The role of internists for bridging the gap between Inpatient and Outpatient Care

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The Earth is Forever Changing

4.6 billion years ago

Today
The Earth is forever changing... and we are on it!

climates.nasa.gov

Last century
Pedersen Glacier, Alaska
Climate change
The Earth is forever changing... and we are on it!

climate.nasa.gov

Last two decades
The Binhai New Area, China
Urban growth
The Earth is forever changing... and we are on it!

August 25, 2004

Last 10 years
Shrinking lake, central Asia
Drought

August 19, 2014
The Earth is forever changing... and we are on it!

Overpopulation
Poverty
Urban growth
Deforestation
Pollution
Climate change
Pandemics

new changes...
new problems...
new needs...
new challenges...
to face and solve!
Health care is forever changing... and 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
Health care is forever changing... and we are on it!

- New Technologies & Treatments
- Increased Life Expectancy
- Inflationary Drivers of Growing Demand and Rising Costs
- Biomedical Research & Innovation
- Higher Patient’s information & Expectations
Health care is forever changing… and we are on it!

1.1.1. Life expectancy at birth, 1990 and 2012

Rising Patient Needs and Costs

For years, hospitals responded to increasing demands by adding more beds, more buildings, and more staff.
Rising Patient Needs and Costs

For years, hospitals responded to increasing demands by adding more beds, buildings, and staff.

Limited Financial Resources

However, in the past decade, the global recession limited hospital resources, and many administrators reduced beds and staff for balancing the bottom line.
Health care is forever changing... and we are on it!

Rising Patient Needs and Costs

Limited Financial Resources

Health care is on a collision course with economic reality
Health care is forever changing... and we are on it!

6.2.1. Health expenditure as a share of GDP, 2012 (or nearest year)

<table>
<thead>
<tr>
<th>Country</th>
<th>Current</th>
<th>Capital</th>
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<td>France</td>
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<td>2014</td>
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</table>

1. Total expenditure only (no breakdown between current and capital spending available).

Health care is forever changing... and we are on it!

6.1.1. Health expenditure per capita, 2012 (or nearest year)

Health care is forever changing... and we are on it!

6.1.2. Annual average growth rate in per capita health expenditure, real terms, 2000 to 2012 (or nearest year)

Health care is forever changing... and we are on it!

6.3.1. Current health expenditure by function, 2012 (or nearest year)

<table>
<thead>
<tr>
<th>Country</th>
<th>Inpatient care¹</th>
<th>Outpatient care²</th>
<th>Long-term</th>
<th>Medical goods (&quot;mainly pharmaceuticals&quot;)</th>
<th>Prevention and administration</th>
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Note: Countries are ranked by inpatient care as a share of current health expenditure.
1. Refers to curative-rehabilitative care in inpatient and day care settings.
2. Includes home-care and ancillary services.
Health care is forever changing... and we are on it!

6.3.2. Average annual growth rates of spending for selected functions, EU average, in real terms

<table>
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<td>-2.7</td>
<td>1.1</td>
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<td>-0.3</td>
<td>8.2</td>
<td>-1.3</td>
<td>2.5</td>
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<td>8.2</td>
<td>-3.8</td>
<td>5.7</td>
<td>-3.5</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Health care is forever changing... and we are on it!

3.5.1. Hospital beds per 1,000 population, 2000 and 2012 (or nearest year)

Hospital Restructuring

Almost all European countries reduced inpatient beds during the last 10 years! Hospital beds are still the cornerstone of traditional internal medicine, but they are expensive and may be more scarce in the coming years...
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

Surgical

Bed

Medical
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 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.

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

“Lack of access to inpatient beds is the main factor for hospital crowding” (US GAO 2003, 2009 and IOM 2006)
Lack of hospital beds forces to shorten hospital stays

the "Revolving Door" syndrome

Inpatients

Outpatients

Increasing Hospital Readmissions
Physicians regard Inpatient Access Block with enormous concern and pessimism.

This phenomenon leads hospitals to suffer waits, cancellations, and diversions that negatively affect patient safety and quality of care.
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 ED "boarding“ patients upstairs
monthly number of patients waiting for a free inpatient bed in the ED at 8.00 am
Addressing the lack of inpatient beds at Bellvitge University Hospital: **Clinician-Administrator collaborative approach**

**Our 10-step process**

1. Something wrong we were doing
2. Literature review
3. New approach
4. Hospital Board Commitment
5. Financial support
6. Multidisciplinary taskforce
7. Multifaceted intervention
8. Communication strategy
9. Implementation
10. Monitoring & Evaluation
“Inpatient Access Block” is a well known phenomenon in many hospitals worldwide…

Several experiences demonstrate that this is not only a “financial resource problem” since it often reflects a larger failure of “hospital-wide operational processes”

Inpatient Access Block

Scheduled patients

Waiting list for elective surgery

Surgical

Access Block

Emergency patients

“Inpatient Boarding” in the ED

Medical
Inpatient Access Block

Internists should be firmly interested in leading this change also in medical patients, and they should consider this an opportunity and not a loss.

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.
Alternatives to Standard Hospitalization

Major Ambulatory Medicine

Surgical Patients

Major Ambulatory Surgery

Medical Patients
“Major Ambulatory Medicine”

Corbella X, Salazar A, Pujol R.


Major ambulatory medicine

Keywords:
Ambulatory care
Patient admission
Hospitalization

For years, as long as payment for health care services covered the costs, hospitals responded to increasing demands by adding more beds. However, since payment is no longer driven by costs, hospitals have had to reduce costs. While it has not been clear how to define these transitions of care units between inpatient and outpatient care for non-surgical patients, our proposal is to unify the sorts of these alternatives to traditional hospitalization under the unique denomination of “Major Ambulatory Medicine” (MAM). The idea is to offer a conceptual framework useful for physicians and policymakers, and help further development and evaluation of such initiatives.

When a new wave claims for ‘generalism’ in Europe and in the U.S., internists should be interested in leading this strategic change, especially in large teaching hospitals, and they should consider this an opportunity and not a loss. Hospitalists and accountable care organis...
New Approach

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 “Major Ambulatory Medicine”
<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Medical/Surgical</th>
<th>Surgical</th>
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<tbody>
<tr>
<td>Day Hospitals</td>
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<tr>
<td>Integrated Care Units</td>
<td>Medical</td>
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<td>Same-day Admission Units</td>
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<td>ED Observation Units</td>
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<td>Hospitals in the Home</td>
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<td>Quick Diagnostic Units</td>
<td>Medical</td>
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<td>23-h Surgical Units</td>
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</table>
Reducing Avoidable Admissions and Unnecessary Hospital Stay

Addressing Hospital Readmissions

Major Ambulatory Medicine

Inpatients

Outpatients
A new Hospital Integration Strategy for Internal Medicine to bridge the gap between Inpatients and Outpatients.
bridging Inpatient and Outpatient care

Inpatient Care

Primary Care

Emergency
Patients who do not have to be hospitalized, should not be there.

Patients who have to be hospitalized, should be there.

bridging Inpatient and Outpatient care
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’Hôpital del Mar Edifici de Llobregat, Catalonia, Spain

DOI: 10.5430/jha.v2n2p9
implementing change at Bellvitge Hospital

Number of Total Inpatient Beds

Year 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

- Number of Total Inpatient Beds
- Linear (Number of Total Inpatient Beds)
implementing change at Bellvitge Hospital

Scheduled versus Emergency Inpatient Admissions

- Red line: Number of Scheduled Inpatient Admissions
- Blue line: Number of Emergency Inpatient Admissions

Graph showing the comparison of scheduled and emergency inpatient admissions from 1998 to 2010.
implementing change at Bellvitge Hospital

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

Baseline (Jan'98-Jun'01)
Intervention (Jul'01-Jun'05)
Follow-up (Jul'05-Mar'10)

Bed Management Team Operative
Bed Management Team Operative Again
implementing change at Bellvitge Hospital
In our setting, **Major Ambulatory Medicine** provided a means of **quality and efficiency** for managing the rapid growth in inpatient care demand.

A contentious issue was whether the growth of Major Ambulatory Medicine will translate into reductions in bed numbers in our hospital.

There is a strong consensus among the hospitalist leaders involved in our research that Major Ambulatory Medicine strategies should be implemented **within existing bed capacity**, rather than achieving any significant reductions in bed numbers.

However, this conclusion has important financial implications as it reduces the ability of hospital executives to achieve savings in the short or medium term after implementing Major Ambulatory Medicine.
1. Healthcare costs have risen faster than levels of available funding.

2. Healthcare spending will continue to rise because of inflationary drivers such as increased life expectancy, chronicity, multi-morbidity, social changes and patient’s expectations.

3. Growing demand and rising costs have put healthcare on a collision course with economic reality, since it cannot be met with current levels of public funding.

4. Accordingly, almost all European hospitals have reduced the number of inpatient beds and begun to operate at or above capacity, with a dysfunctional bed “competition” between emergency and scheduled inpatient admissions.
4. Addressing the lack of inpatient beds, internists from different European countries have begun to be firmly interested in leading the development of new organizational models of care, based on inpatient-outpatient integrated care strategies.

5. For avoiding unnecessary admissions, hospital stays, and readmissions in medical patients, many alternatives to standard hospitalization have been proposed in recent years, such as:

   Quick diagnostic units, Day care hospitals, ED Observation units, Extended evaluation and treatment units for chronic and cancer patients, Short-stay units, or Hospital-at-the home.
6. While it has not been clear how to define these transition of care units between inpatient and outpatient care for medical patients, our proposal was to unify the sort of these alternatives to standard hospitalization under the denomination of “Major Ambulatory Medicine”.


7. Drawing upon these trends, we encourage more internists to be interested in leading new integration strategies for bridging inpatient and outpatient worlds, considering it an opportunity and not a loss.
Internal Medicine Department
New Approach: Acute Hospitals and Integrated Care

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 “Major Ambulatory Medicine” by using “Alternatives to Standard Hospitalization”

Primary Care
Leadership in the prevention and continuum care of adult patients with various medical conditions and chronic diseases.
Thank you very much for your attention

The role of internists for bridging the gap between Inpatient and Outpatient Care