seen in figure 1.

Fig. 1. Two frames from our vision video. The left-hand side showing the interactive bed and the right-hand side showing a remote radiology conference on a wall-sized interactive display.

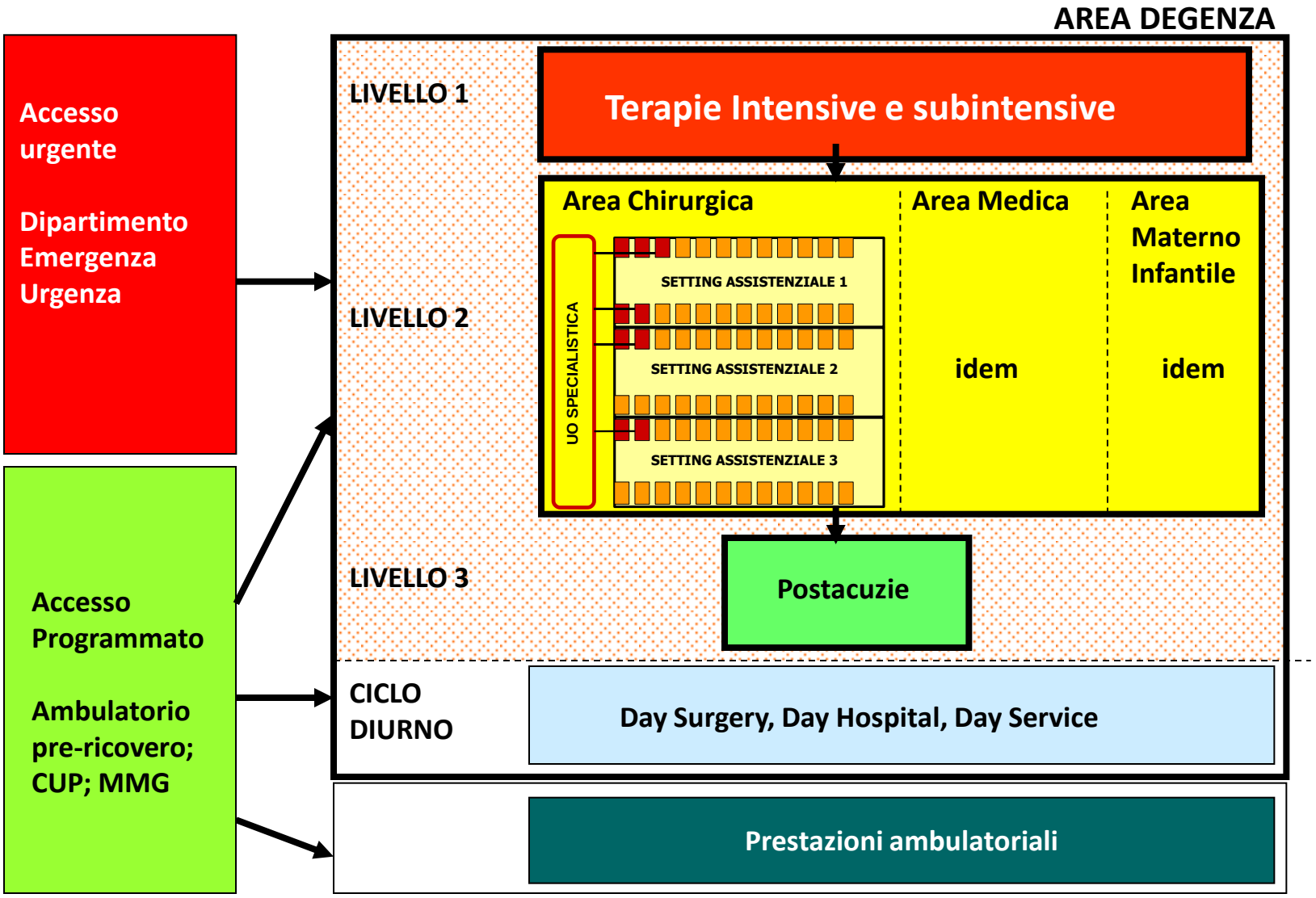
Fig. 2. The current implmentation of the vision shown in figure 1. Left-hand side: The interactive bed. Right-hand side: A prototype on a public wall-display. A nurse is having a real-time conference with a radiologist.

92 anni cardiopatico, diabetico …….
frattura di femore

Ospedale specialistico “verticale”

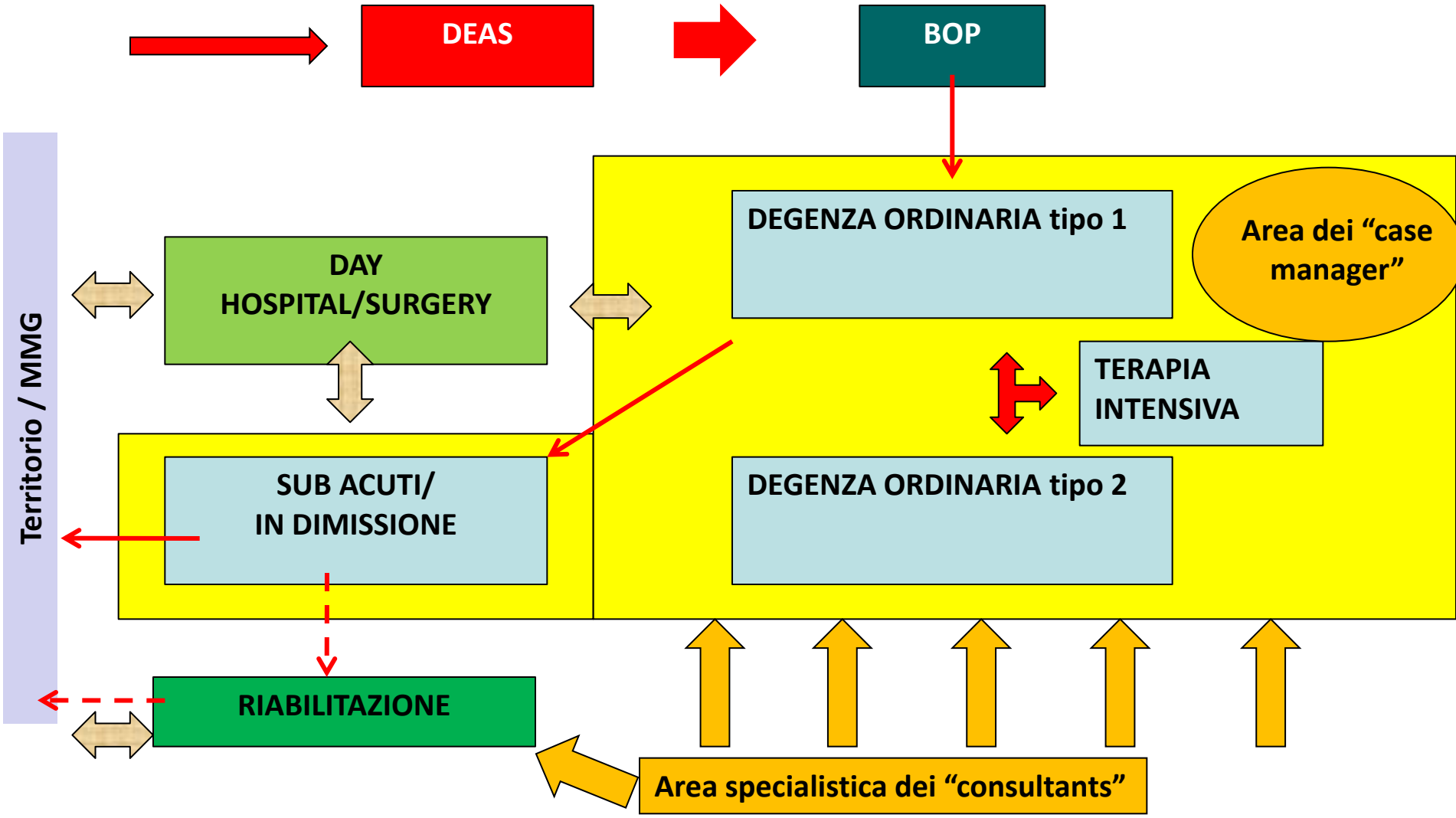


L'OSPEDALE PER INTENSITA' DI CURE



92 anni, cardiopatico, diabetico, AD+VD
…….
Frattura di femore

Ospedale organizzato per funzioni

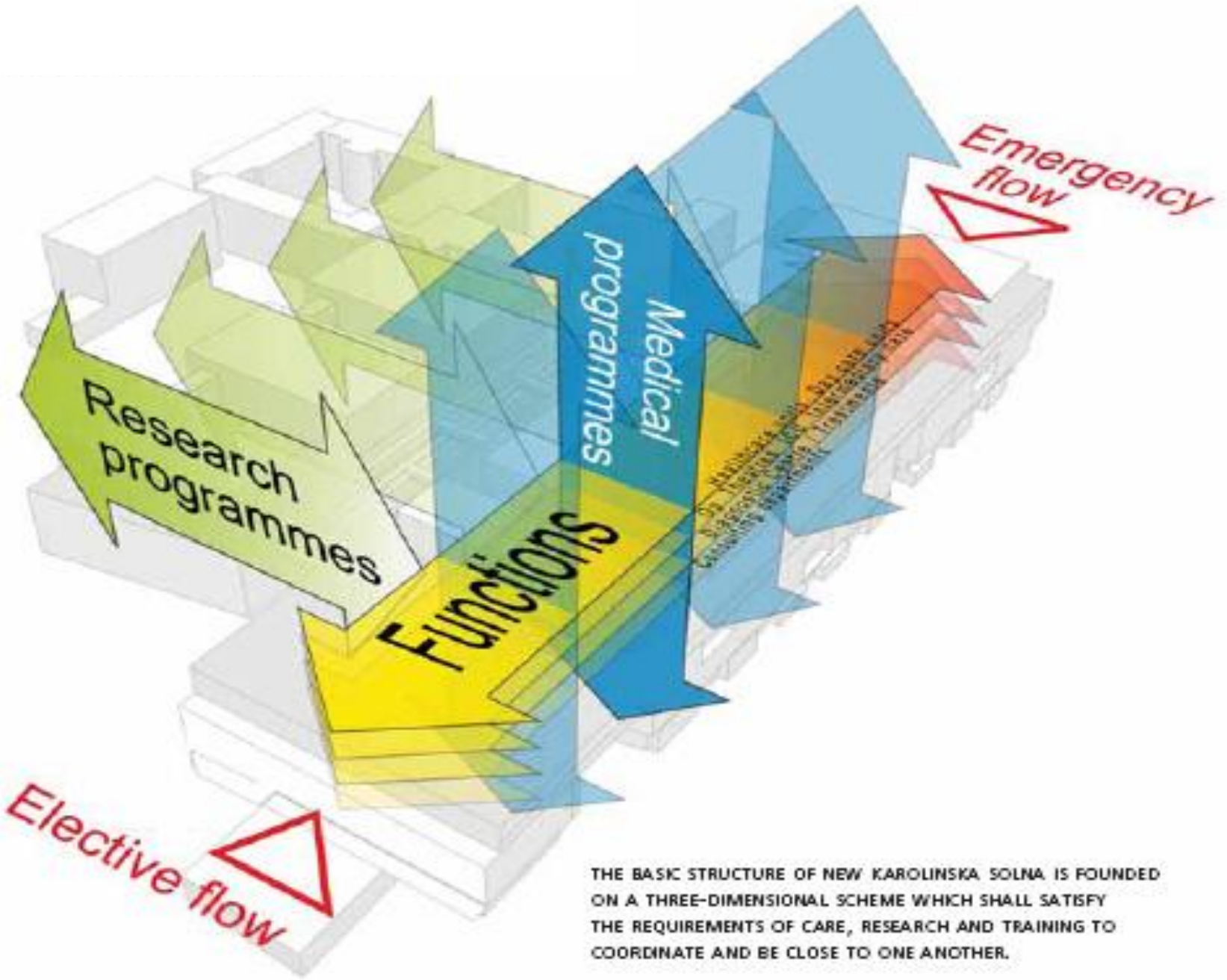


Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- L'ospedale e innovazioni medico-sanitarie: missione e realtà
  - L'ospedale di oggi
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- **L'ospedale di domani (modelli di cambiamento)**
    - **Il "New Karolinska Solna 2016"**
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- Conclusioni

The New Karolinska Solna 2016

The challenge for the New Karolinska Solna University Hospital, which opens for the first patients in 2016, is to offer highly specialized and specialized medical care and to carry out research and educational training on a significant scale and at highest quality. The new Karolinska University Hospital will be a center in the Stockholm region's renewed medical care system and will contribute to the effective collaboration with other hospitals and healthcare providers in the region.



THE BASIC STRUCTURE OF NEW KAROLINSKA SOLNA IS FOUNDED ON A THREE-DIMENSIONAL SCHEME WHICH SHALL SATISFY THE REQUIREMENTS OF CARE, RESEARCH AND TRAINING TO COORDINATE AND BE CLOSE TO ONE ANOTHER.

The New Karolinska Solna 2016

The new University hospital will have:

- **Clear focus on the patient's safety and integrity**
- **Secure single rooms to reduce the risk of spreading infection**
- **Efficient and process-oriented approach, to minimize having to move the patient, for example**
- **Good collaboration and logistics between the different units**
- **Care which is organized under medical themes**
- **Increased proximity of care, research and training that will enhance advances in healthcare**
- **Appropriate environment that stimulates the healing process**
- **Stimulating environment for staff, researchers and students**
- **An energy-efficient and sustainable hospital**
- **A University hospital in the city, close to residents**

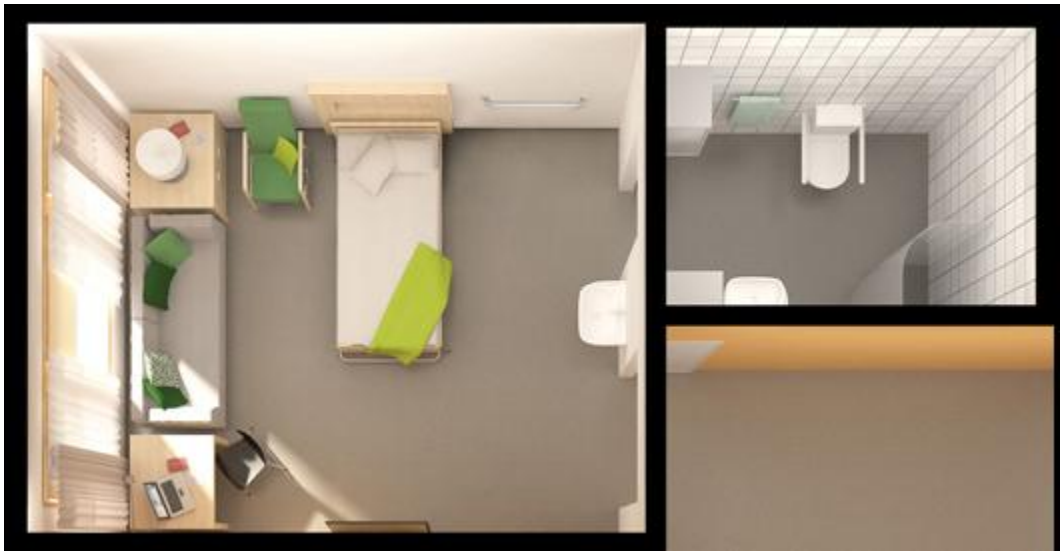
Patients at the New Karolinska Solna will be investigated and treated without waiting times and setup times. The goal is that most of the investigations and decisions about treatment should be done on the same day.

What does ”patients first” mean within the NKS?

“Patients First” means that great emphasis is placed on areas concerning healthcare associated infections (VRI), medication, falls and nutrition.

The following are examples of how the NKS plans to ensure "Patients First", all of which contribute to the increased safety of the patient:

-Single rooms contribute to reducing the risk of the spreading of diseases and mean that patients can be cared for in their rooms in general and can also have relatives with them throughout the whole of their stay in hospital



Conceptual layout: Single rooms with a private shower and toilet and space for relatives to stay overnight.

Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- L'ospedale e innovazioni medico-sanitarie: missione e realtà
  - L'ospedale di oggi
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- **Il lavoro ospedaliero nell'ospedale che cambia (EHRs)**
- Conclusioni

VIEWPOINT

Teaching Physicians to Care Amid Chaos

Allan S. Detsky, MD, PhD
Donald M. Berwick, MD

JAMA, March 13, 2013—Vol 309, No. 10

For physicians who were residents in the 1970s (like we were), it was a simpler era for care.
A relatively small number of medications were available for treatment and prevention of illness. All patients with acute myocardial infarctions received lidocaine because physicians mistakenly thought it prevented arrhythmic death.
The powerful cardiovascular benefits of aspirin were unknown.
Blood work and plain radiographs could be ordered (computed tomography was just arriving on the scene), but physicians had to go to the radiology department to view the images. Information was exchanged by synchronous face-to-face and telephone communication or by written notes and letters.
Physicians and surgeons worked in teams, whose members shared responsibility for the territory of specific patient wards. In most teaching hospitals, each resident was responsible for a roster of patients, and the work ethic was clear: complete all clinical tasks before leaving for the night.
Even if a resident had been on call the night before, if one of his or her patients was unstable, he or she stayed late until the clinical issues were resolved.
Signing over an unstable patient to a coresident was considered bad form.
Residents showed their investment in the well-being of patients by taking responsibility for them during the full length of time those patients were hospitalized, starting with their admission.
Attending physicians typically served for 1 month at a time.
After patients were discharged, residents often saw them in ambulatory settings—"continuity clinic," sometimes for as long as they trained at that hospital.
When those residents left the hospital training program, they passed their clinic patients on as a group to incoming residents.
Continuity was a key ingredient, allowing physicians of that era to translate their good intentions and commitment into care.

In 2013, inpatient medical care in teaching hospitals is different: far more complex, more intense, and, simply put, faster. The arsenal of diagnostic tests, medical therapies, interventional technologies, and health care professionals is much larger.

Attending staff have shorter rotations, often 1 or 2 weeks. For good reasons, resident work schedules have fewer total and consecutive hours.

A large proportion of the patients cared for by a primary team are admitted by other residents, handed off to them as “holdovers.”

Team schedules seem less synchronized, and turnover of members seems more frequent.

As a consequence of these scheduling changes, a hospitalized patient is now often cared for by many more and different physicians.

The length of time a single physician bears responsibility for a patient may be as short as a few hours.

The inevitable result is an increase in the proportion of time a hospitalized patient is cared for by physicians who neither initiated a care plan nor will be responsible for (or perhaps even aware of) the final outcome.

Inpatient care in teaching hospitals has become a relay race for the responsible physicians and consultants, and patients are the batons.

Communication patterns are now fundamentally different from those of the earlier era, due to technological progress in electronic and mobile communication.
These technologies have brought efficiency, but have also vastly increased the total volume of communication and the frequency of interruptions, even during important tasks.
The electronic health record (EHR) has pulled both the resident and attending physicians' focus toward the computer instead of the patient, and the contemporary EHR has become a series of often unrelated notes.
For all these reasons and more, the job of a resident and attending staff is far more stressful today than in previous times, and continuity—a hallmark of schedules in earlier eras—has decreased.
It is worth asking what the effects of such speed, complexity, and continual handoffs may be on the perspectives of the physicians involved—both for trainees and attending physicians.
As physicians near the end of their time of responsibility, priorities can change, as they do for a lameduck president or congressman.
Additionally, do residents who care for patients for short periods really know each patient's full history?
Can the broader sense of commitment, responsibility, and command of patients' details that we recall (albeit through the distorting lens of nostalgia) from our own training years endure?

It is easy to conjure up specific, hypothetical examples.

Will a surgeon, on call for just 1 week and caring for a patient who needs a difficult or risky procedure, delay the surgery until the next surgeon takes over?

Will an internist nearing the end of an attending stint, faced with a family who is demanding futile care of a patient who is not in imminent danger of dying, put off that difficult conversation until the next attending takes over?

These examples are not raised to impugn the motivation or ethical compass of today's residents and their teachers, but only to point out that rapid turnovers and short time horizons likely have consequences for who takes responsibility for what.

Few other industries that depend on effective workforce cooperation would choose to be organized in this chaotic way.

VIEWPOINT

Putting Health IT on the Path to Success

William A. Yasnoff, MD, PhD
Latanya Sweeney, PhD
Edward H. Shortliffe, MD, PhD

JAMA, March 13, 2013—Vol 309, No. 10

VIEWPOINT

Improving the Electronic Health Record—Are Clinicians Getting What They Wished For?

James J. Cimino, MD

JAMA, March 13, 2013—Vol 309, No. 10

Pleas for improvement in patient health records date back to Florence Nightingale and have persisted well into the 21st century.

Computer based records, currently referred to as electronic health records (EHRs), have been proposed as a means for improving availability, legibility, and completeness of patient information.

There is no question that computerization has made patients' records more available and legible. With respect to completeness, however, there are now complaints that the record is too complete: electronic notes are deemed by many clinicians as being full of extraneous details and obscuring important aspects of a patient's condition.

The documentation functions are, in a way, automated versions of an antiquated model.

The documentation functions in EHRs are designed to replicate problem-based medical records. Accomplishing this on paper requires finding information from other parts of the patient's chart, such as diagnostic reports, flow sheets, and other clinicians' notes, and then reentering this information into the new note.

Computer-based documentation, while more legible, requires more time and effort, reducing flexibility. When the time required for the task exceeds the time available, appropriate completeness is bound to decline.

As EHRs have evolved, attempts have been made to improve the efficiency of electronic documentation. User interface features, like check boxes and shortcut functions, allow rapid inclusion of standard phrases and even boilerplate paragraphs. Such methods are less effective for capturing the complex concepts related to patient conditions and decision making.

Clinical notes are filled with "pertinent negatives" (whether actually pertinent or not), obscuring the more clinically relevant details.

EHRs also are intended to help with the insertion of previously recorded data into the new note, through functions such as automated inclusion of laboratory results, or cut-and paste.

When used injudiciously, such features only serve to further complicate "note bloat" and to perpetuate inclusion of irrelevant or even erroneous information.

On the positive side, EHRs offer clinicians functions that could never be achieved with paper records. For example, computer-based clinical decision support systems that provide warnings about drug interactions, monitor the emergence of dangerous data trends, and provide reminders about health maintenance tasks have been available for decades.

But the potential for EHRs to truly improve patient-care processes still remains relatively untapped. The call for problem oriented records was at least partially realized in the pre- EHR era, and the vision was that computers would assist physicians in capturing clinical reasoning and make it available to other members of the extended care team, not that computers would lead to overdocumentation.

So how can the EHR be improved?

Sommario

- L'ospedale per acuti: scenari di ieri e attualità
- L'ospedale e innovazioni medico-sanitarie: missione e realtà
  - L'ospedale di oggi
    - Epidemiologia nosografica
    - Territorio e prevenzione
    - DEA
    - Re-ricoveri ospedalieri
    - Riduzione dei posti letto
    - Modificazione della LOS
- La transizione dei modelli assistenziali
- Cosa rappresenta e rappresenterà l'ospedale (società, cittadino)
- L'ospedale nella rete dei servizi
- L'ospedale di domani (modelli di cambiamento)
    - Il "New Karolinska Solna 2016"
- Il lavoro ospedaliero nell'ospedale che cambia (EHRs)
- **Conclusioni**

HELP
SOS
HELP
SOS
HELP
SOS
SOS