

Innovation in hospitals and healthcare: the way forward

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Son muchas las cualidades de nuestro sistema sanitario y múltiples las bondades de nuestros hospitales y de sus profesionales. Pero en esta época, caracterizada por continuos y atropellados aires de cambio, unos necesarios y otros temerarios, llama profundamente la atención la ausencia de autocrítica en nuestro sistema hospitalario. Resulta curioso observar la inexistencia de reflexiones críticas con el funcionamiento de nuestros hospitales.

La causa de esta ausencia es clara: Es tal el poder acumulado en los últimos cincuenta años, que llega a oscurecer la razón de los más brillantes de nuestros analistas. Nos encontramos ante un poder tan robusto, tan firme, tan arraigado entre estudiosos, gestores, profesionales y usuarios, que el silencio aplasta cualquier indicio de crítica o sospecha de amenaza, ante tanto poder.

FALTA DE ADAPTACIÓN

Es imprescindible acabar con este silencio. El mayor problema al que se ha de enfrentar el Sistema Nacional de Salud en la próxima década es la larga y profunda crisis de nuestro sistema hospitalario. Una crisis consecuencia de su profunda debilidad para adaptarse a las auténticas necesidades en salud de nuestros ciudadanos, y una crisis, derivada de la ingente cantidad de recursos que consume y acapara, que impide invertir y poder desarrollar las estructuras auténticamente imprescindibles para conseguir resultados con mayor eficacia y eficiencia.

El espacio de esta crónica me obliga a no ser prolijo en los argumentos, pero sí me permite enumerar algunas de las disfunciones que acumula el gobierno de nuestros hospitales:

- Una ausencia de autocrítica sobre su modelo orga-

¿Cuándo cambiarán los hospitales?



Asensio López Santiago*

El modelo hospitalario actual está en crisis, entendida ésta como una oportunidad de renovación. El autor apunta las carencias y defectos que en él se han ido generando y plantea la necesidad de un amplio debate.

nizativo y su relación con el resto del sistema sanitario. Primera y gran barrera para el cambio: sin autoconciencia es imposible transformación alguna.

- El modelo con el que se organizan los hospitales es incapaz de ofrecer a los pacientes una atención cálida y en la que se imponga la humanización.

- Todavía está muy lejos la participación real de los pacientes en la toma de decisiones; en todas aquellas intervenciones que afectan a su salud.

- Una profunda debilidad perpetuada en el tiempo: las enormes lagunas en la atención, derivadas de la falta de continuidad asistencial a los pacientes con el resto de los niveles asistenciales.

- Los modelos de trabajo imperantes, salvo excepciones, están todavía alejados de un auténtico trabajo en equipo entre las diferentes categorías profesionales.

- Los hospitales son una constante *puerta de entrada* a la tecnificación y a la medicalización innovadora, pero con una carencia generalizada en la evalua-

ción en su impacto en la salud y en la economía del sistema sanitario.

- La falta de continuidad en la atención origina una deficiencia en la auténtica evaluación de su actividad, pues la mayoría de los datos disponibles se refieren a los tiempos de hospitalización.

- Salvo excepciones, los hospitales abordan enfermedades. Es poco habitual que se enfrenten a los problemas de salud de las personas de una manera integral, atendiendo a sus contextos familiares y sociales.

- La extraordinaria fragmentación en múltiples especialidades dificulta la atención coordinada intrahospitalaria de los pacientes. Muchos son los que toman decisiones sobre una misma persona, pero de manera fragmentada.

- Estamos muy lejos de conocer con transparencia los resultados de su actividad: desde la selección de sus gestores hasta los criterios de asignación de sus recursos y el análisis de las variables que condicionan sus resultados en salud o económicos.

Todas estas carencias son endémicas en nuestro medio. Tanto nos han dado, y nos siguen dando, nuestros hospitales y sus profesionales, que somos incapaces de romper este aplastante velo de silencio. Pero es hora de exponerlo, claro y fuerte: el modelo hospitalario está en una profunda crisis. Y para romper con esta inercia, el primer paso para movilizar un cambio, es tomar autoconciencia. Invito a debatir y discutir sobre el asunto. Porque, por fortuna, hay vientos que rompen desde más allá de nuestras fronteras, proclamando una *nueva gobernanza* para los hospitales. El futuro de nuestro sistema público de salud nos va en ello.

* Coordinador de proyectos estratégicos de la Consejería Sanidad de Murcia.

Need for change in hospitals....

- Absence of self-criticism on the organizational model
- They are not patient-centered
- Lack of continuity of care with other levels
- Lack of teamwork
- Fragmentation in multiple specialities
- Gateway to technology without proper assessment
- Most important part of health spending
- Global approach to the sick person diseases are treated , unusual is not taken into account family and social context of the patient
- Lack of knowledge about their health outcomes and / or economic
- Transparency: Far from the results of their activity
- Selection of its managers
- Etc...

International comparisons

(Report by Heijink R, Polder JJ, et al., 2006)

Table 15: Percentage of total (SHA) health expenditure per provider category

		AUS 2000	CAN 1998	FRA 1998	GER 2002	NETH 2003
HP.1	Hospitals	33,8	32,8	41,9	30,1	35,5
HP.2	Nursing and residential care facilities	6,9	9,7	3,1	7,3	11,8
HP.3	Providers of ambulatory care	31,9	27,7	25,0	26,9	22,1
HP.4	Retail sale and other providers of medical goods	17,1	17,8	22,1	21,1	16,0
HP.5	Provision and administration of public health	-	6,3	2,4	1,9	1,7
HP.6	General health administration and insurance	4,4	1,8	1,8	5,9	4,1
HP.7	Other industries (rest of the economy)	-	0,3	1,3	3,9	2,8
HP.9	Rest of the world	-	-	-	-	1,0
Total current expenditure on health care		94,0	96,5	97,6	97,1	95,1
	Capital formation of health care provider institutions	6,0	2,8	2,4	2,9	4,9
	Undistributed	-	0,7			
Total health expenditure		100,0	100,0	100,0	100,0	100,0

AUS=Australia; CAN=Canada; FRA=France; GER=Germany; NETH=Netherlands.

Source: OECD Health Data, with an adjustment for France: €2105 million from hospital expenditure moved to nursing and residential care facilities. This entails long-term hospital stays, arranged for elderly (see table 9).

SHA: System of Health Accounts

¿Dónde está y hacia dónde va nuestro sistema sanitario?

Health care system: where is now and where it goes?

Josep M. Piqué *

Med Clin (Barc). 2013;140(11):514–519

Director General del Hospital Clínic de Barcelona, Barcelona, España

- **Limit hospitalization for therapeutic procedures related to technologically complex and very specific flare-ups of highly selected patients with chronic diseases.**
- **Reduce acute beds**
- **In parallel create and expand support devices for rapid problem solving**
- **Creating Process Units (multiprofessional and multidisciplinary) for the management of prevalent diseases**
- **Develop alternatives to conventional hospitalization (Support Teams, home, day hospital ..)**
- **Management Units for chronic processes (with family physicians, nurses, home support, day hospital support, call centers, tele-assistance tools help or telemonitoring)**
- **Involve efficient management professionals with innovative response to chronic disease**
- **Coordination with primary care. cross pattern. general concept. integrated, coordinated and measurable health care in terms of health outcome.**
- **Coordination with nursing homes and social devices.**
- **The organization must turn grouped together and around the patient and each group performed the part of care for which it is better trained, more effective and less cost.**
- **Modify incentive and compensation systems of the parties.**

Future hospital: Caring for medical patients



Future Hospital
Commission

A report from the Future Hospital Commission
to the Royal College of Physicians
September 2013

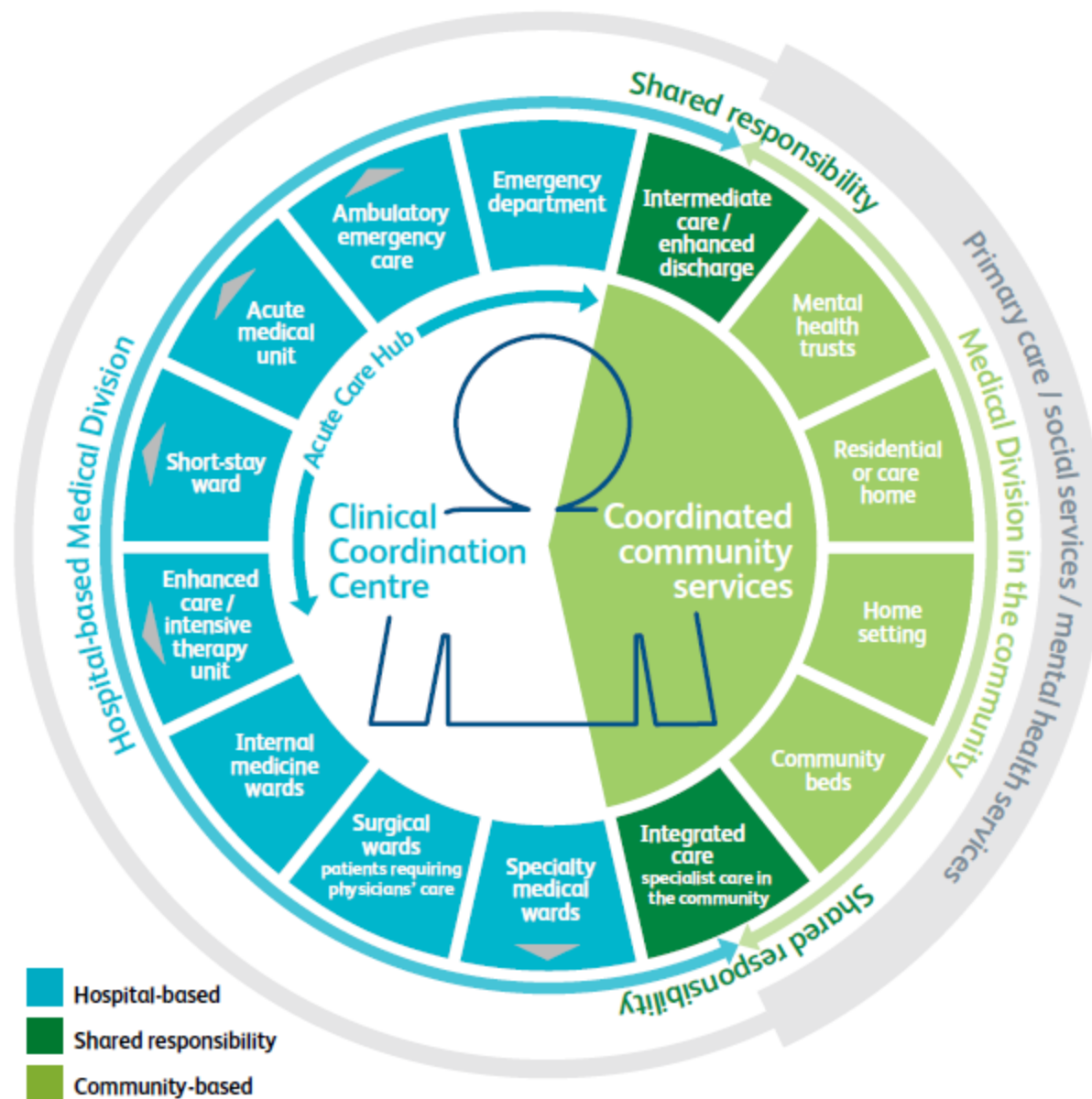
The model of care proposed by the Future Hospital Commission is underpinned by the principle that hospitals must be designed around the needs of patients. The Commission's recommendations are centred on the need to design hospital services that deliver:

- > safe, effective and compassionate medical care for all who need it as hospital inpatients
- > high-quality care sustainable 24 hours a day, 7 days a week
- > continuity of care as the norm, with seamless care for all patients
- > stable medical teams that deliver both high-quality patient care and an effective environment in which to educate and train the next generation of doctors
- > effective relationships between medical and other health and social care teams
- > an appropriate balance of specialist care and care coordinated expertly and holistically around patients' needs
- > transfer of care arrangements that realistically allocate responsibility for further action when patients move from one care setting to another.



In the hospital of the future:

- 1 Fundamental standards of care must always be met.¹
- 2 Patient experience is valued as much as clinical effectiveness.
- 3 Responsibility for each patient's care is clear and communicated.
- 4 Patients have effective and timely access to care, including appointments, tests, treatment and moves out of hospital.
- 5 Patients do not move wards unless this is necessary for their clinical care.
- 6 Robust arrangements for transferring of care are in place.
- 7 Good communication with and about patients is the norm.
- 8 Care is designed to facilitate self-care and health promotion.
- 9 Services are tailored to meet the needs of individual patients, including vulnerable patients.
- 10 All patients have a care plan that reflects their individual clinical and support needs.
- 11 Staff are supported to deliver safe, compassionate care, and committed to improving quality.



The Medical Division remit: circle of patient-centred care. Directional arrows (in the hospital-based Medical Division) denote areas of the future hospital where patients may be referred on to tertiary specialist care.

- Protocolize “industrialized” processes (1/3 patients) (Example:Fast track ileocolon surgery)
- Create coordinating clinical sessions for individualized patient working methodology in hospital (2/3 patients)
- Reorienting the organization towards geriatric frailty and deconstruct the care of chronic patients
- Stakeout powers between specialists and generalists
- Increase training quality and organizational skills nurses
- Stressing the organization to ensure continuity of care and improve patient safety
- Rethinking the organization to adapt to patient-centered care
- Adapt the criteria for admission to the critical care units and semi-critical deployment strategies
- Leadership , learn from mistakes and promote innovation

Future hospital: caring for medical patients

Protocolize “industrialized” processes

Fast track surgery versus conventional recovery strategies for colorectal surgery (Review)

Spanjersberg WR, Reurings J, Keus F, van Laarhoven CJHM



AUTHORS' CONCLUSIONS

Implications for practice

The use of ERAS programs in peri-operative care for abdominal (ileo-) colorectal surgery seems safe. Implementation in the identified RCT's showed a reduction in overall complications in the ERAS group, while procuring a decrease in hospital length of stay. However, major complications were not reduced, and the effect was due to a reduction in undefined complications in a single trial. More large studies, with more stringent quality criteria may improve power and provide proof of reducing complications. In the field, a common idea is although releasing patients earlier, ERAS leads to more readmissions. Although patients were released earlier, surprisingly no increase in readmissions have been observed.

Description of the intervention

In recent years, a trend towards new peri-operative treatment strategies has been seen; "Fast track surgery" or Enhanced Recovery After Surgery (ERAS). ERAS programs focus on a number of techniques that facilitate early recovery after major surgery by preserving pre-operative bodily composition and organ functions. Techniques include optimal pain control by epidural and local anaesthesia, minimally invasive techniques, and aggressive post-operative rehabilitation (Lassen 2009; Wilmore 2001). All these interventions are chosen on the basis of high-grade evidence of clinical efficacy. The first to incorporate these strategies in elective colonic surgery were Kehlet and associates in the mid 90's, showing a reduction of days to recovery to as early as 2 days postoperatively (Kehlet 2007).

Future hospital: caring for medical patients

- > high-quality care sustainable 24 hours a day, 7 days a week

Like Night and Day — Shedding Light on Off-Hours Care

David J. Shulkin, M.D.

Lately, I've been coming to work at midnight. You see, I've begun making late-night administrative rounds at the hospital where I am president and chief executive officer. No, I'm not nostalgic for my harrowing days as a resident. Rather, these middle-of-the-nighters are part of an initiative of mine intended to address a matter that is of increasing concern at hospitals throughout the country: the stark discrepancy in quality between daytime and nighttime inpatient services.

Like many hospital executives, I've come to appreciate the fact that I work in two distinct places,

though they share the same address. One is a hospital that operates from approximately 7 a.m. until 7 p.m., Monday through Friday. The other is a hospital that operates in the evening, through the night, and on weekends. Although these facilities appear to be one and the same, they in fact represent two very different medical environments.

The weekday hospital has a full administrative team, department chairs and service chiefs, experienced nurse managers, and a full complement of professional staff. The off-hours hospital, on the other hand, rarely, if ever, has senior managers present. Nurse-

to-patient ratios are significantly lower. Even the number of residents is considerably lower — certainly lower than during my days of training — because of mandated work-hour restrictions.

The positive spin on these differences is that we are trying to achieve a calmer and quieter environment at night and on the weekend so that our patients can rest and recuperate. But there are serious downsides. Silent hospital corridors can also reflect sparse staffing and a lack of institutional leadership, which make important hospital services and consultative expertise difficult to obtain. This discrepancy in pro-

Mortality Rate After Nonelective Hospital Admission

Rocco Ricciardi, MD, MPH; Patricia L. Roberts, MD; Thomas E. Read, MD; Nancy N. Baxter, MD, PhD;
Peter W. Marcello, MD; David J. Schoetz, MD

Objective: We hypothesized that the mortality rate after nonelective hospital admission is higher during weekends than weekdays.

Design: Retrospective cohort analysis.

Setting: Patients admitted to hospitals in the Nationwide Inpatient Sample, a 20% sample of US community hospitals.

Patients: We identified all patients with a nonelective hospital admission from January 1, 2003, through December 31, 2007, in the Nationwide Inpatient Sample. Next, we abstracted vital status at discharge and calculated the Charlson comorbidity index score for all patients. We then compared odds of inpatient mortality after nonelective hospital admission during the weekend compared with weekdays, after adjusting for diagnosis, age, sex, race, income level, payer, comorbidity, and hospital characteristics.

Main Outcome Measure: Mortality rate.

Results: Discharge data were available for 29 991 621

patients with nonelective hospital admissions during the 5-year study period: 6 842 030 during weekends and 23 149 591 during weekdays. Inpatient mortality was reported in 185 856 patients (2.7%) admitted for nonelective indications during weekends and 540 639 (2.3%) during weekdays ($P < .001$). The regression revealed significantly higher mortality during weekends for 15 of 26 (57.7%) major diagnostic categories. The weekend effect remained, and mortality was noted to be 10.5% higher during weekends (odds ratio, 1.10; 95% confidence interval, 1.10-1.11) compared with weekdays after adjusting for all other variables with the imputed data set.

Conclusions: These data demonstrate significantly worse outcomes after nonelective admission during the weekend compared with weekdays. Although the underlying mechanism of this finding is unknown, it is likely that factors such as differences in hospital staffing and services offered during the weekend compared with weekdays are causal and mutable.

Arch Surg. 2011;146(5):545-551

Analysis of the Mortality of Patients Admitted to Internal Medicine Wards Over the Weekend

American Journal of Medical Quality
25(4) 312-318

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Medical Quality

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DOI: 10.1177/1062860610366031

<http://ajmq.sagepub.com>



Javier Marco, PhD,¹ Raquel Barba, PhD,²
Susana Plaza, PhD,³ Juan E. Losa, PhD,⁴
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Abstract

The management of patients admitted during weekends may be compromised because the level of staffing in the hospital is often lower then. This study was conducted to assess what independent influence, if any, weekend admission might have on in-hospital mortality. The authors analyzed the clinical data of 429 880 adults >14 years of age who were admitted to internal medicine wards in Spain after having presented to the hospitals' emergency departments. Overall mortality and early mortality (occurring in the first 48 hours) were examined, taking into account whether a patient was admitted on a weekend or a weekday, in addition to other parameters. Weekend admissions were associated with a significantly higher in-hospital mortality than weekday admissions among patients admitted to an internal medicine service (odds ratio [OR] = 1.1; 95% confidence interval [CI] = 1.14-1.08). Differences in mortality persisted after adjustment for age, sex, and coexisting disorders (OR = 1.071; 95% CI = 1.046-1.097). Analyses of deaths within 2 days after admission showed larger relative differences in mortality between weekend and weekday admissions (OR = 1.28; 95% CI = 1.22-1.33). For patients admitted to an internal medicine service via an acute care visit to the emergency room, admission on weekends is associated with higher mortality than admission during the week.

Keywords

mortality, weekends, internal medicine

Future hospital: caring for medical patients

- > effective relationships between medical and other health and social care teams
- > continuity of care as the norm, with seamless care for all patients
- > an appropriate balance of specialist care and care coordinated expertly and holistically around patients' needs
- > transfer of care arrangements that realistically allocate responsibility for further action when patients move from one care setting to another.

Estrategia para el Abordaje de la Cronicidad en el Sistema Nacional de Salud

COMITÉ TÉCNICO

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La organización actual de los servicios, centrados en la resolución de patologías agudas, favorece una atención episódica de los problemas de salud con un enfoque curativo, valorando poco los aspectos preventivos, la perspectiva de los cuidados y la responsabilidad de las personas sobre los mismos. Existe, además, variabilidad no justificada en la atención prestada a pacientes con características clínicas similares y se realizan intervenciones que no aportan valor en términos de mejora en los resultados de salud. La falta de coordinación entre niveles de atención sanitaria (Atención Primaria-Atención Especializada) y entre el sistema sanitario y social es uno de los principales condicionantes de la ineficiencia en la provisión, desarrollo y gestión de los recursos disponibles y conduce a que los servicios no se presen-ten en el nivel más adecuado y por el profesional más idóneo.

El sistema sanitario no puede ofrecer solamente un seguimiento y unos cuidados discontinuos a los pacientes con enfermedades crónicas, ligados en general a las agudizaciones o descompensaciones de sus patologías. El abordaje de la cronicidad requiere fomentar el **trabajo en equipos interdisciplinarios**, formados por los diferentes profesionales de los servicios sanitarios y sociales implicados en la atención a estos pacientes, que garanticen la **continuidad en los cuidados** con la máxima participación del paciente y de su entorno.

Problems.....

- *Resolution of acute problems*
- *No preventive aspects are valued*
- *Variability not justified*
- *Lack of coordination between levels of care*
- *Need teamwork and continuity of care*

The State of US Health, 1990-2010

Burden of Diseases, Injuries, and Risk Factors

JAMA. doi:10.1001/jama.2013.13805
Published online July 10, 2013.

US Burden of Disease Collaborators

RESULTS US life expectancy for both sexes combined increased from 75.2 years in 1990 to 78.2 years in 2010; during the same period, HALE increased from 65.8 years to 68.1 years. The diseases and injuries with the largest number of YLLs in 2010 were ischemic heart disease, lung cancer, stroke, chronic obstructive pulmonary disease, and road injury. Age-standardized YLL rates increased for Alzheimer disease, drug use disorders, chronic kidney disease, kidney cancer, and falls. The diseases with the largest number of YLDs in 2010 were low back pain, major depressive disorder, other musculoskeletal disorders, neck pain, and anxiety disorders. As the US population has aged, YLDs have comprised a larger share of DALYs than have YLLs. The leading risk factors related to DALYs were dietary risks, tobacco smoking, high body mass index, high blood pressure, high fasting plasma glucose, physical inactivity, and alcohol use. Among 34 OECD countries between 1990 and 2010, the US rank for the age-standardized death rate changed from 18th to 27th, for the age-standardized YLL rate from 23rd to 28th, for the age-standardized YLD rate from 5th to 6th, for life expectancy at birth from 20th to 27th, and for HALE from 14th to 26th.

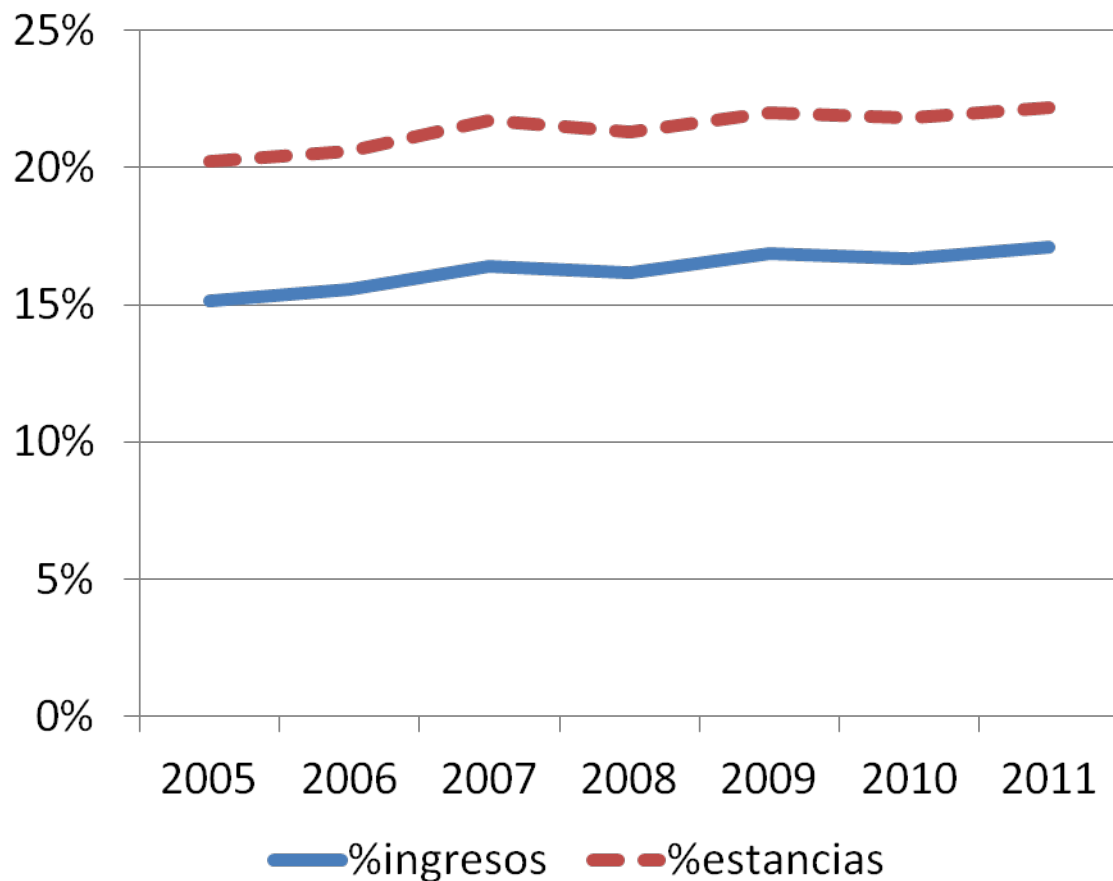
CONCLUSIONS AND RELEVANCE From 1990 to 2010, the United States made substantial progress in improving health. Life expectancy at birth and HALE increased, all-cause death rates at all ages decreased, and age-specific rates of years lived with disability remained stable. However, morbidity and chronic disability now account for nearly half of the US health burden, and improvements in population health in the United States have not kept pace with advances in population health in other wealthy nations.

En España la esperanza de vida aumenta 3 horas cada día.....

Evolución en 7 años...

	2005	2006	2007	2008	2009	2010	2011
Exitus	10,30%	9,50%	9,90%	9,90%	9,85%	9,90%	10,30%
% urgencias	93,40%	92,10%	92,20%	92,60%	92,50%	93,10%	93,0%
Edad media	70,8	70,5	71,2	71,8	71,9	72,4	73,1
Edad mediana	75	75	76	77	77	77	78
Estancia media	10,1	9,8	9,8	9,7	9,5	9,4	9,1
Resp +Cardiac o	52,70%	51,10%	52,80%	52,40%	52,40%	52,10%	53,2%
% mujeres	46,20%	46,60%	46,80%	47,40%	47,50%	47,60%	48,1%

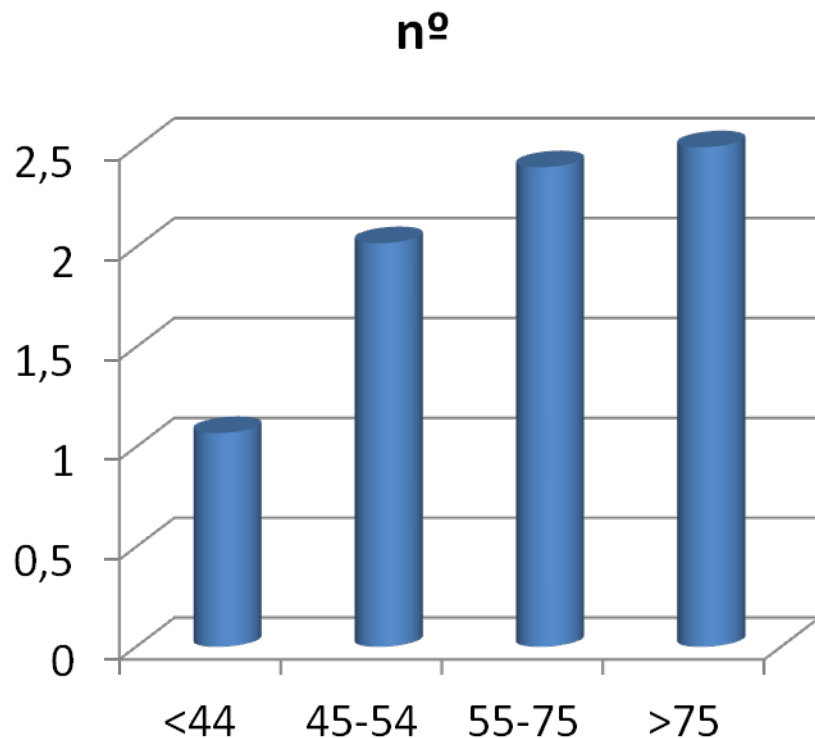
% altas y % estancias en MI respecto al total de altas de nuestro país



%ingresos	%estancias
15,1%	20,2%
15,6%	20,6%
16,4%	21,7%
16,2%	21,3%
16,9%	22,0%
16,7%	21,8%
17,1%	22,2%

Ingresos hospitalarios en medicina interna: enfermedades crónicas

Edad	Nº enfermedades crónicas
<44 años	1,07
45-54 años	2,02
55-74 años	2,52
>75 años	2,55



Johan Polder, PhD | Professor in Health Economics

Cost of illness - Framework & Data
“Measuring education and health volume output”

OECD - Paris, June 6th- 7th, 2007

Costs per patient and age

- < 65 years2.200 Euros/year
- -65 y 79 years....8.750 Euros/year
- 80 y 94 years....15.000 Euros/year



1.2. Extension of work on
expenditure by disease,
age and gender

INTERIM REPORT

EU CONTRIBUTION AGREEMENT 2011 53 01

April 2012



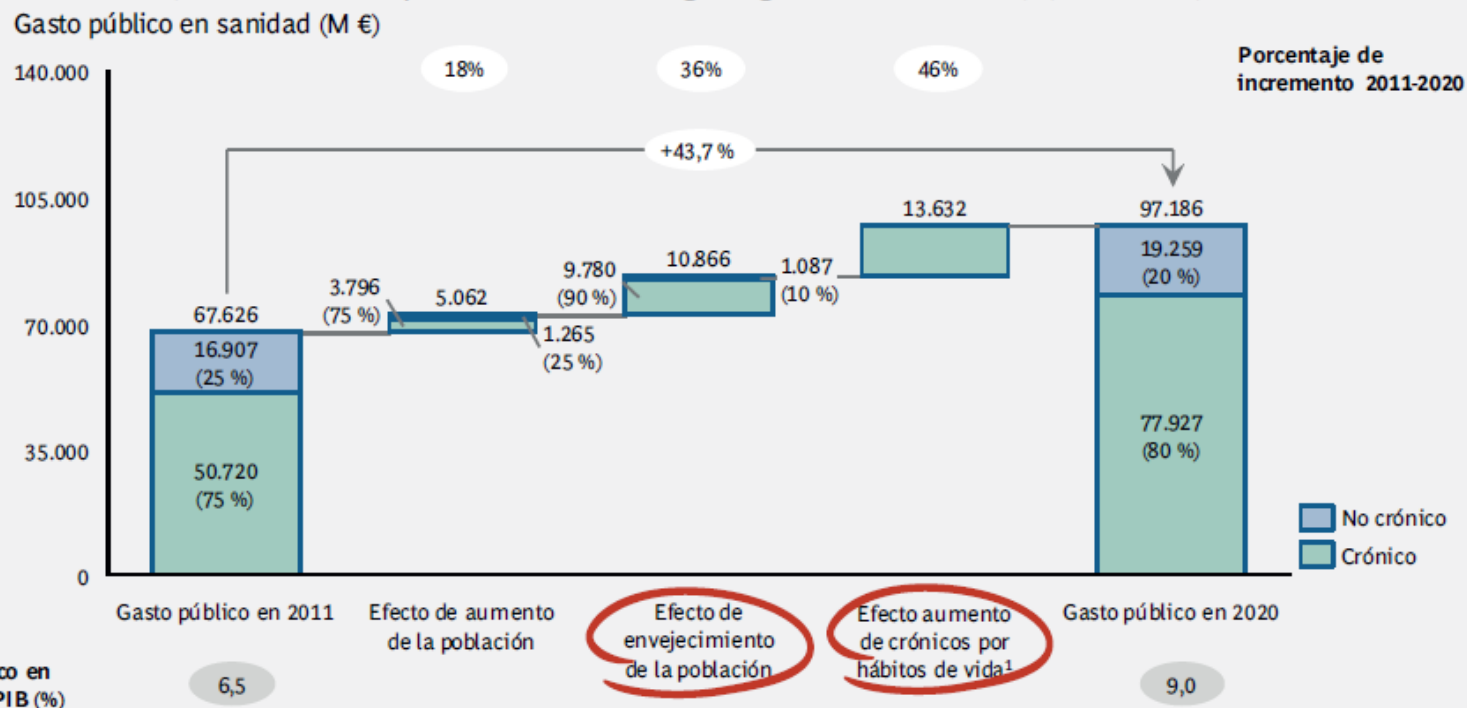
Health Division

www.oecd.org/health

Directorate for Employment, Labour and Social Affairs

Figura 5

**Evolución estimada de la necesidad de recursos públicos en sanidad en España
(escenario en el que no se realiza ninguna gestión de crónicos) (2011-2020)**



1. Se ha supuesto un aumento de la población crónica anual (en porcentaje) equivalente al experimentado por la diabetes en 1995-2006 derivado de un empeoramiento en los hábitos de vida

Nota 1: mantenimiento del gasto público por paciente de 2011 Nota 2: se ha asumido que el porcentaje de gasto público en 2011 debido a crónicos es equivalente al porcentaje de gasto en crónicos en público y privado

Fuente: OECD Health Data 2012; INE; Federación de Asociaciones para la Defensa de la Sanidad Pública (FADSP); Ministerio de Sanidad; Naciones Unidas; análisis BCG

Future hospital: caring for medical patients

- > transfer of care arrangements that realistically allocate responsibility for further action when patients move from one care setting to another.

- 9 Services are tailored to meet the needs of individual patients, including vulnerable patients.
- 10 All patients have a care plan that reflects their individual clinical and support needs.
- 11 Staff are supported to deliver safe, compassionate care, and committed to improving quality.

SPECIAL ARTICLE

End-of-Life Transitions among Nursing Home Residents with Cognitive Issues

Pedro Gozalo, Ph.D., Joan M. Teno, M.D., Susan L. Mitchell, M.D., M.P.H.,
Jon Skinner, Ph.D., Julie Bynum, M.D., M.P.H., Denise Tyler, Ph.D.,
and Vincent Mor, Ph.D.

Table 2. Variation in Rates of Burdensome Transitions among 474,829 Patients, According to State.

Criterion for a Burdensome Transition	Overall Rate for All Patients %	State with Lowest Rate*	State with Highest Rate*
Transition 72 hours before death			
To hospice	4.4	Alaska (0)	Nevada (8.0)
From nursing home to acute care hospital	5.8	Vermont (1.1)	Mississippi (12.7)
From hospital to nursing home	2.3	Alaska (0)	Mississippi (3.9)
Lack of continuity in hospitalization			
From nursing home A to hospital to nursing home B in last 90 days	2.7	Alaska (0)	Louisiana (10.9)
Multiple hospital admissions in the last 90 days of life			
≥2 Episodes of pneumonia	2.3	Alaska (0)	Louisiana (6.0)
≥2 Episodes of urinary tract infection	3.9	Vermont (0.1)	Louisiana (11.8)
≥2 Episodes of dehydration	2.7	Alaska (0)	Louisiana (7.6)
≥2 Episodes of septicemia	2.1	Alaska, Idaho, and Wyoming (0)	Louisiana (5.2)
≥3 Hospitalizations for any reason	4.2	Oregon (0.1)	Louisiana (12.2)

Reducing Unnecessary Hospitalizations of Nursing Home Residents

Joseph G. Ouslander, M.D., and Robert A. Berenson, M.D.

It's a common scenario: a 90-year-old resident of a U.S. nursing home — call her Ms. B. — has moderately advanced Alzheimer's disease, congestive heart failure with severe left-ventricular dysfunction,

and chronic pain from degenerative joint disease. She develops a nonproductive cough and a fever of 100.4°F. The night nurse calls an on-call physician who is unfamiliar with Ms. B. Told that she has a cough and fever, the physician says to send her to the emergency room, where she's found to have normal vital signs except for the low-grade fever, a normal basic-chemistry panel and white-cell count, but a possible infiltrate on chest x-ray. She is admitted to the hospital and treated with intravenous fluids and antibiotics. During her second night in the hospital, Ms. B. becomes confused and agitated, climbs out of bed, and falls, fracturing her hip. One week after admission, she is dis-

charged back to the nursing home with coverage under the Medicare Part A benefit. The episode results in about \$10,000 in Medicare expenditures, as well as discomfort and disability for Ms. B.

There is an alternative scenario, however, in which, when the same symptoms develop, the night nurse evaluates Ms. B. using a standardized protocol and calls an on-call nurse practitioner (NP) who visits the nursing home daily. "Late this afternoon, the resident developed a nonproductive cough and a temperature of 100.4°F," the nurse reports. "Her other vital signs are normal, and her lungs sound clear. She isn't complaining of shortness of breath or chest pain, and there is no leg edema.

I think we can watch her and call back if something changes." The NP agrees and says she'll see Ms. B. in the morning, at which point she finds a persistent low-grade fever and crackles in the right posterior lung field. After consulting with Ms. B.'s daughter, who serves as her health care proxy, the NP orders an oral antibiotic and increased oral fluid intake. Ms. B. recovers over the next several days. The episode costs Medicare about \$200 and results in no complications for Ms. B.

More than 1.6 million Americans live in nursing homes. Hospitalizations are common in this population; in 2006, 23.5% of the people admitted to a post-acute-care skilled-nursing facility were rehospitalized within 30 days.¹ Several studies suggest that many of these hospitalizations are inappropriate, avoidable, or related to conditions that could be treated outside the hospital setting —



JAMDA

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Original Study

Admission of Nursing Home Residents to a Hospital Internal Medicine Department

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A B S T R A C T

Keywords:

Nursing home
hospitalizations
mortality
internal medicine

Objective: Hospitalization of nursing home residents is costly and potentially exposes residents to iatrogenic disease and psychological harm.

Design and Setting: In this study, we analyzed the data from the Basic Minimum Data Set of patients hospitalized from the nursing home who were discharged from all the internal medicine departments at the National Health Service hospitals in Spain between 2005 and 2008, according to the data provided by the Ministry of Health and Consumer Affairs.

Results: Between January 2005 and December 2008, 2,134,363 patients were admitted to internal medicine departments in Spain, of whom 45,757 (2.1%) were nursing home residents. Overall, 7898 (17.3%) patients died during hospitalization, 2442 (30.91%) of them in the first 48 hours. The following variables were the significant predictors of in-hospital mortality in multivariate analysis: age (odds ratio [OR] 1.02, 95% confidence intervals [CI] 1.02–1.03), female gender (OR 1.13, 95% CI 1.13–1.17), dementia (OR 1.09, 95% CI 1.03–1.16), previous feeding tube (OR 1.34, 95% CI 1.09–1.79), malignant disease (OR 2.03, 95% CI 1.86–2.23), acute infectious disease (OR 1.18, 95% CI 1.12–1.25), pressure sores (OR 1.88, 95% CI 1.62–1.95), acute respiratory failure (OR 2.00, 95% CI 1.90–2.10), and nosocomial pneumonia (OR 2.5, 95% CI 2.23–2.72).

Conclusions: Two of every 100 patients admitted to internal medicine departments came from nursing homes. The rate of mortality is very high in these patients, with almost one third of patients dying in the first 48 hours, which suggests that many of these transfers were unnecessary. The cost of these admissions for 1 year was equivalent to the annual budget of a 300- to 400-bed public hospital in Spain. The mechanism of coordination between nursing homes and public hospitals must be reviewed with the aim of containing costs and facilitating the care of patients in the last days of life.

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Aging and Nursing homes

- Median age 78 years in Internal Medicine
- 6% > 90 years. 22 % mortality .
- Admissions from residence influence our performance indicators
- Mortality year follow-up is 4 times higher in geriatric residents.
- 18% mortality among patients admitted from residences , of which 30% in the first 48 hours.
- Increased transfers in the last 72 hours of life and in the final three months
- Need to reduce unnecessary transfers from the residences

Future hospital: caring for medical patients

The model of care proposed by the Future Hospital Commission is underpinned by the principle that hospitals must be designed around the needs of patients. The Commission's recommendations are

1 Fundamental standards of care must always be met.¹

- > an appropriate balance of specialist care and care coordinated expertly and holistically around patients' needs
- > effective relationships between medical and other health and social care teams

VIEWS & REVIEWS



ACUTE PERSPECTIVE

David Oliver: Rehabilitation is part of medicine

I spoke recently at a conference on how future hospital models must adapt to older people's needs. Conversation afterwards turned to doctors' careers and what might make acute and general internal medicine more appealing. Someone pulled out the chestnut (one sadly familiar to geriatricians) that "doctors don't go into medicine to do social work."

Firstly, such patients are the biggest users of acute services. Patients over 65 account for around two thirds of acute hospital admissions and over 80s for a quarter of bed days.¹ One in four acute beds is occupied by someone with dementia.² Multiple comorbidity is the norm in over 60s attending the emergency department,³ and frailty is highly predictive of hospital admission.⁴ Looking after these patients is now everyone's business.^{1 5}

In any aspect of adult hospital medicine, you will encounter (generally older) patients with complex biopsychosocial problems. If we are serious about patient centred care, we can't marginalise them.

ACUTE PERSPECTIVE

David Oliver: Rehabilitation is part of medicine

Secondly, a patient who could walk last week but is now falling or immobile, or who was lucid but is now delirious, who had intact bones but has now broken one, has a diagnosable and modifiable medical problem. The notion that he or she is a “social” admission⁶ ignores the medical skill and knowledge needed to help patients regain former levels of independence and return home (or vice versa). Comprehensive geriatric assessment is such a multidisciplinary biopsychosocial approach. Meta-analysis of 22 trials shows that doing this well has long term benefits for inpatients’ survival and independence for months after they leave hospital.⁷

Thirdly, most older patients admitted acutely to hospital have some functional impairment already,^{8 9} but most also lose some ability in common activities such as standing, walking, or dressing while on the wards,^{9 10} and they go home short of baseline even if the acute problem has stabilised.¹¹ So most need, and benefit from, a skilled multidisciplinary approach involving allied health professionals. Many need referral to ongoing health and care services to continue their recovery outside hospital. That’s the way of modern healthcare.

So, next time I discuss future hospital models I’ll wonder aloud whether medical training will ensure that all doctors have rudimentary knowledge about helping older people back onto their feet, an understanding of community services, and full commitment to rehabilitation rather than assuming it’s someone else’s job.

We mustn’t socialise problems that medical skills can help tackle. A patient with a fall, a fracture, or loss of mobility needs more than just a social approach.

**Readmissions.....specially potentially
avoidable readmissions...!!!**

Studies of Rehospitalizations

- Nearly 20% of Medicare hospitalizations are followed by readmission within 30 days.
- 90% of rehospitalizations within 30 days appear to be unplanned, the result of clinical deterioration.
- MedPAC: 75% of readmissions preventable, adding \$12 Bn/yr to Medicare spending.
- Only half of the patients rehospitalized within 30 days had a physician visit before readmission.
 - Unknown if lack of physician visit causes readmissions—but poor continuity of care, esp for many chronically ill patients.
- 19% of Medicare discharges are followed by an adverse event within 30 days—2/3 are drug events, the kind most often judged “preventable.”

Reducing Avoidable Hospital Readmissions

Steve Hines, PhD
Vice President, Research
Health Research and Educational Trust

June 4, 2010
Florida Hospital Association Meeting

Original Investigation

International Validity of the HOSPITAL Score to Predict 30-Day Potentially Avoidable Hospital Readmissions

Jacques D. Donzé, MD, MSc; Mark V. Williams, MD; Edmondo J. Robinson, MD, MBA, MSHP;
Eyal Zimlichman, MD, MSc; Drahomir Aujesky, MD, MSc; Eduard E. Vasilevskis, MD, MPH; Sunil Kripalani, MD, MSc;
Joshua P. Metlay, MD, PhD; Tamara Wallington, MD; Grant S. Fletcher, MD, MPH;
Andrew D. Auerbach, MD, MPH; Jeffrey L. Schnipper, MD, MPH

IMPORTANCE Identification of patients at a high risk of potentially avoidable readmission allows hospitals to efficiently direct additional care transitions services to the patients most likely to benefit.

OBJECTIVE To externally validate the HOSPITAL score in an international multicenter study to assess its generalizability.

DESIGN, SETTING, AND PARTICIPANTS International retrospective cohort study of 117 065 adult patients consecutively discharged alive from the medical department of 9 large hospitals across 4 different countries between January 2011 and December 2011. Patients transferred to another acute care facility were excluded.

EXPOSURES The HOSPITAL score includes the following predictors at discharge: hemoglobin, discharge from an oncology service, sodium level, procedure during the index admission, index type of admission (urgent), number of admissions during the last 12 months, and length of stay.

MAIN OUTCOMES AND MEASURES 30-day potentially avoidable readmission to the index hospital using the SQLape algorithm.

RESULTS Overall, 117 065 adults consecutively discharged alive from a medical department between January 2011 and December 2011 were studied. Of all medical discharges, 16 992 of 117 065 (14.5%) were followed by a 30-day readmission, and 11 307 (9.7%) were followed by a 30-day potentially avoidable readmission. The discriminatory power of the HOSPITAL score to predict potentially avoidable readmission was good, with a C statistic of 0.72 (95% CI, 0.72-0.72). As in the derivation study, patients were classified into 3 risk categories: low ($n = 73\,031$ [62.4%]), intermediate ($n = 27\,612$ [23.6%]), and high risk ($n = 16\,422$ [14.0%]). The estimated proportions of potentially avoidable readmission for each risk category matched the observed proportion, resulting in an excellent calibration (Pearson χ^2 test $P = .89$).

CONCLUSIONS AND RELEVANCE The HOSPITAL score identified patients at high risk of 30-day potentially avoidable readmission with moderately high discrimination and excellent calibration when applied to a large international multicenter cohort of medical patients. This score has the potential to easily identify patients in need of more intensive transitional care interventions to prevent avoidable hospital readmissions.

Table 1. HOSPITAL Score^a for 30-Day Potentially Avoidable Readmissions

Attribute	Points If Positive
Low hemoglobin level at discharge (<12 g/dL ^b)	1
Discharge from an Oncology service	2
Low sodium level at discharge (<135 mEq/L ^c)	1
Procedure during hospital stay (any ICD-9 ⁷ coded procedure)	1
Index admission type: urgent or emergent (nonelective)	1
No. of hospital admissions during the previous year	
0-1	0
2-5	2
>5	5
Length of stay ≥ 5 d	2

First, the HOSPITAL score was calculated for each hospital discharge. Then the risk for an admission to be followed by a 30-day potentially avoidable readmission was categorized into 3 groups according to the total number of points: low risk (0 to 4 points), intermediate risk (5 to 6 points), and high risk (≥ 7 points). These categories were created in the

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Original article

Predictive model of readmission to internal medicine wards

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Results: Of the 999,089 internal medicine admissions in Spain during 2006–2007, 12.4% were rehospitalized within 30 days. The key factors that predicted subsequent admission included male sex, length of stay, comorbidity of the patient, and some clinical conditions. There were small but relevant differences among the different age subgroups.

Conclusions: Readmissions to Internal Medicine departments are prevalent (12.4%). The SEMI INDEX can be used to assess accurately the risk of readmission within 30 days after discharge.

Table 3

“Semi index” for the quantification of risk of readmission within 30 days after discharge stratified by age.

Attribute	≤ 50 years	51–70 y	71–90 y	> 90 y
N (%)	153,409 (15.4%)	226,911 (22.7%)	570,592 (57.1%)	48,177 (4.8%)
Global (Risk of readmission)	8.6%	12.2%	13.6%	11.1%
Points ^a				
Gender (male)	1	1	1	1
Length of stay, (above median)	1	1	1	1
Severe liver disease	5	7	6	4
Exacerbation of chronic pulmonary disease	1	3	3	3
Malnutrition	2	2	3	2
Cancer	5	6	3	0
Chronic renal insufficiency	3	4	2	1
Acute Congestive heart failure	1	3	2	1
Anaemia	1	2	2	1
Diabetes	0	1	1	2
Dementia	5	4	1	1
Atrial fibrillation	0	0	1	2
Accuracy of the model	89%	85%	83%	89%
Risk of readmission				
Low risk	0–3 points	0–5 points	0–5 points	0–5 points
Moderate risk	3–6 points	6–9 points	6–9 points	6–8 points
High risk	> 6 points	> 10 points	> 10 points	> 8 points

“SEMI” is the acronym of Sociedad Española Medicina Interna (Spanish Society of Internal Medicine).

^a A patient's final SEMI score is calculated by summing the points of the attributes that apply to the patient.

SPECIAL ARTICLE

Readmissions, Observation, and the Hospital Readmissions Reduction Program

Rachael B. Zuckerman, M.P.H., Steven H. Sheingold, Ph.D., E. John Orav, Ph.D.,
Joel Ruhter, M.P.P., M.H.S.A., and Arnold M. Epstein, M.D.

ABSTRACT

BACKGROUND

The Hospital Readmissions Reduction Program, which is included in the Affordable Care Act (ACA), applies financial penalties to hospitals that have higher-than-expected readmission rates for targeted conditions. Some policy analysts worry that reductions in readmissions are being achieved by keeping returning patients in observation units instead of formally readmitting them to the hospital. We examined the changes in readmission rates and stays in observation units over time for targeted and nontargeted conditions and assessed whether hospitals that had greater increases in observation-service use had greater reductions in readmissions.

METHODS

We compared monthly, hospital-level rates of readmission and observation-service use within 30 days after hospital discharge among Medicare elderly beneficiaries from October 2007 through May 2015. We used an interrupted time-series model to determine when trends changed and whether changes differed between targeted and nontargeted conditions. We assessed the correlation between changes in readmission rates and use of observation services after adoption of the ACA in March 2010.

RESULTS

We analyzed data from 3387 hospitals. From 2007 to 2015, readmission rates for targeted conditions declined from 21.5% to 17.8%, and rates for nontargeted conditions declined from 15.3% to 13.1%. Shortly after passage of the ACA, the readmission rate declined quickly, especially for targeted conditions, and then continued to fall at a slower rate after October 2012 for both targeted and nontargeted conditions. Stays in observation units for targeted conditions increased from 2.6% in 2007 to 4.7% in 2015, and rates for nontargeted conditions increased from 2.5% to 4.2%. Within hospitals, there was no significant association between changes in observation-unit stays and readmissions after implementation of the ACA.

CONCLUSIONS

Readmission trends are consistent with hospitals' responding to incentives to reduce readmissions, including the financial penalties for readmissions under the ACA. We did not find evidence that changes in observation-unit stays accounted for the decrease in readmissions.

This article was published on February 24, 2016, at NEJM.org.

DOI: 10.1056/NEJMsa1513024

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Has the Affordable Care Act Affected Hospital Readmissions?

Daniel D. Dressler, MD, MSc, SFHM, FACP reviewing Zuckerman RB et al. N Engl J Med 2016 Feb 24.

Readmission rates, especially those for ACA-targeted conditions, started declining significantly faster after ACA introduction.

In 2010, the Affordable Care Act (ACA) began to apply financial penalties to hospitals for higher than expected 30-day hospital readmission rates for targeted clinical conditions (acute myocardial infarction, heart failure, and pneumonia). Investigators used an interrupted time series design and Centers for Medicare & Medicaid Services (CMS) data from 2007 through 2015 to evaluate >52 million hospital stays in 3387 U.S. hospitals and their associated 30-day hospital readmission rates.

Annual readmission rates declined throughout the study period; however, a significantly faster decline in hospital readmission rates began in 2010 for both ACA-targeted and ACA-nontargeted conditions. Rates of readmissions declined faster for targeted conditions than for nontargeted conditions, rates of hospital-implementation.

COMMENT

The passage and implementation of the ACA, with its incentives and financial readmission penalties, likely had an overarching effect on rates of all U.S. hospital readmissions — and readmissions for targeted conditions probably were affected most of all. The law's effects probably will be realized further in years to come, as other clinical conditions (total hip or knee replacement and chronic obstructive pulmonary disease) were added to the ACA-targeted conditions in 2015.



Journal Watch



Post-Hospital Syndrome — An Acquired, Transient Condition of Generalized Risk

Harlan M. Krumholz, M.D.

How might the post-hospital syndrome emerge? Hospitalized patients are not only enduring an acute illness, which can markedly perturb physiological systems, but are experiencing substantial stress. During hospitalization, patients are commonly deprived of sleep, experience disruption of normal circadian rhythms, are nourished poorly, have pain and discomfort, confront a baffling array of mentally challenging situations, receive medications that can alter cognition and physical function, and become deconditioned by bed rest or inactivity. Each of these perturbations can adversely affect health and contribute to substantial impairments during the early recovery period, an inability to fend off disease, and susceptibility to mental error.

Comprehensive strategies for mitigating post-hospital syndrome and its accompanying risks might begin with efforts to target the stressors that probably contribute to vulnerability in patients soon after discharge.

HANDOFFS

Transitions of Care Consensus Policy Statement: American College of Physicians, Society of General Internal Medicine, Society of Hospital Medicine, American Geriatrics Society, American College of Emergency Physicians, and Society for Academic Emergency Medicine

Journal of Hospital Medicine Vol 4 | No 6 | July/August 2009

The TOCCC discussed what components should be included in an ideal transition record and agreed on the following elements:

- Principle diagnosis and problem list.
- Medication list (reconciliation) including over-the-counter medications/herbals, allergies, and drug interactions.
- Emergency plan and contact number and person.
- Treatment and diagnostic plan.
- Prognosis and goals of care.
- Test results/pending results.
- Clear identification of the medical home and/or transferring coordinating physician/institution.
- Patient's cognitive status.
- Advance directives, power of attorney, and consent.
- Planned interventions, durable medical equipment, wound care, and so forth.
- Assessment of caregiver status.



Improving the Care of Patients as They Transition from Hospital to Home

Our Vision

By improving hospital discharge processes, Project BOOST aims to:

- Reduce 30 day readmission rates for general medicine patients (with particular focus on older adults)
- Improve patient satisfaction scores and H-CAHPS scores related to discharge
- Improve flow of information between hospital and outpatient physicians and providers
- Identify high-risk patients and target specific interventions to mitigate their risks for adverse events
- Improve patient and family preparation for discharge

Background

According to recent research published in the *New England Journal of Medicine*, about 1 in 5 hospitalized Medicare beneficiaries were readmitted within 30 days after discharge. Unplanned re-hospitalizations cost Medicare \$17.4 billion in 2004.

Project BOOST is led by a national advisory board of recognized leaders in care transitions, hospital medicine, payers and regulatory agencies. The board is co-chaired by Eric Coleman MD, MPH and Mark Williams, MD, FACP, FHM and includes representatives from the Agency for Healthcare Research and Quality (AHRQ), Blue Cross and Blue Shield Association, Centers for Medicare and Medicaid Services, Centers for Disease Control and Prevention, Institute for Health Care Improvement (IHI), The Joint Commission, and Kaiser Permanente. Medical, pharmacy and nursing professional societies, and patient advocates participate and contribute to Project BOOST's development.

De: Society of Hospital Medicine [shm@hospitalmedicine.org]

Enviado el: miércoles, 24 de julio de 2013 20:41

Para: Zapatero Gaviria.Antonio

Asunto: New Research Finds Project BOOST Reduces Readmissions

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[New research published online in the *Journal of Hospital Medicine*](#) this week finds that hospitals implementing Project BOOST experienced a reduction in 30-day readmissions. *Now is the time for hospitalists to do something about it.*

In a study of 11 hospitals that implemented one or more Project BOOST tools, hospitals reduced 30-day readmissions by an average of 13.6 percent.

Readmissions are measured by the percentage of hospitalized patients who return to the hospital within 30 days of discharge. The average rate of 30-day readmissions dropped from 14.7 percent before using Project BOOST to 12.7 percent one year afterward.

Hospitalists can play a leadership role in helping their hospitals reduce readmissions. Now is the time to act.

More than 160 hospital sites nationwide have already participated in Project BOOST, and SHM is accepting applications for its 2013 cohort until August 30.

To apply for the 2013 cohort, visit www.hospitalmedicine.org/boost today.

The Check-Out Checklist

Kathleen Finn, MD, Daniel D. Dressler, MD, MSc, FHM reviewing Soong C et al. *J Hosp Med* 2013 Aug.

An evidence-based hospital discharge checklist that starts at admission might improve safe transition from hospital to home.

With the Centers for Medicare & Medicaid Services (CMS) reducing payments to facilities with high rates of readmission, discharge safety and efficacy is ever more paramount. A multidisciplinary consensus panel of experts (in acute, chronic, home, and long-term care and in rehabilitation medicine) convened by the Ontario Ministry of Health and Long-Term Care developed a safe hospital-discharge checklist of evidence-based pre-discharge, post-discharge, and bridging practices, categorized into the following seven domains that represent events that should be completed during a typical hospitalization:

1. Indication for hospitalization

2. Primary care

- Identify/confirm primary care physician (PCP)
- Contact/notify PCP of patient admission, diagnosis, predicted discharge date
- Schedule PCP follow-up within 7–14 days of discharge

3. Medication safety

- Reconcile home and admission medications
- Teach proper use of discharge medications and their relation to prior home medications
- Reconcile discharge, prior-home, and hospital medications

4. Follow-up plans

- Postdischarge follow-up phone call within 72 hours for high-risk patients (high LACE index score [Length of stay, Acuity on admission, Comorbidity, and Emergency department visits])
- Arrange outpatient studies (e.g., lab, radiology) if needed
- Arrange specialty clinic follow-up if needed

5. Home-care referral

- Home-care agency shares information about patient's preexisting community services
- Engage home-care agencies
- Schedule postdischarge home care (if needed)

6. Communication with outpatient providers — provide discharge summary, medication reconciliation information, and inpatient attending contact information to patient, PCP, community pharmacy, and caregiver

7. Patient education

- Use teach-back method
- Explain relation between new medications and diagnosis
- Explain discharge summary
- Explain expected home course, including anticipated or possible symptoms and circumstances and when patient should contact his or her physician

Future hospital: caring for medical patients

- > safe, effective and compassionate medical care for all who need it as hospital inpatients



ANALYSIS

Medical error—the third leading cause of death in the US

Medical error is not included on death certificates or in rankings of cause of death. **Martin Makary** and **Michael Daniel** assess its contribution to mortality and call for better reporting

Martin A Makary *professor*, Michael Daniel *research fellow*

Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, MD 21287, USA

How big is the problem?

The most commonly cited estimate of annual deaths from medical error in the US—a 1999 Institute of Medicine (IOM) report⁷—is limited and outdated. The report describes an incidence of 44 000–98 000 deaths annually.⁷ This conclusion was not based on primary research conducted by the institute but on the 1984 Harvard Medical Practice Study and the 1992 Utah and Colorado Study.^{8,9} But as early as 1993, Leape, a chief investigator in the 1984 Harvard study, published an article arguing that the study's estimate was too low, contending that 78% rather than 51% of the 180 000 iatrogenic deaths were preventable (some argue that all iatrogenic deaths are preventable).¹⁰ This higher incidence (about 140 400 deaths due to error) has been supported by subsequent studies which suggest

Top 10 Patient-Safety Strategies Update

Daniel D. Dressler, MD, MSc, FHM reviewing Shekelle PG et al. Ann Intern Med 2013 Mar 5. Shine KI. Ann Intern Med 2013 Mar 5.

Ten strategies are encouraged strongly for immediate adoption on the basis of a systematic literature review.

Patient-safety experts in North America and the U.K. systematically reviewed the growing evidence base for 158 patient-safety topics, including 41 strategies designated as most important to practitioners and patients. All reviews are published in the Agency for Healthcare Research and Quality (AHRQ) evidence report entitled [“Making Health Care Safer II: An Updated Critical Analysis of the Evidence for Patient Safety Practices”](#) to update the original 2001 publication. After carefully analyzing each patient-safety problem and its related safety strategy, the authors strongly recommend immediate adoption of the following 10 strategies:

- Preoperative and anesthesia checklists to prevent operative and postoperative events
- Bundles (with checklists) to prevent central line–associated bloodstream infections
- Interventions to reduce urinary catheter use
- Bundles to prevent ventilator-associated pneumonia
- Hand hygiene
- Do-not-use list for hazardous abbreviations
- Multicomponent interventions to prevent pressure ulcers
- Barrier precautions to prevent healthcare-associated infections
- Real-time ultrasonography for central line placement
- Interventions to improve prophylaxis for venous thromboembolism

The Top Patient Safety Strategies That Can Be Encouraged for Adoption Now

Paul G. Shekelle, MD, PhD; Peter J. Pronovost, MD, PhD; Robert M. Wachter, MD; Kathryn M. McDonald, MM; Karen Schoelles, MD, SM; Sydney M. Dy, MD, MSc; Kaveh Shojania, MD; James T. Reston, PhD, MPH; Alyce S. Adams, PhD; Peter B. Angood, MD; David W. Bates, MD, MSc; Leonard Bickman, PhD; Pascale Carayon, PhD; Sir Liam Donaldson, MBChB, MSc, MD; Naihua Duan, PhD; Donna O. Farley, PhD, MPH; Trisha Greenhalgh, BM BCH; John L. Haughom, MD; Eileen Lake, PhD, RN; Richard Lilford, PhD; Kathleen N. Lohr, PhD, MA, MPhil; Gregg S. Meyer, MD, MSc; Marlene R. Miller, MD, MSc; Duncan V. Neuhauser, PhD, MBA, MHA; Gery Ryan, PhD; Sanjay Saint, MD, MPH; Stephen M. Shortell, PhD, MPH, MBA; David P. Stevens, MD; and Kieran Walshe, PhD



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Choosing Wisely Canada is a campaign to help physicians and patients engage in conversations about unnecessary tests, treatments and procedures.





Contents lists available at ScienceDirect

Clinical Nutrition

journal homepage: <http://www.elsevier.com/locate/clnu>

Original Article

Prevalence of the notification of malnutrition in the departments of internal medicine and its prognostic implications

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ARTICLE INFO

Article history:

Received 14 July 2010

Accepted 13 December 2010

Keywords:

Inpatients

Malnutrition

Prevalence

Nutrition assessment

Internal medicine

Hospital costs

SUMMARY

Background & aims: Detection and notification of malnutrition are essential to adopt a support plan and take costs into account. The aim of this study was to describe how often discharge sheets from Internal Medicine (IM) units include malnutrition among diagnoses (notification frequency) using the International Classification of Diseases, 9th Revision Clinical Modification -ICD-9. Factors associated with this diagnosis and its prognostic implications are also assessed.

Material and methods: The Minimum Basic Data Set from the Spanish hospitals (Ministry of Health and Consumer Affairs) was revised, and patients with diagnosis of malnutrition (ICD-9: 260–263.9) were identified.

Results: 1,567,659 patients were analysed (21,804–1.4% with malnutrition). These patients were older (72.4 vs 70.8 years of age), had a greater degree of comorbidity (Charlson >2: 28% vs 23.5%), and resided in nursing homes more often (3.9% vs 1.9%) than the non-undernourished. The malnutrition associated diagnoses were: dementia, cancer, HIV infection and chronic renal failure. Mortality (19.5% vs 9.8%), hospital stay (18.1 vs 9.8 days), costs (5228.46 vs 3537.8 €) and relative weights applied to each Diagnosis Related Group (2.6 vs 1.1) were higher ($p < 0.001$ for all comparisons).

Conclusions: Notification of malnutrition in IM departments is low, below the prevalence described in inpatients. This diagnosis is associated with an increase in morbidity, mortality and costs.

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RESEARCH ARTICLE

Open Access

Hip fracture in hospitalized medical patients

Antonio Zapatero¹, Raquel Barba^{2*}, Jesús Canora¹, Juan E Losa³, Susana Plaza⁴, Jesús San Roman⁵ and Javier Marco⁶

Abstract

Background: The aim of the present study is to analyze the incidence of hip fracture as a complication of admissions to internal medicine units in Spain.

Methods: We analyzed the clinical data of 2,134,363 adults who had been admitted to internal medicine wards. The main outcome was a diagnosis of hip fracture during hospitalization. Outcome measures included rates of in-hospital fractures, length of stay and cost.

Results: A total of 1127 (0.057%) admittances were coded with an in-hospital hip fracture. In hospital mortality rate was 27.9% vs 9.4%; $p < 0.001$, and the mean length of stay was significantly longer for patients with a hip fracture (20.7 days vs 9.8 days; $p < 0.001$). Cost were higher in hip-fracture patients (6927€ per hospitalization vs 3730€ in non fracture patients). Risk factors related to fracture were: increasing age by 10 years increments (OR 2.32 95% CI 2.11-2.56), female gender (OR 1.22 95% CI 1.08-1.37), admission from nursing home (OR 1.65 95% CI 1.27-2.12), dementia (1.55 OR 95% CI 1.30-1.84), malnutrition (OR 2.50 95% CI 1.88-3.32), delirium (OR 1.57 95% CI 1.16-2.14), and anemia (OR 1.30 95% CI 1.12-1.49).

Conclusions: In-hospital hip fracture notably increased mortality during hospitalization, doubling the mean length of stay and mean cost of admission. These are reasons enough to stress the importance of designing and applying multidisciplinary plans focused on reducing the incidence of hip fractures in hospitalized patients.

Keywords: Hip-fracture, Hospitalized, Internal medicine, Morbidity, Mortality, Security

Future hospital: caring for medical patients

- 4 Patients have effective and timely access to care, including appointments, tests, treatment and moves out of hospital.
- 7 Good communication with and about patients is the norm.

eReferral — A New Model for Integrated Care

Alice Hm Chen, M.D., M.P.H., Elizabeth J. Murphy, M.D., D.Phil., and Hal F. Yee, Jr., M.D., Ph.D.

The rate of outpatient specialist referrals has nearly doubled over the past decade. Increased utilization, along with documented variation in referral rates, has raised concerns about worsening fragmentation of care and the appropriateness of referrals.

In 2005, San Francisco General Hospital (SFGH) was grap-

Because of a tremendous mismatch between supply and demand for specialty services, patients were waiting 11 months for a routine clinic appointment for gastroenterology, 10 months for nephrology, and 7 months for endocrinology. If a patient

The dual imperatives of timely access and rational triage drove the creation, implementation, and spread of our homegrown, Web-based, integrated specialty referral and consultation system, called eReferral. It uses health information technology to link primary care providers (PCPs) and specialists, with the goals of increasing access to care, improving dialogue, optimizing the efficient use of specialty resources, and enhancing primary care capacity.

Originally piloted for gastroenterology services, eReferral is now used for more than 40 services at SFGH. PCPs initiate new specialty referral requests through eReferral. The electronic form is automatically populated with relevant information about the patient and the PCP, and the reason for consultation is entered as free text, along with relevant history and exam findings.

Every service has a designated specialist provider who reviews and responds to each referral. The

Future hospital: caring for medical patients

> effective relationships between medical and other health and social care teams

7 Good communication with and about patients is the norm.

Instant Replay — A Quarterback's View of Care Coordination

Matthew J. Press, M.D.

Perspective

AUGUST 7, 2014

As a general internist, I often serve as the quarterback for my patients' care — helping them navigate the system, advocating on their behalf, and coordinating their evaluation and treatment.

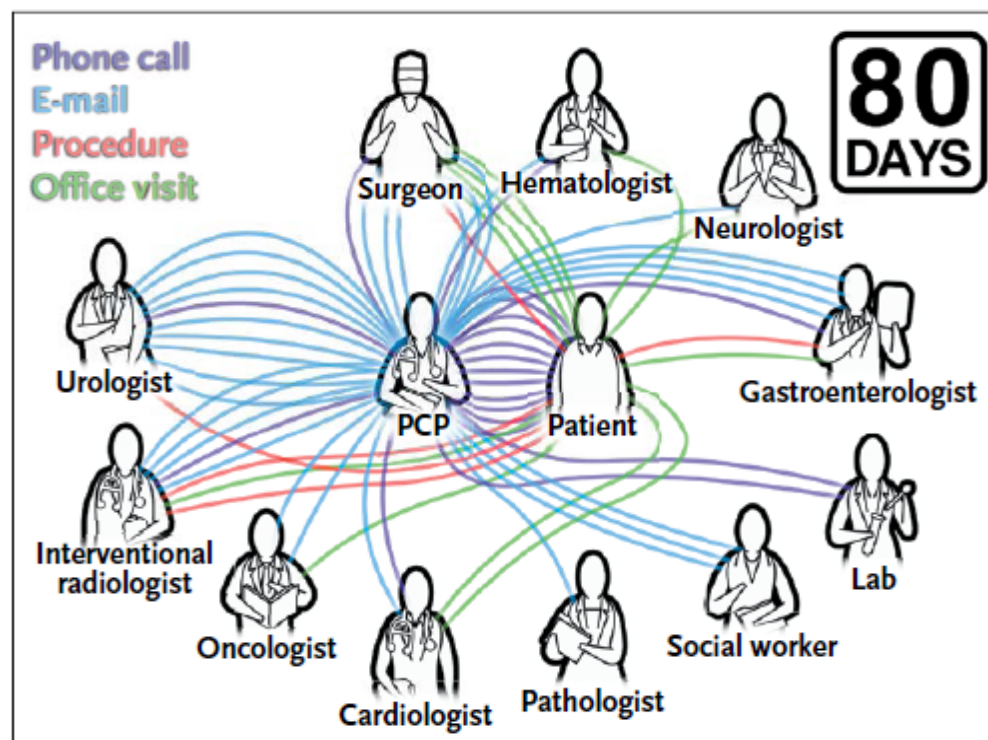
But for one of my patients, the game was played on a whole different level.

Mr. K. was a stoic 70-year-old with a few minor medical problems. His care was fairly straightforward — I was the only doctor he saw regularly — until the day he came into my office with flank pain and fever. A CT scan of his abdomen revealed a kidney stone — and a 5-cm mass in his liver, which a subsequent MRI indicated was probably a cholangiocarcinoma.

Over the 80 days between when I informed Mr. K. about the MRI result and when his tumor was resected, 11 other clinicians became involved in his care, and he

had 5 procedures and 11 office visits (none of them with me). As the complexity of his care increased, the tasks involved in coordinating it multiplied. I kept a running list and, at the end, created an “instant replay” of Mr. K.'s care (see diagram; also see animation, available with the full text of this article at NEJM.org). In total, I communicated with the other clinicians 40 times (32 e-mails and 8 phone calls) and with Mr. K. or his wife 12 times. At least 1 communication occurred on 26 of the 80 days, and on the busiest day (day 32), 6 communications occurred.

This instant replay offers a chronicle of the coordination that



Ambulatory Care Coordination for One Patient.

Over an 80-day period, 12 clinicians were involved in the care of the patient. The patient's primary care physician (PCP) communicated with the other clinicians 40 times (32 e-mails and 8 phone calls) and with the patient (or his wife) 12 times. The patient underwent 5 procedures and had 11 office visits (none of them with his PCP). (An animated “instant replay” is available with the full text of this article at NEJM.org.)

Need of information....transparency

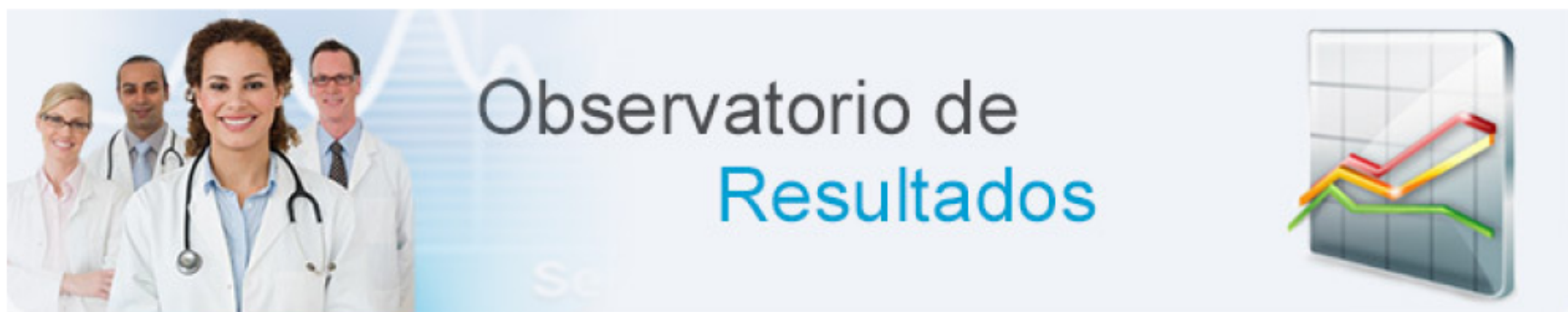
Servicio Madrileño de Salud Consejería de Sanidad



Observatorio de Resultados del Servicio Madrileño de Salud

Martes, 12 de abril de 2016

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**Observatorio de Resultados del
Servicio Madrileño de Salud**

Clinical effectiveness and patient safety

- Aggregate Index mortality
- Mortality from Acute Myocardial Infarction
- Mortality from Heart Failure
- Mortality from Pneumonia
- Mortality from stroke
- Percentage of medical and surgical complications
- Readmissions for surgical causes at 7 days
- Readmissions for chronic obstructive pulmonary disease at 30 days
- Readmissions for heart failure at 30 days
- Percentage of low-risk cesarean
- postoperative thromboembolic disease
- postsurgical septicemia overall
- prevalence of infection related to health care
- Incidence of surgical infection localization of colon surgery Incidence of surgical site infection in knee replacement surgery
- Incidence of surgical site infection in hip replacement surgery

Eficiencia

- Porcentaje de hospitalizaciones potencialmente evitables
- Porcentaje de pacientes con ictus con estancia mayor de 20 días
- Porcentaje de pacientes con fractura de cadera con estancia mayor de 20 días
- Índice de colecistectomía laparoscópica
- Porcentaje de ambulatorización de procesos quirúrgicos
- Estancia media de atención hospitalaria
- Índice de Estancia Media Ajustada (IEMA)
- Peso medio de las altas hospitalarias
- Importe por receta

Efficiency

- Percentage of potentially avoidable hospitalizations
- Percentage of stroke patients stay more than 20 days
- Percentage of patients with hip fracture stay more than 20 days
- Index laparoscopic cholecystectomy
- Percent of ambulatory surgical procedures
- Average length of stay of hospital care
- Complexity of hospital discharges
- Amount prescription budget

Patient Care

- Overall satisfaction index Global Index
- Recommendation Index of
- Satisfaction with information
- Satisfaction with medical professionals
- Satisfaction with treatment and kindness of medical professionals
- Satisfaction with nurses
- Satisfaction with treatment and kindness of nurses
- Overall satisfaction with the room Index claims
- Expected average for surgery
- Expected average for first consultation on specialized care

Martes 12 de abril de 2016

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Desglose por hospitales



Índice de satisfacción global

En la siguiente tabla se muestra el resultado del índice de satisfacción global con la atención recibida de los hospitales del Servicio Madrileño de la Comunidad de Madrid, agrupados según las características y complejidad de los centros.

En los hospitales en los que no se dispone del dato o en dónde no procede por las características o circunstancias del centro (por la fecha de apertura, tipo de paciente atendido, etc.), el resultado aparece en blanco.

	2012	2013	2014
Baja complejidad			
H. El Escorial	92,43%	92,31%	89,16%
H.U. del Tajo	93,52%	88,46%	86,20%
H.U. del Henares	87,94%	89,35%	83,96%
H.U. Infanta Cristina	89,09%	89,42%	88,21%
H.U. Infanta Elena	93,49%	92,93%	93,76%
H.U. del Sureste	92,31%	90,12%	91,85%
Media complejidad			
H. Gómez Ulla	91,26%	90,49%	87,88%
H.I.U. Niño Jesús	94,68%	94,94%	91,08%
H.U. Rey Juan Carlos	95,00%	95,86%	93,21%
H.U. de Torrejón	92,64%	94,93%	88,80%
H.U. de Fuenlabrada	91,15%	89,42%	85,33%
H.U. Fundación Alcorcón	93,05%	91,56%	87,64%
H.U. de Getafe	93,08%	90,93%	91,05%

Here are 10 patient suggestions for hospitals. Let's make them happen.

Peter Pronovost, MD, PhD | Physician | November 5, 2015

Since undergoing a double-lung transplant at the Johns Hopkins Hospital in December 2011, Podge Reed Jr. has had four medical admissions, two surgical admissions, eight outpatient procedures requiring anesthesia, more than 100 outpatient appointments, and 700 labs and other tests. He's amassed enough experiences with the health care system to write a book. So far, though, he's mostly kept it to two letters, totaling 12 pages, to our patient relations office, detailing opportunities for improvement.

So when our hospital hosted an employee town hall meeting about patient-centered care, Reed was a natural choice to sit on a panel. Reed, a member of the hospital's Patient and Family Advisory Council, explained that he has been very pleased overall with the care he has received, and he says he gave us high marks on the surveys sent following his visits. Still, he wanted to share his feedback — advising, for instance, to turn off the TV monitor at night, give patients a bathrobe and avoid late-night blood draws when possible, or at least explain why they're needed.

1. Let me sleep. Do not take vitals throughout the night or draw blood between 10 p.m. and 6 a.m. unless it is critical. If it is critical, please make sure I understand. My sleep helps me recover and feel better.

2. Keep the noise levels down at the nurses' station. This is so important — especially at night when my sleep is needed. Turn off the TV, radio, computer screen, etc., at night in my room so there is not a glare or noise that can disturb my sleep.

3. Don't lose my personal belongings. Take an inventory and label everything with my name and medical record number so my personal belongings do not get misplaced. These belongings are an extension of me and make me feel more at ease. Taking care of my stuff feels like you are taking care of me.

4. Knock on the door before entering. This shows respect for me as an individual and my privacy. Introduce yourself to me and shake hands or make eye contact when you do this. Call me by my preferred name (formal or first name).

5. Please keep my whiteboard current and up to date. It gives me a quick reference of who is caring for me and my daily plan. Provide a notebook at the bedside so I can keep all my important papers and cards from my health care team and other staff members in one place. Please make sure my name and my location — nursing unit, room number and room phone — are listed on the front.

6. Update me and my family if you notice changes in my condition. Keep communication open. Please keep me informed of delays — it lessens my anxiety during an already stressful time

7. Keep my room clean. Mop the floors every day, wipe surfaces to prevent the spread of germs, empty my wastebasket and keep my bathroom really clean so it even smells clean. If you are my housekeeper, please introduce yourself to me and say hello. I like to know who is taking care of me.

8. Listen to me and engage me in my care. Use plain language and make sure I understand my plan of care.

9. Please orient me to my room and the hospital so I know where important things are located, how to work the television, how to order food and when my linens may be changed. I am a guest here and don't know these things, yet these are important to me.

10. Please maintain professionalism in all areas of the hospital. While you may be on your break, you are still a hospital employee and a reflection of the hospital. How I perceive you is often how I perceive the hospital and care that I am receiving.



Lámina de 1960 en la que una enfermera pide silencio.

SALUD PÚBLICA
**EN ESTE
 HOSPITAL
 NO HAY
 QUIEN
 DUERMA**

El ruido en los hospitales no sólo es molesto, sino que entorpece la recuperación de los pacientes, aumenta los niveles de estrés de sus trabajadores y el riesgo de enfermedades cardiovasculares, reduce la respuesta inmunitaria e incrementa el dolor. En el Día Mundial contra el Ruido, los sanitarios hablar de este problema.

POR MARÍA VALERIO