European Winter School
of Internal Medicine
Riga, Latvia
25-31 January 2015

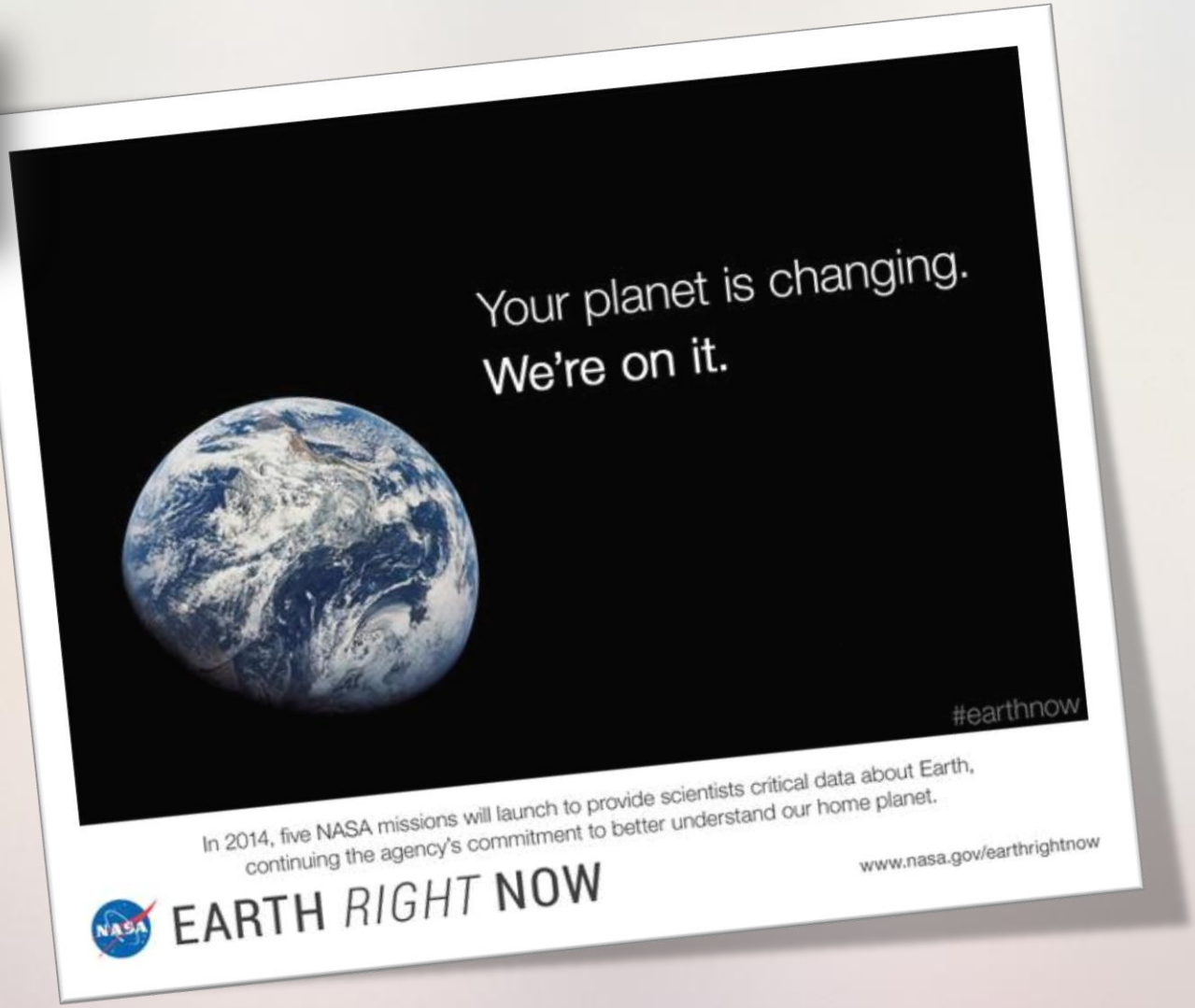
New Strategies for a Hospital Integrated Care

The role of internists for bridging Inpatient and Outpatient Worlds

Xavier Corbella, MD, PhD, MBA

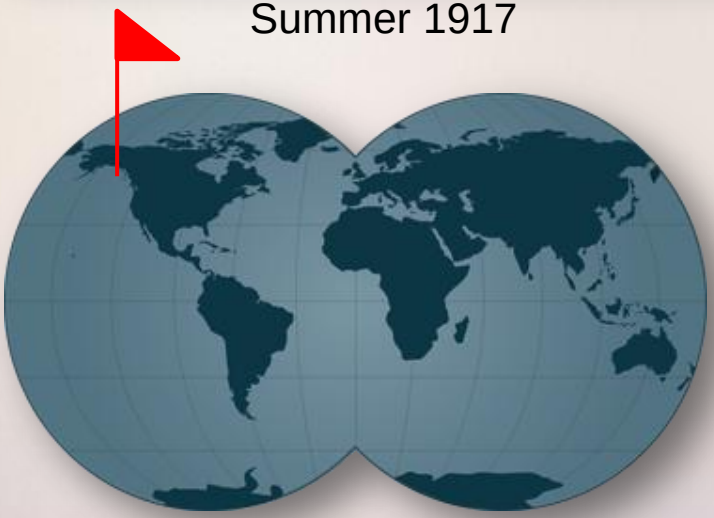
Head, Internal Medicine Department,
Bellvitge University Hospital
Vice-Dean, Faculty of Medicine and Health Sciences,
International University of Catalonia
Barcelona, Spain

earth is changing… we are on it !



earth is changing… we are on it !

Summer 1917 Summer 2005



Pedersen Glacier, Alaska

Climate change

earth is changing… we are on it !

July 30, 1992

April 8, 2012

The Binhai New Area, China

Urban growth

earth is changing… we are on it !

August 25, 2000

August 19, 2014

Shrinking lake, central Asia

Drought

earth is changing… we are on it !

new changes…
new problems…
new needs…
new challenges…
to face and solve !

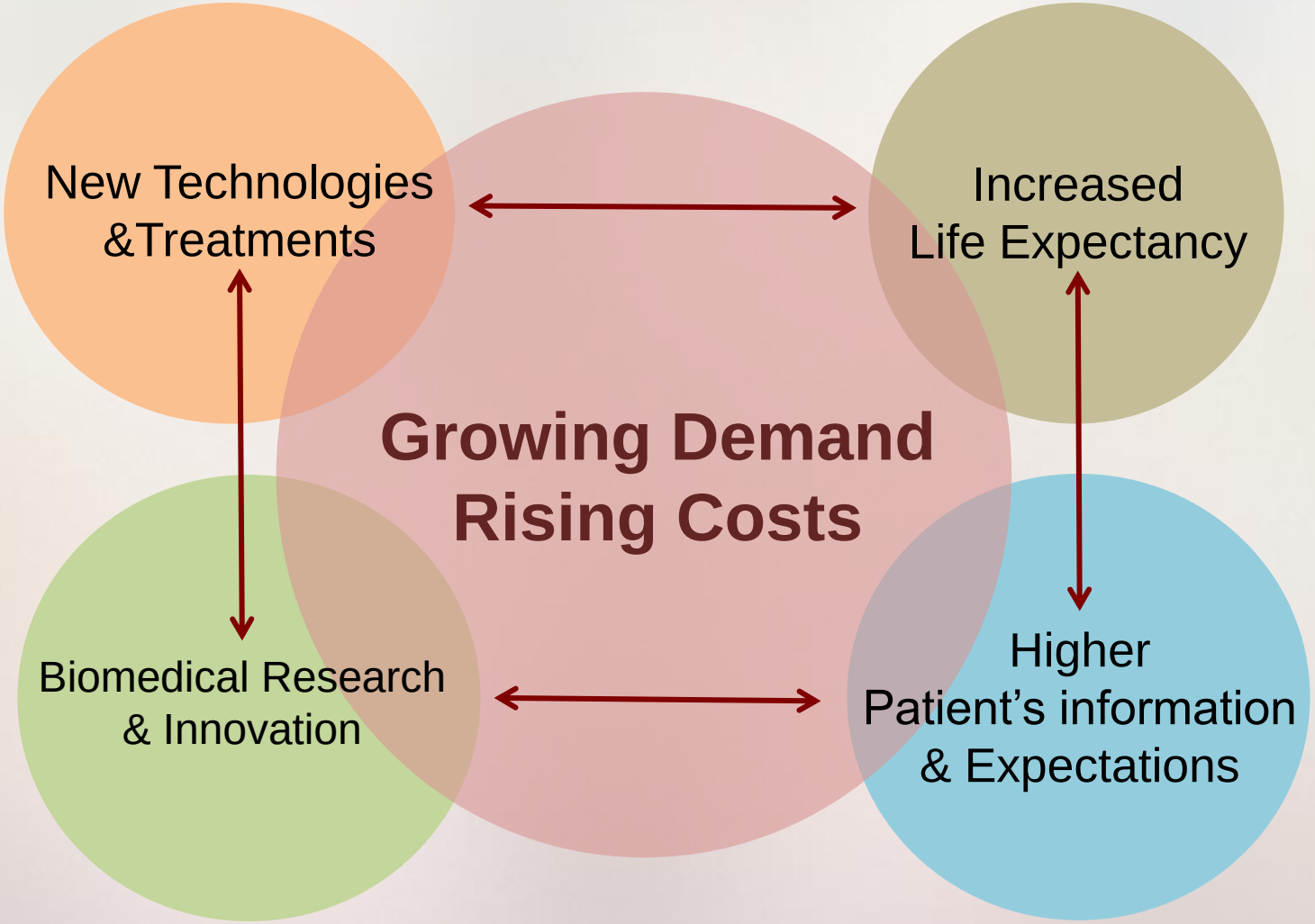
Overpopulation
Poverty
Urban growth
Deforestation
Pollution
Climate change
Pandemics …
…

medicine is changing… we are on it !

new changes…
new problems…
new needs…
new challenges…
to face and solve !

Aging
Chronicity
Multi-morbidity
Social changes
New diseases
Role of patients
Higher information
More expectations
Growing demand
Rising costs

medicine is changing… we are on it !



medicine is changing… we are on it !

Patient Needs Rising Costs

For years, as long as payment for health care services covered the costs, hospitals responded to increasing demands by adding more beds, more buildings, and more staff

medicine is changing… we are on it !

Patient Needs
Rising Costs

For years. as long as pay
for he
covere
resp
dem
bed

medicine is changing… we are on it !

Patient Needs
Rising Costs

For years. as long as pay
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bed

Limited Financial Resources

In the past decade,
the global financial crisis
limited hospital resources, and
administrators have required
to **reduce beds and staff**
for balancing
the bottom line

medicine is changing… we are on it !

Patient Needs Rising Costs

For years, as long as payment for health care services covered the costs, hospitals responded to increasing demands by adding more beds, more buildings, and more staff

Limited Financial Resources

In the past decade, **the global financial crisis** limited hospital resources, and administrators have required to **reduce beds and staff** for balancing the bottom line

medicine is changing… we are on it !

Patient Needs
Rising Costs

Limited Financial Resources

Hospital Restructuring

Reducing Hospital Beds: Traditional, Expensive → → Scarce

Hospital Restructuring

After reducing beds, most hospitals have begun to operate **at or above capacity**, with a **dysfunctional bed "competition"** between **emergency** and **scheduled** inpatient admissions.

Physicians face daily with "**boarded patients**" waiting for a free bed in the ED, lack of ICU beds, theatre cancellations, and hospital diversions

Dysfunctional Inpatient Bed Competition

Lack of Access to Inpatient Beds

Scheduled patients

Emergency patients

Surgical

Waiting list for elective surgery

Access Block

Medical

“Inpatient Boarding” in the ED

Lack of Access to Inpatient Beds

February 1998

Urban / Metropolit

+

Public

Access Block

+

University affiliated

Bellvitge Hospital

Lack of Access to Inpatient Beds

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE

"Lack of access to inpatient beds is the **main factor for hospital crowding"**
(US GAO 2003, 2009 and IOM 2006)

In 2006, the **Institute of Medicine** reported that **when hospitals are full**, hospital executives might prefer **scheduled** to **emergency** patients, since emergency admissions tend to be for **medical conditions**, which are considered **less profitable** than is elective surgery

Lack of Access to Inpatient Beds

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"Lack of access to inpatient beds is the **main factor for hospital crowding"**
(US GAO 2003, 2009 and IOM 2006)

Hospital executives
not only prefer
scheduled over **emergency** admissions,
but still **consider normal to force EDs** to
absorb the excess of demand
for **medical admissions**
of the entire hospital.

Inpatient Access Block

Waits, cancellations, and diversions **negatively affect** patient **safety and quality** of care.

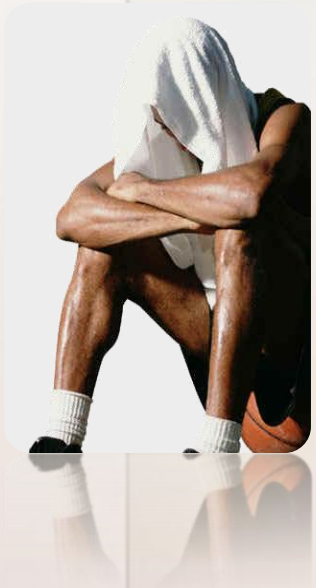
Physicians regard this phenomenon with enormous **concern and pessimism.**

… our efforts largely failed during the 1990's

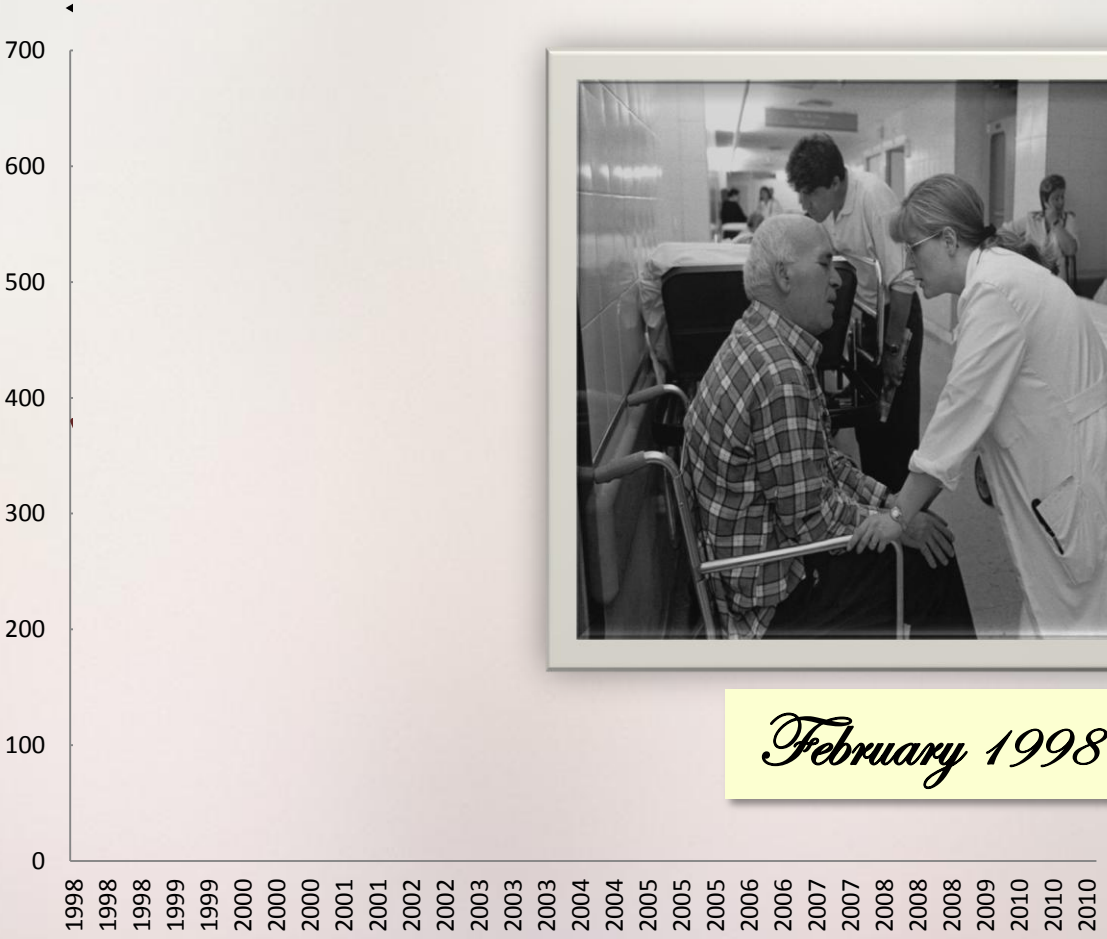
In the late 90's,
one decade before
the Global Financial Crisis…

… our daily hospital routine was → how to face the **lack of free inpatient beds**, → how to avoid **cancellations** in elective surgery, and → how to get the **"boarding" of ED admitted patients** upstairs

… our efforts largely failed during the 1990's



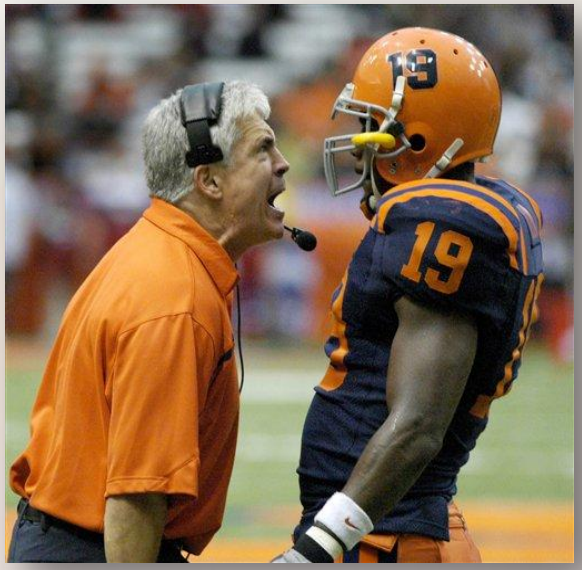
monthly number of patients waiting for a free inpatient bed in the ED at 8.00 am



February 1998

clinicians and administrators in collaboration

In 2001, a new hospital board assumed the executive management, asking medical managers and hospitalists, collectively, to implement **change in our organizational procedures…**



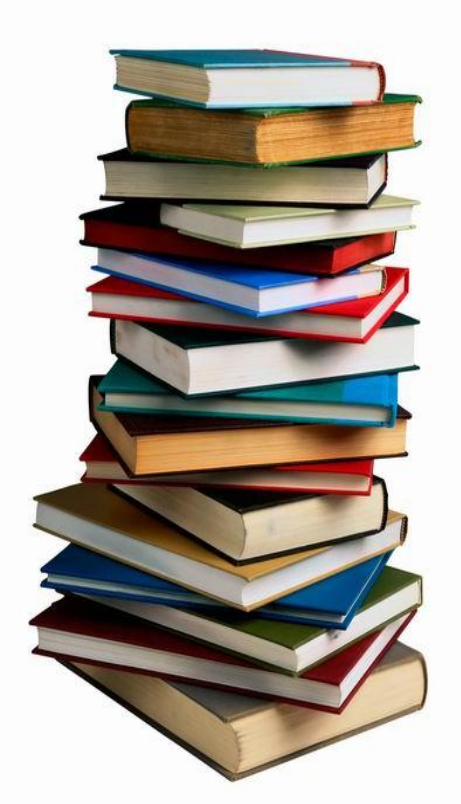
Process

1. **Something wrong was doing**
2. Literature review
3. New approach
4. Board Commitment
5. Multidisciplinary taskforce
6. Multifaceted intervention
7. Communication strategy
8. Implementation
9. Resource & Financial support
10. Follow-up & Evaluation

Literature Review

“Inpatient Access Block” is a well known phenomenon in many hospitals worldwide…

Several experiences have demonstrated that inpatient access block is **not only** a **“financial resource problem”** but that it often reflects a larger failure of **hospital-wide operational processes**



clinicians and administrators in collaboration

Surgeons

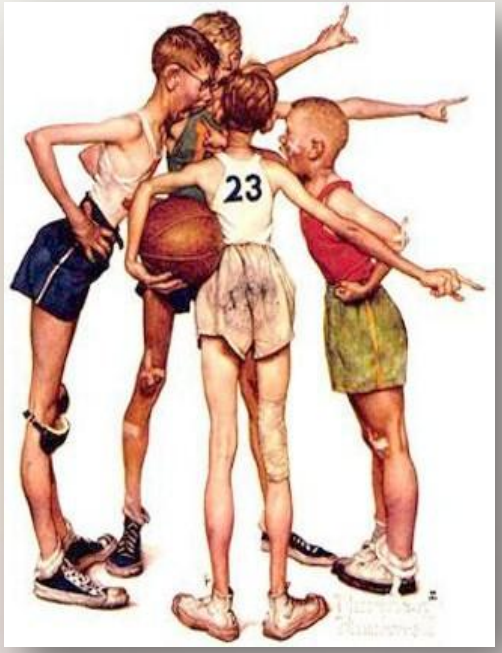
Internists

Surgeons
have been more willing than internists to introduce **inpatient care alternatives** in their clinical practice

During the past 30 years, "**Major Ambulatory Surgery**" has grown steadily and has become a totally accepted modality of delivery.

Internists
may also lead a similar **change** in medical patients, considering some inpatient care alternatives to avoid unnecessary hospital admissions

New Approach



Multidisciplinary Taskforce

Our Aim

To guarantee free hospital beds for inpatient admission

→ to eliminate the “inpatient boarding” in the ED

→ to increase hospital throughput

Our Strategy

To Relieve Pressure on Hospital Bed Availability

→ by Reducing Avoidable Inpatient Admissions

→ by Reducing Unnecessary Hospital Stays

Our Action

To Change our Traditional Clinical Practice

→ by using Alternatives to Standard Hospitalization and we named this **“Major Ambulatory Medicine”**

“Major Ambulatory Medicine” *

* Corbella X, Salazar A, Pujol R.
Major Ambulatory Medicine. ***Eur J Intern Med*** **(2012), http://dx.doi.org/10.1016/j.ejim.2012.09.003**

alternatives to standard hospitalization

Short Stay Units
Medical/ Surgical

Day Hospitals
Medical

Hospitals in the Home
Medical/Surgical

Alternatives to Standard Hospitalization

Chronic Disease Integrated Units
Medical

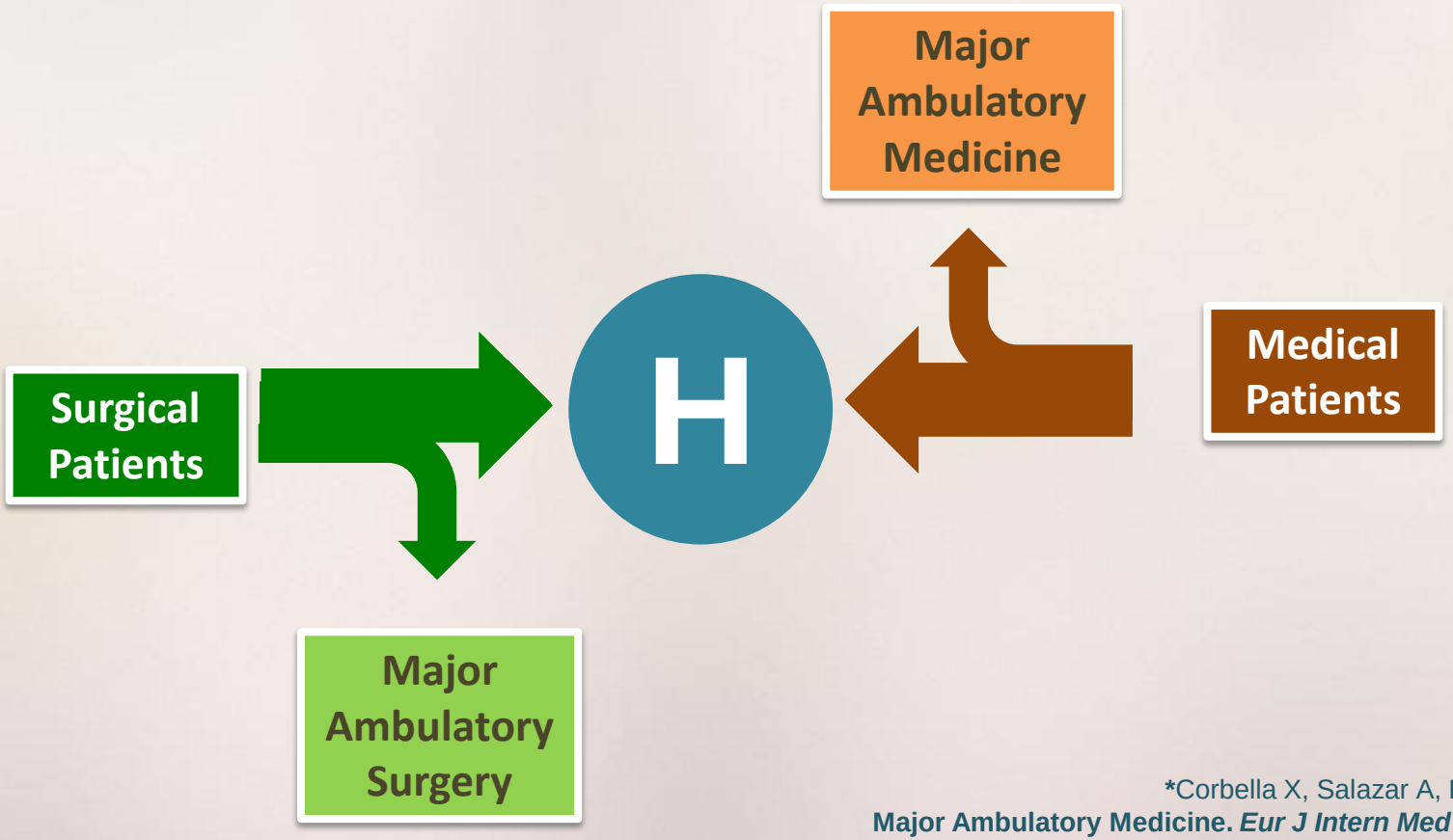
Quick Diagnostic Units
Medical

Same-day Admission Units
Medical/Surgical

23-h Surgical Units
Surgical

ED Observation Units
Medical /Surgical

alternatives to standard hospitalization



*Corbella X, Salazar A, Pujol R. **Major Ambulatory Medicine.** ***Eur J Intern Med*** **(2012), http://dx.doi.org/10.1016/j.ejim.2012.09.003**

alternatives to standard hospitalization

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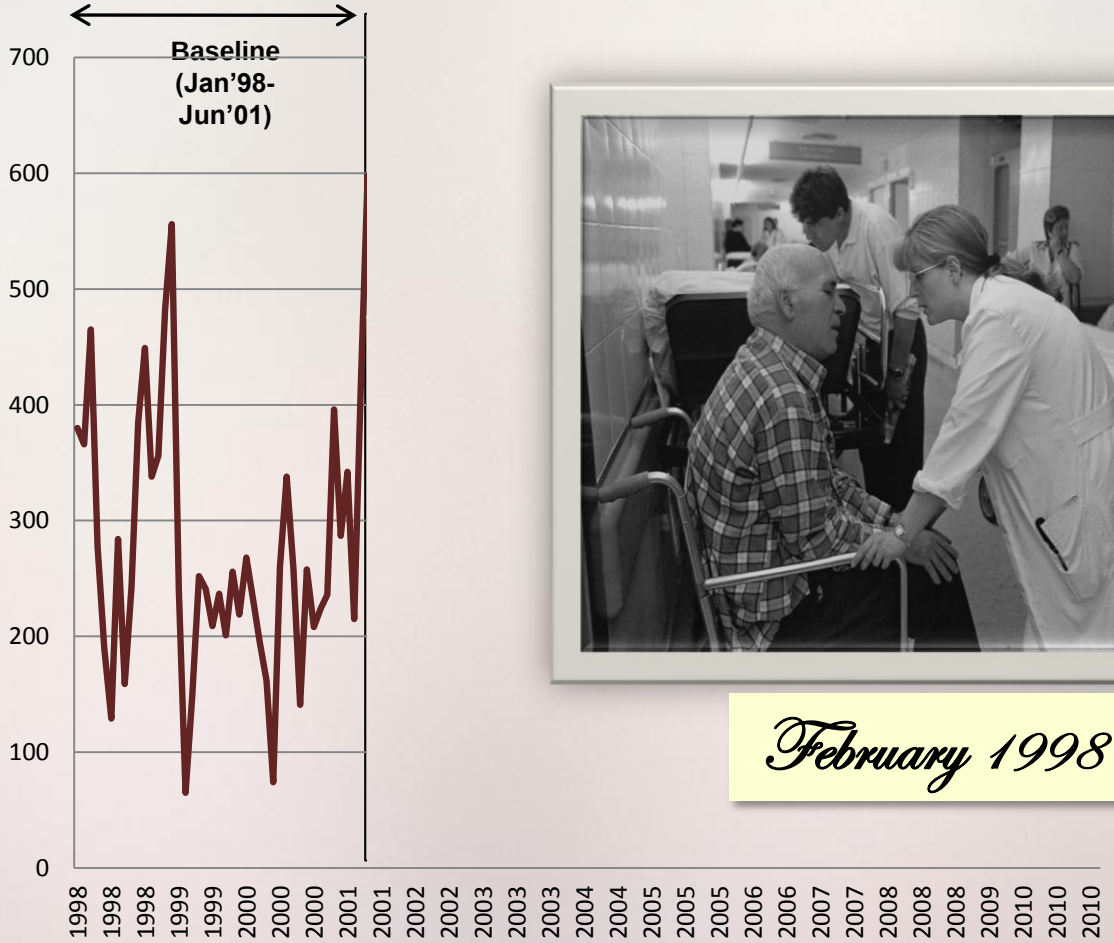

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alternatives to standard hospitalization

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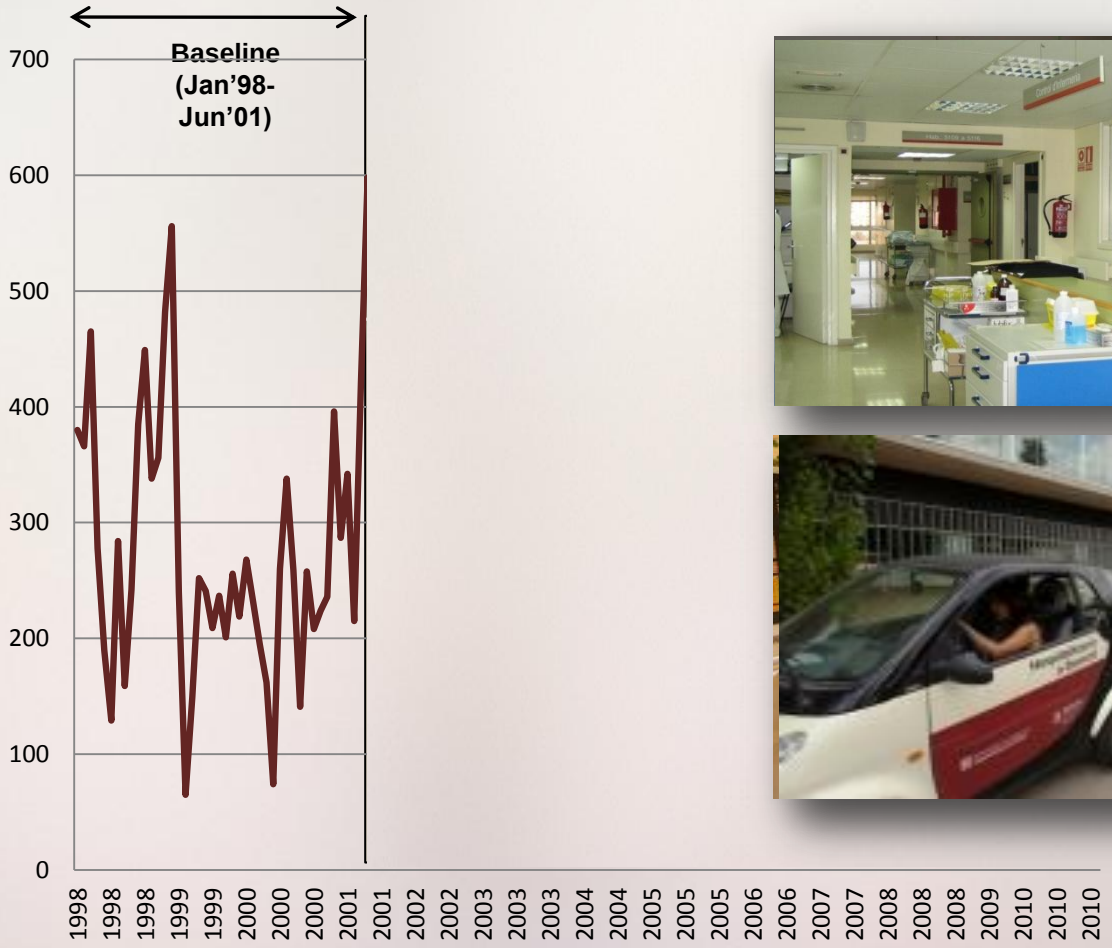

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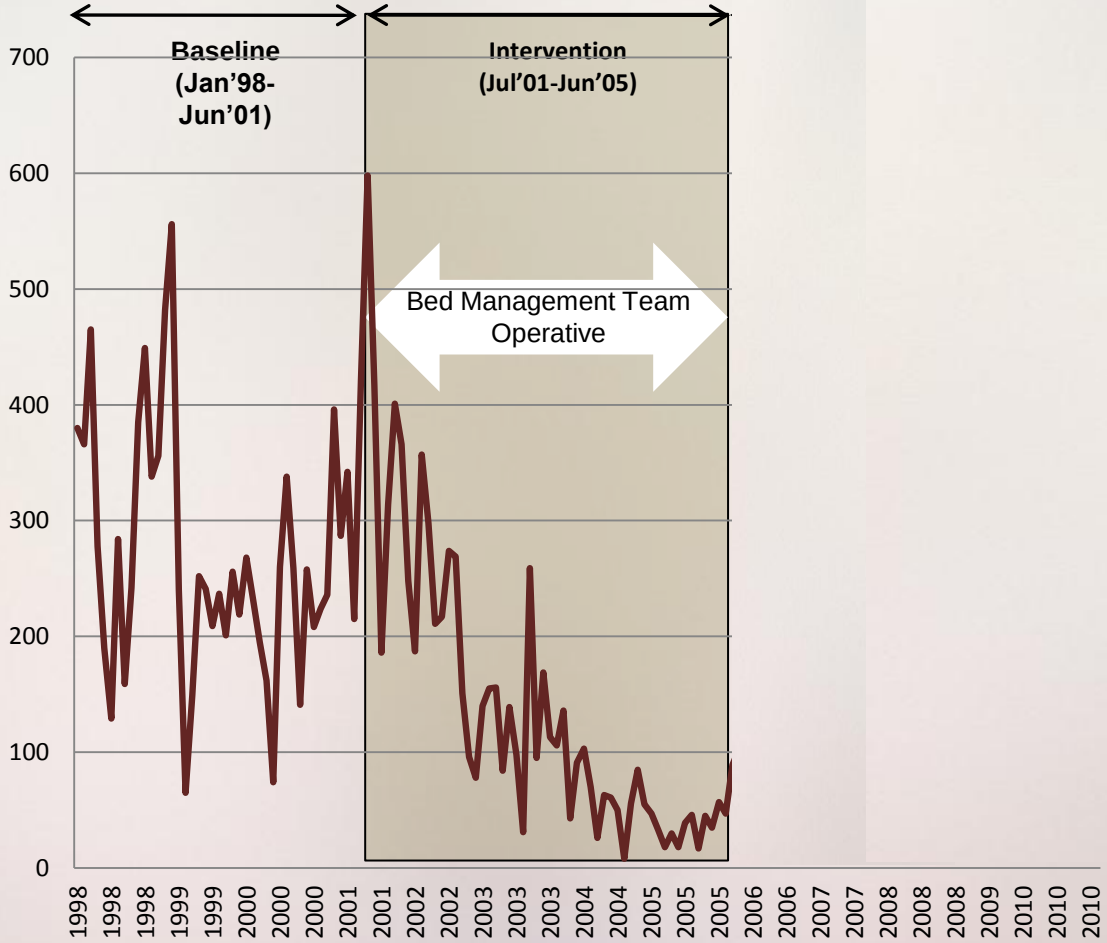

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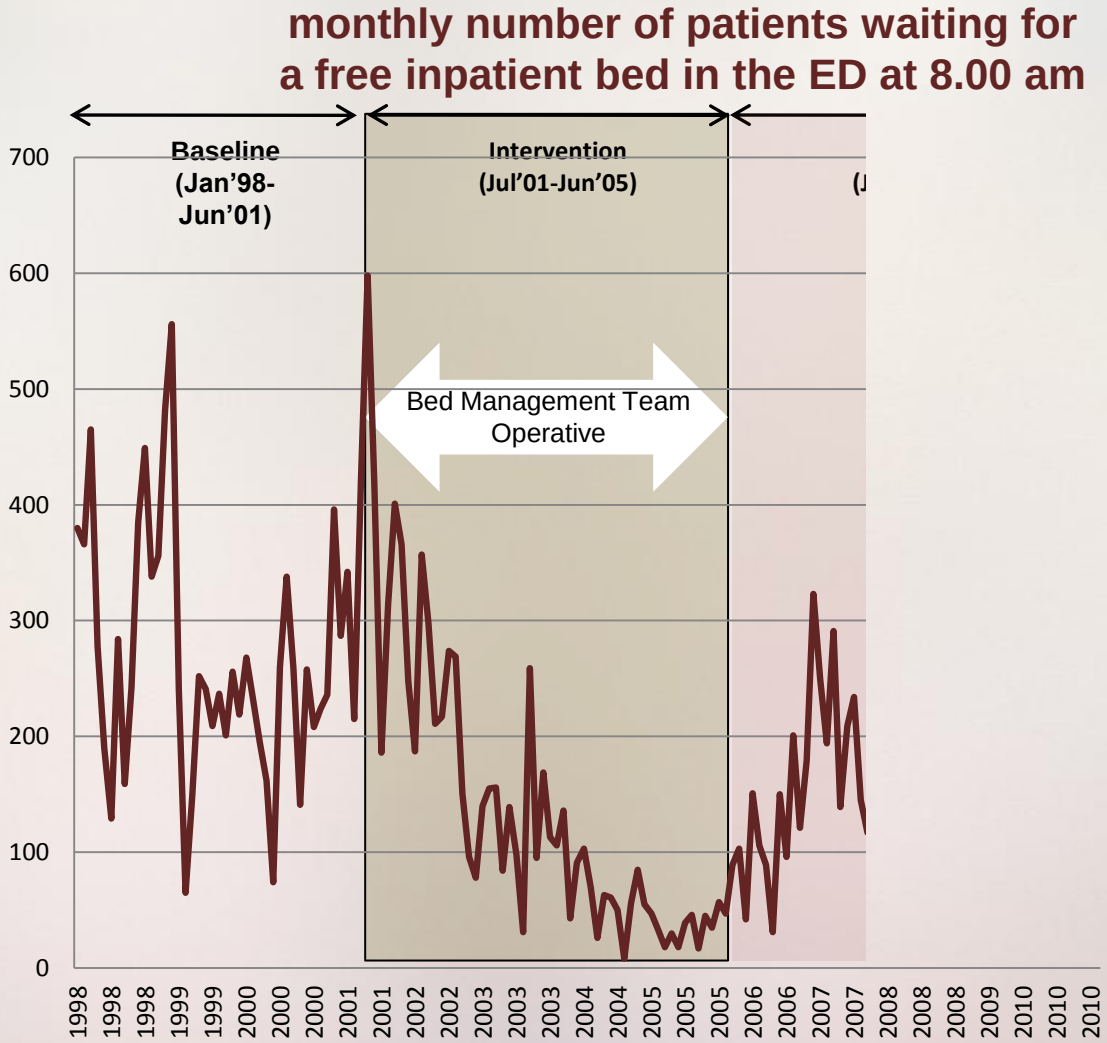

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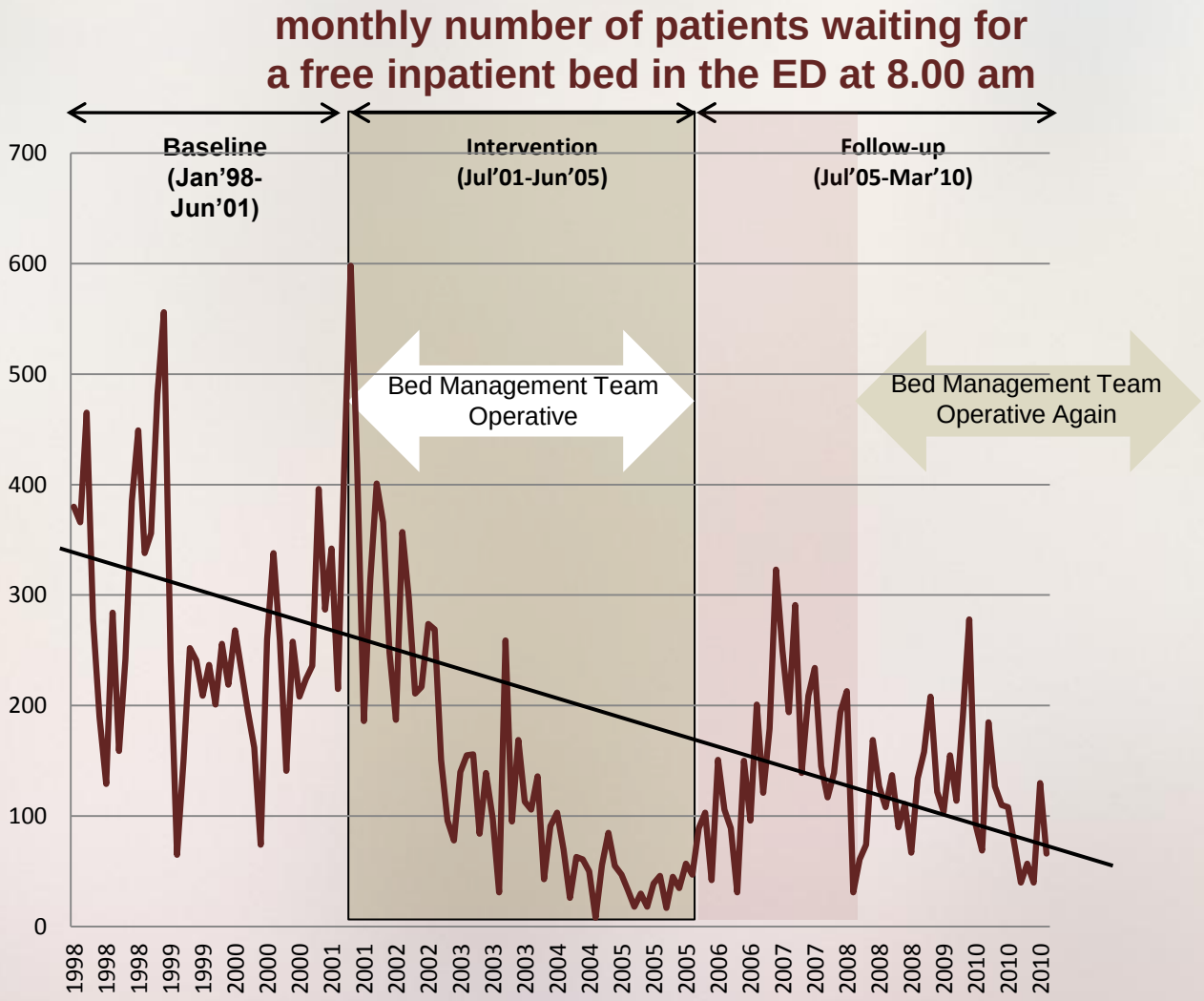


alternatives to standard hospitalization

www.sciedu.ca/jha Journal of Hospital Administration, 2013, Vol. 2, No. 2

ORIGINAL ARTICLE

Alternatives to conventional hospitalization for improving lack of access to inpatient beds: A 12-year cross-sectional analysis

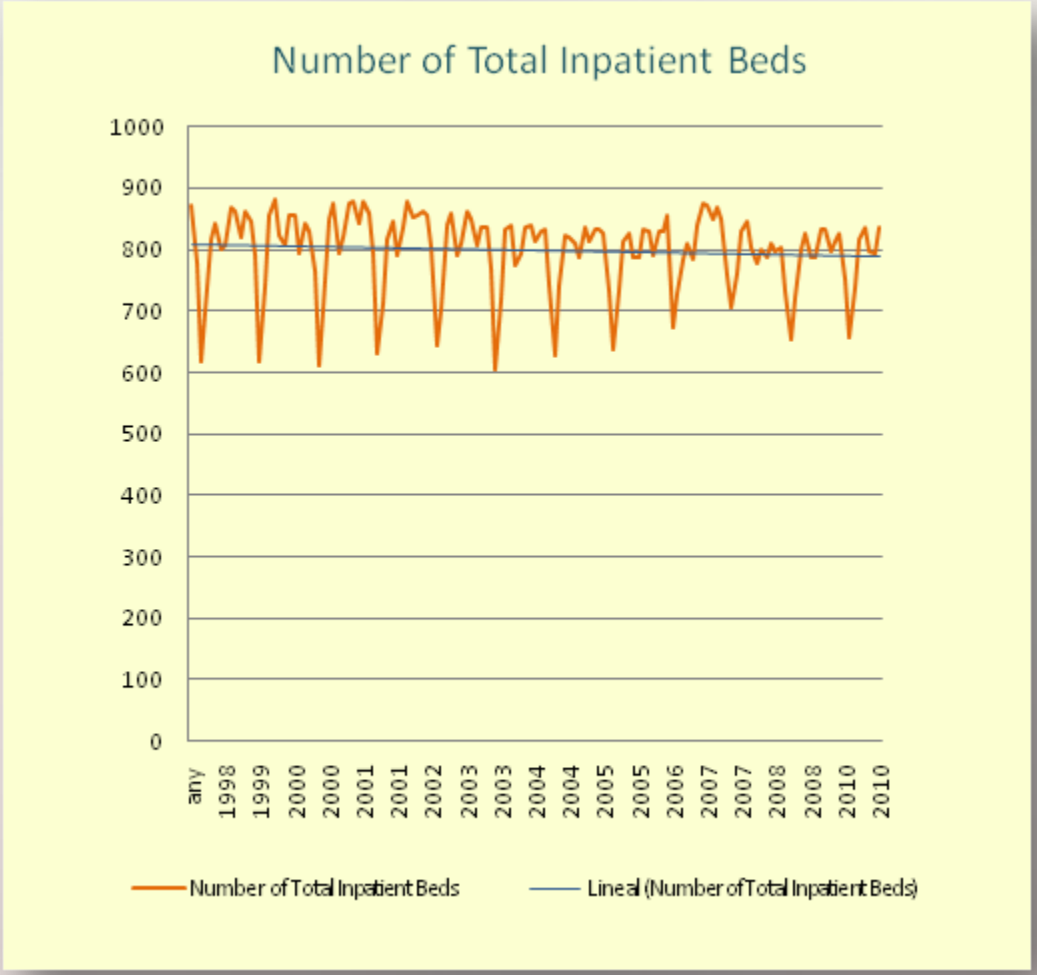
Xavier Corbella, Berta Ortiga, Antoni Juan, Nuria Ortega, Carmen Gomez-Vaquero, Cristina Capdevila, Ignasi Bardes, Gilberto Alonso, Carles Ferre, Maria Soler, Rafael Mañez, Eduardo Jaurrieta, Ramon Pujol, Albert Salazar

Bellvitge University Hospital and Bellvitge Biomedical Research Institute (IDIBELL), University of Barcelona, L'Hospitalet de Llobregat, Catalonia, Spain

Correspondence: Xavier Corbella. Address: Bellvitge University Hospital, Department of Internal Medicine, Feixa Llarga s/n, 08907 L'Hospitalet de Llobregat, Catalonia, Spain. E-mail: xaviercorbella@yahoo.com

Received: September 29, 2012 **Accepted:** November 8, 2012 **Online Published:** December 17, 2012
DOI: 10.5430/jha.v2n2p9 **URL:** http://dx.doi.org/10.5430/jha.v2n2p9

alternatives to standard hospitalization



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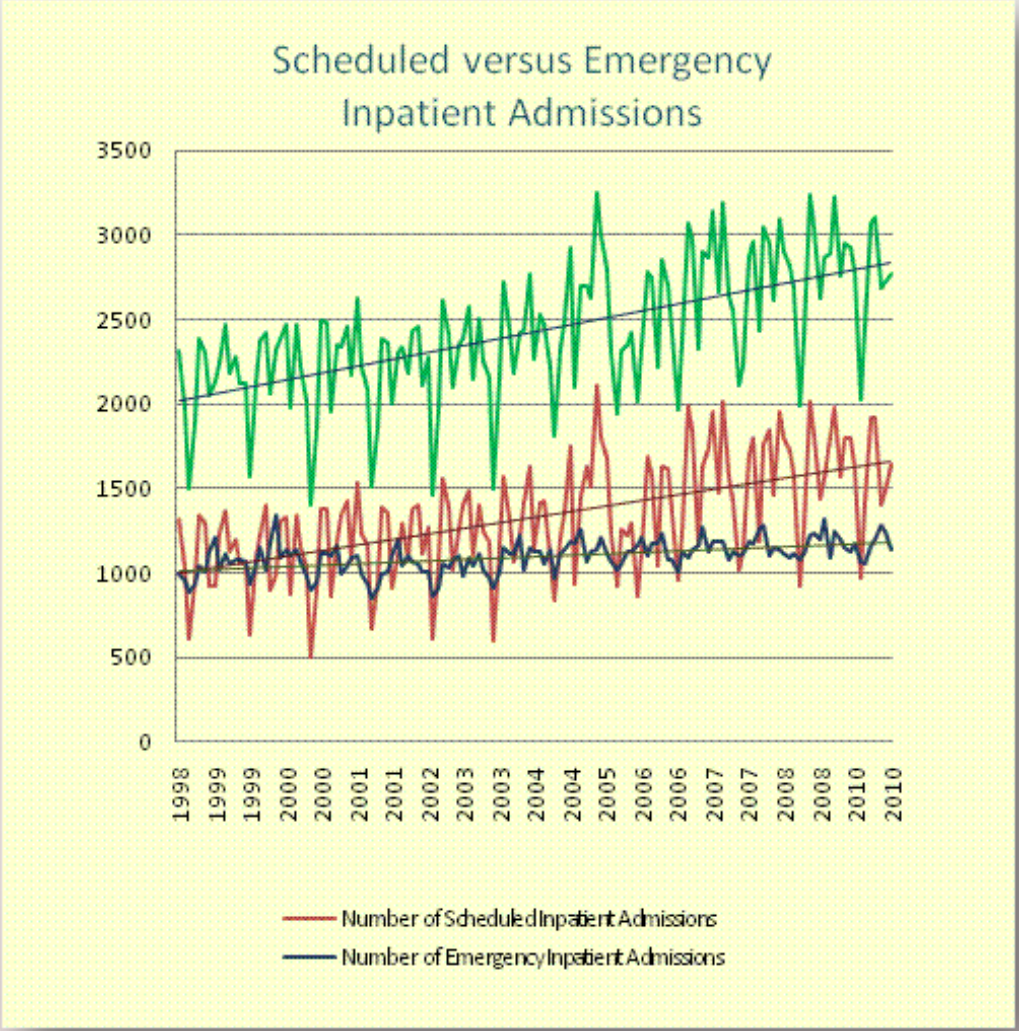
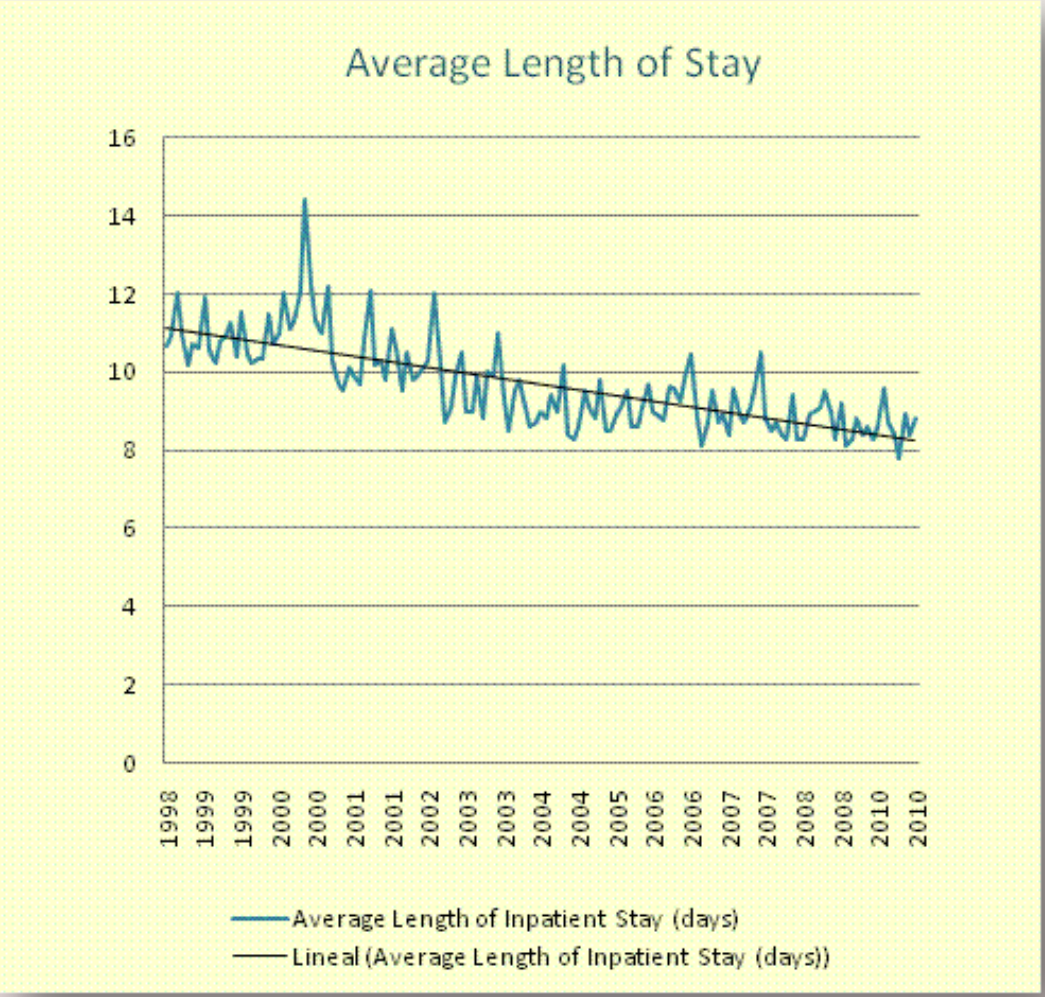


alternatives to standard hospitalization



alternatives to standard hospitalization

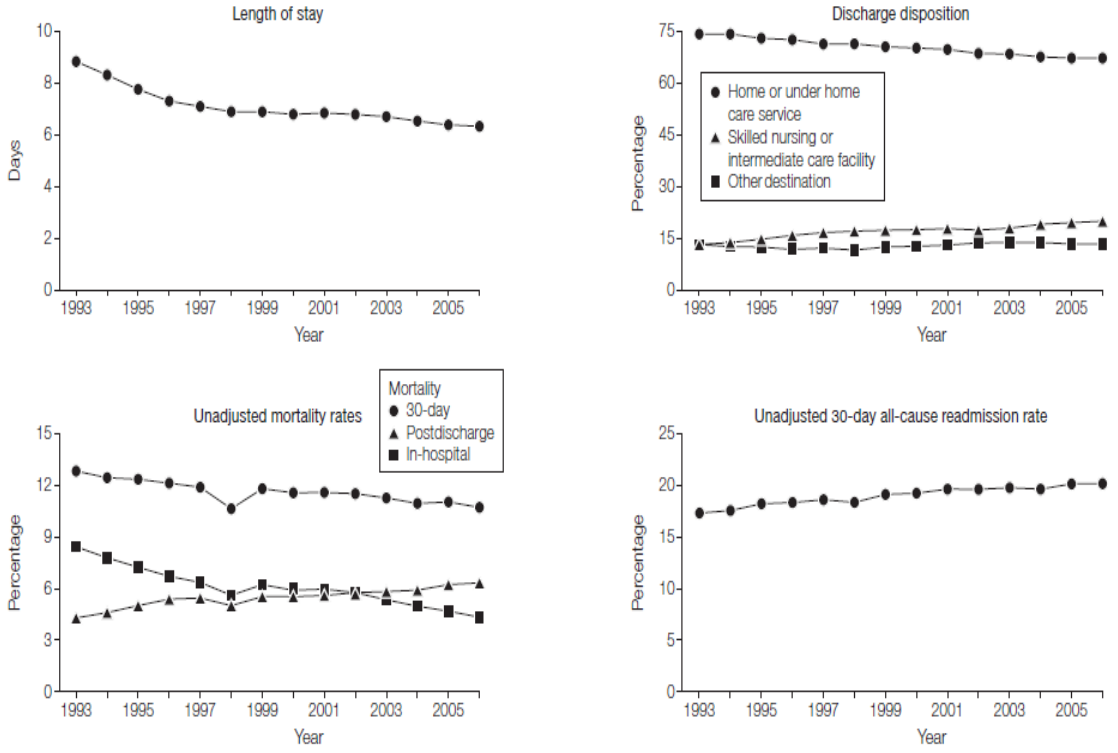
JAMA
The Journal of the American Medical Association

Trends in Length of Stay and Short-term Outcomes Among Medicare Patients Hospitalized for Heart Failure, 1993-2006

JAMA. 2010;303(21):2141-2147

Héctor Bueno, MD, PhD
Cardiologist

Figure 1. Secular Trends for Length of Stay, Discharge Disposition, and Unadjusted Mortality and 30-Day All-Cause Readmission Rates in Medicare Fee-for-Service Patients Hospitalized for Heart Failure Between 1993 and 2006



Due to small size, error bars (95% confidence intervals) are included within the size of the data markers.

the "revolving door" syndrome

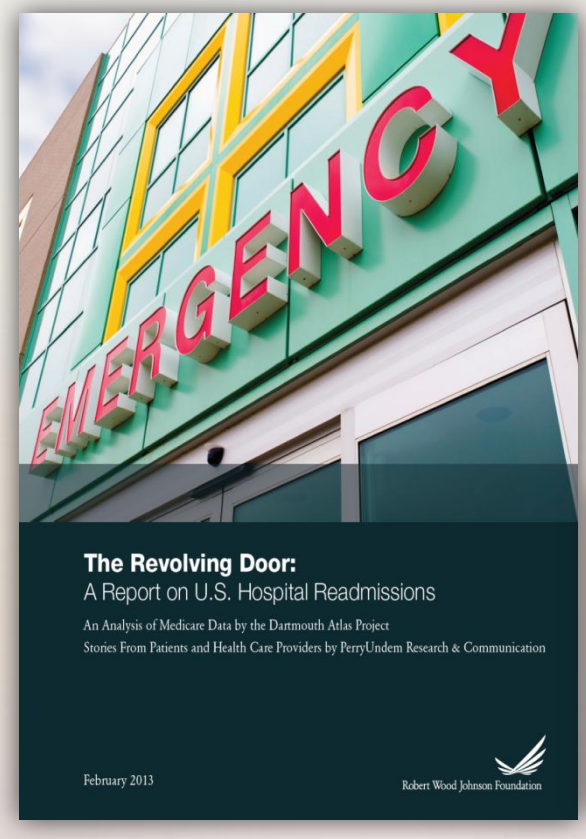
Reducing Length of Hospital Stay and Mortality

Inpatients

Outpatients

Increasing Hospital Readmissions

the "revolving door" syndrome



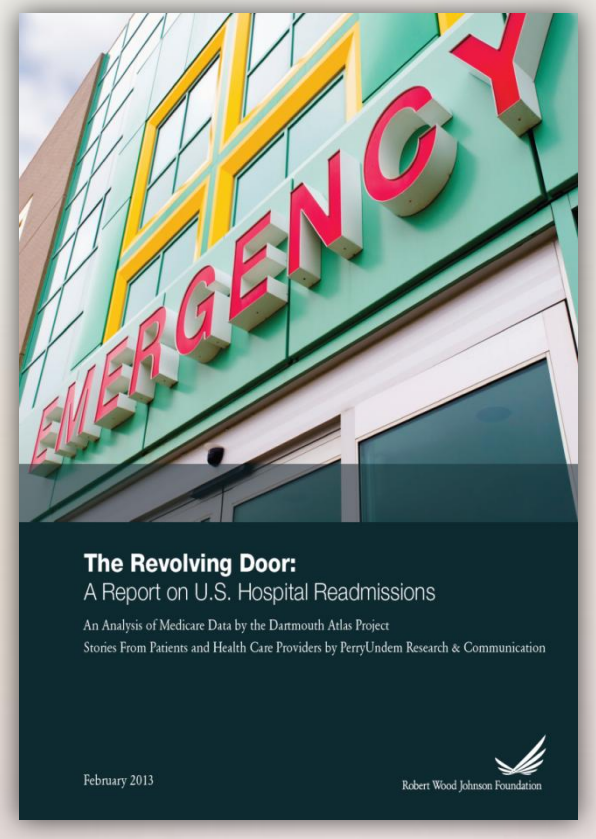
THE DARTMOUTH INSTITUTE
FOR HEALTH POLICY & CLINICAL PRACTICE

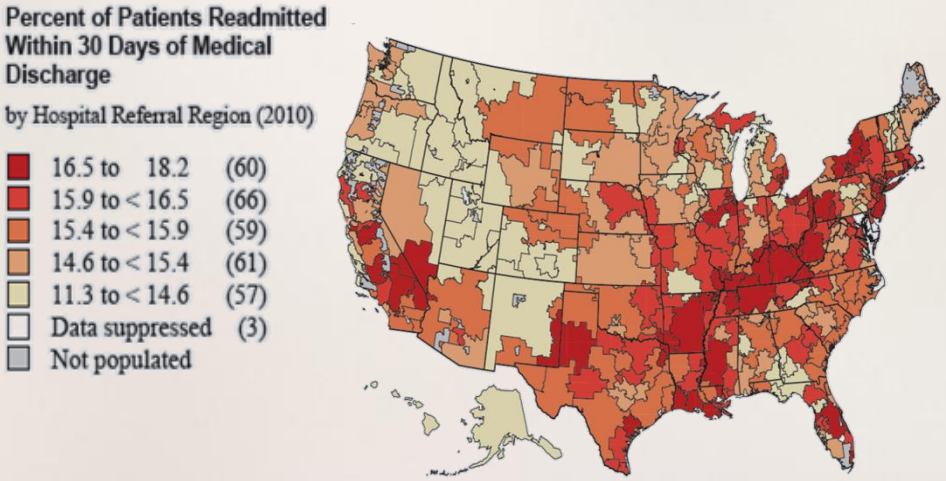
The Revolving Door:
A Report on U.S. Hospital Readmissions

An Analysis of Medicare Data by the Dartmouth Atlas Project

Stories From Patients and Health Care Providers by PerryUndem Research & Communication

the "revolving door" syndrome





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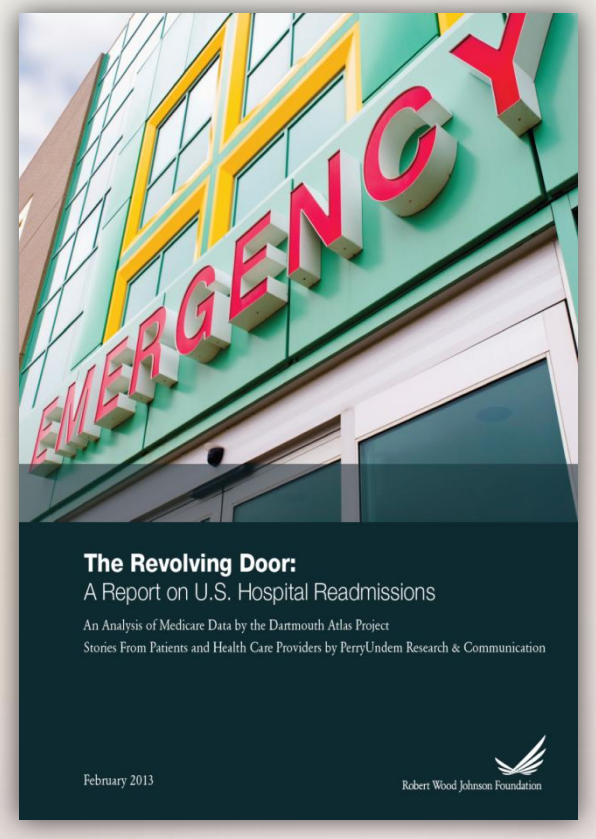
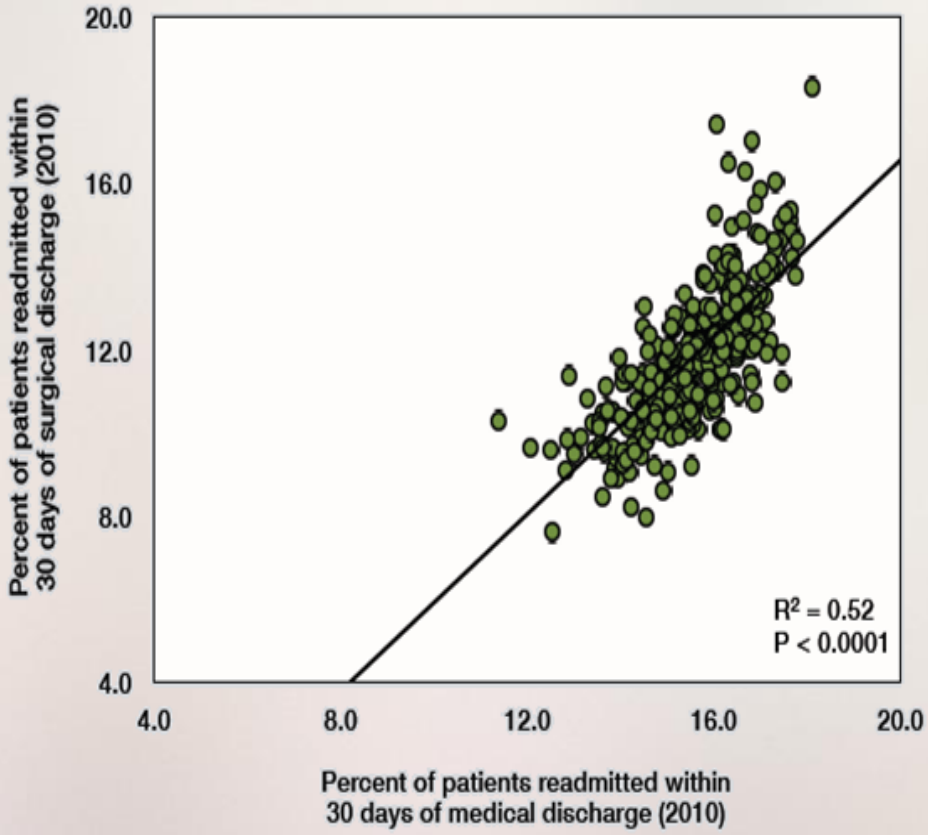




the "revolving door" syndrome

Hospitals with low readmissions tend to have high mortality

Hospitals with high readmissions tend to have low mortality

CORRESPONDENCE

N ENGL J MED 363;3 NEJM.ORG JULY 15, 2010

Are All Readmissions Bad Readmissions?

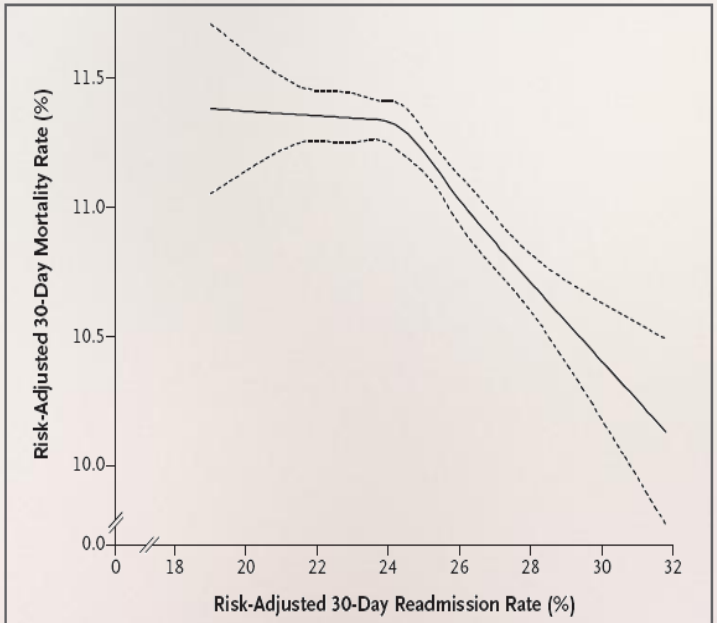
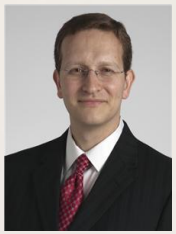


Figure 1. Comparison of Risk-Adjusted Hospital Readmission Rates and Mortality Rates 30 Days after an Index Admission for Heart Failure.

The dashed lines indicate the upper and lower limits of the 95% confidence intervals, and the solid line indicates linear regression. Data are from the Centers for Medicare and Medicaid Services Hospital Compare public reporting database.[1]

The NEW ENGLAND JOURNAL of MEDICINE



Eiran Z. Gorodeski, M.D., M.P.H.
Randall C. Starling, M.D., M.P.H.
Eugene H. Blackstone, M.D.

Cleveland Clinic
Cleveland, OH
gorodee@ccf.org

Length of Stay, Readmission, and Mortality rates: Competing Clinical Outcomes

How do we see this relationship?

… complex and incompletely understood

Karen E. Joynt, MD, MPH,
Harvard School of
Public Health

Hospitals with low mortality rates are the ones that save **very ill patients**. These patients are then more likely to stay longer in hospital and to be readmitted.

Hospitals with low mortality rates and low length of stay could also be the ones that admit the **least sick patients**. This "*propensity to admit*" explains both low mortality rates, low length of stay, and high readmission rates.

the "revolving door" syndrome

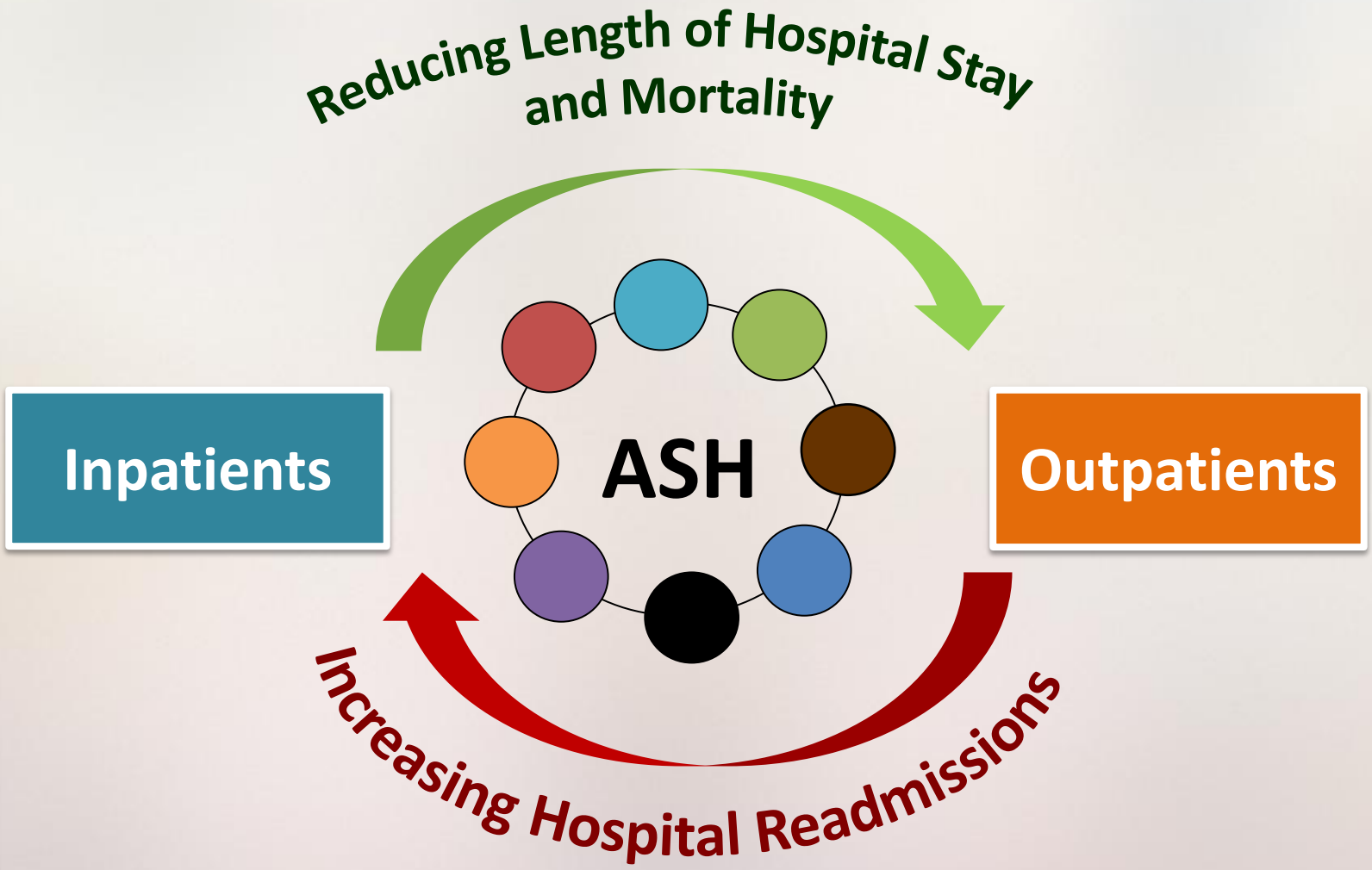
Reducing Length of Hospital Stay and Mortality

Inpatients

Outpatients

Increasing Hospital Readmissions

the "revolving door" syndrome



bridging Inpatient and Outpatient care

A new Hospital Integration Strategy for Internal Medicine

Inpatients

Outpatients

to bridge the gap between

bridging Inpatient and Outpatient care

ED Short Stay Unit
Medical

Day Hospital
Medical

Hospital in the Home
Medical

Alternatives to
Standard
Hospitalization

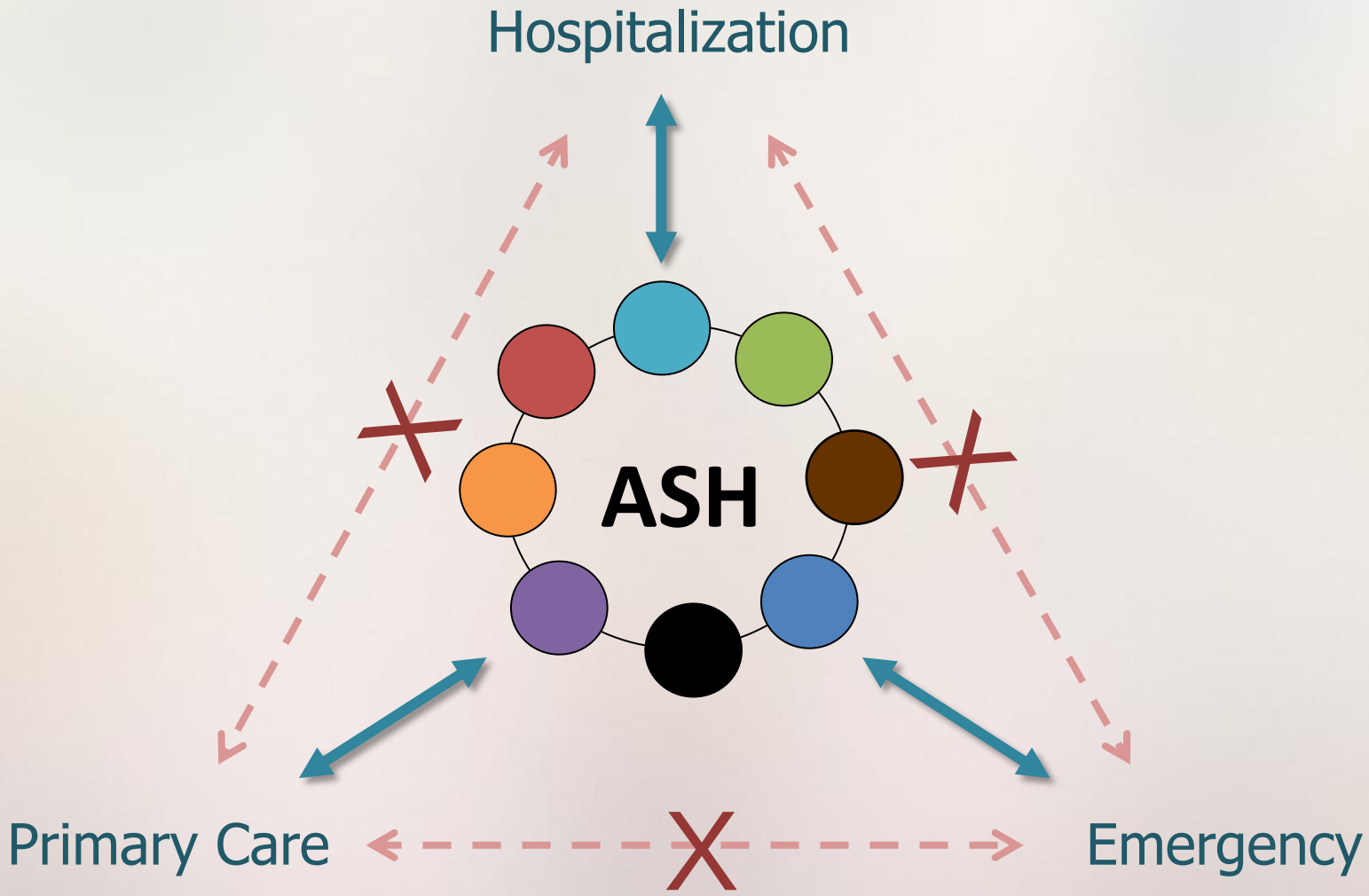
Chronic Disease Functional Units
Medical

Quick Diagnostic Unit
Medical

ED Observation Unit
Medical /Surgical

Primary Care "Virtual" Consultations

bridging Inpatient and Outpatient care



bridging Inpatient and Outpatient care

During the past decade, in addition to the traditional division between **acute inpatient care** and **"ambulatory" outpatient care**, several **alternatives to standard hospitalization** have emerged for bridging the traditional gap between inpatient and outpatient care

In

Patients who have to be in the hospital should be there

Out

Patients who do not be in the hospital should not be there

Internal Medicine Department

New Approach

Inpatient Care

Leadership in the attention to severely ill admitted patients

- → Acute exacerbation of Multi-morbidity & Geriatrics
- → Active medical support to Surgical Departments
- → Chronically critically patients after ICU admission
- → Complex and Rare Diseases

Outpatient Care

Leadership in the use of Alternatives to Conventional Hospitalization and **"Major Ambulatory Medicine"**

Moving from theory to practice may not be easy

Internists may find "obstacles" at all levels:

Patients

Medical patients are old and frail

Medical patients usually have more than one chronic medical condition

Families

Caregivers of chronic patients seek something more than go at home "fast"

Clinicians

Lack of experience in non-inpatient care

Doubts concerning efficacy and safety

Administrators

Lack of financing

Lack of incentive policies

Internal Medicine Department

New Approach

So, in the current time…

… what do medical patients need ? … more Beds ?

… probably no, they need better inpatient management !

Internists should consider this an opportunity and not a loss !!

Internal Medicine Department

New Approach

Internists can do that…!, leading both

→ the attention to **severely ill hospitalized patients** and

→ the use of **alternatives to standard hospitalization**

for reducing unnecessary hospital stays

and avoidable inpatient admissions and readmissions.

In

Out

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Thank you very much for your attention

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Consultes Externes
Hospital Universitari de Bellvitge