



Cass-IZA Conference on Leadership, May 9th 2013

**John Van Reenen, Centre for Economic Performance,
London School of Economics**

(joint work with Nick Bloom, Stanford & Raffaella Sadun, HBS)

Management, Productivity & the importance of clinical leadership in hospitals

- **External** factors explain some of the problems in healthcare systems
 - Growing demand & limited capacity
 - Perverse Incentives
 - Poor systemic coordination (e.g. IT)
- However, problems also related to avoidable inefficiencies linked to lack of basic managerial processes **inside** organizations
 - Lack of knowledge
 - Lack of communication
 - Poor coordination
- Gather large sample international data
 - Describe data, external validity association with performance
 - Variation of management & importance of leadership

Agenda

1 Measuring management practices in healthcare

2 Describing management across hospitals

3 “Drivers” of management practices

4 Implications

The World Management Survey (www.worldmanagementsurvey.org)

- Started in 2004 with the objective to collect quantifiable information on the quality of practices adopted by organizations
 - Need to go beyond case study evidence
 - Allow for systematic statistical analysis of dispersion of management practices & impact on outcomes
- Has led to creation of large source of management data
 - Major waves in 2004, 2006, 2009
 - More than 10,000 organizations in 21 countries (Americas, Asia, Europe & Africa this summer 2013)
 - Initially focused on **manufacturing**
 - Now extended to **hospitals** (& retail, schools, etc.)
 - Various extensions on methods (MOI, MOPs) & experiments (consultancy RCT in India; working from home in China)

Hospital Survey methodology

1) Developing management questions

- 18 practice scorecard: “lean”, monitoring, targets & incentives
- Phone interviews with managers and doctors in orthopaedics & cardiology for ~1 hour

2) Getting hospitals to participate in the interview

- Performance indicators from external sources (not interview)
- Endorsement letter from Department of Health, AHA, etc.
- Run by 25 MBA-types (loud, assertive & experienced)

3) Obtaining unbiased responses (“Double-blind”)

- Interviewers do not know the hospital’s performance
- Interviewees are not informed (in advance) they are scored
- All interviews ran from a single location, intensive training and calibration

What do we mean by “management practices”?

- Look at some very basic practices
- With some exceptions (patient flow, standardization and protocols), most of the survey questions are **not** healthcare specific

Q1 LEAN OPERATIONS – layout of patient flow

- Can you briefly describe the patient journey for a typical episode?
- How closely located are the wards, theatres and consumables?
- Has the patient flow and the layout of the hospital changed in recent years

Score	(1): Layout of hospital and organisation of workplace is not conducive to patient flow, e.g., ward is on different level from theatre, or consumables are often not available in the right place at the right time	(3): Layout of hospital has been thought through and optimised as far as possible; but workplace organisation is not regularly challenged (and changed)	(5): Hospital layout has been configured to optimize patient flow; workplace organization is challenged regularly and changed when needed
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Q3 STANDARDIZATION AND PROTOCOLS

- How standardised are the main clinical processes?
- What tools does the clinical staff employ to ensure that they have the correct patient and/or conduct the appropriate procedure?
- How are managers able to monitor whether clinical staff are following protocols?

Score	(1): Little standardization and few protocols exist (e.g. different clinical staff have different approaches to the same treatments)	(3): Protocols have been created, but are not commonly used because they are too complicated or not monitored adequately (e.g. may be on website or manual only)	(5): Protocols are known and used by all clinical staff and regularly followed up on through some form of monitoring or oversight
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Typical process improvement: BEFORE

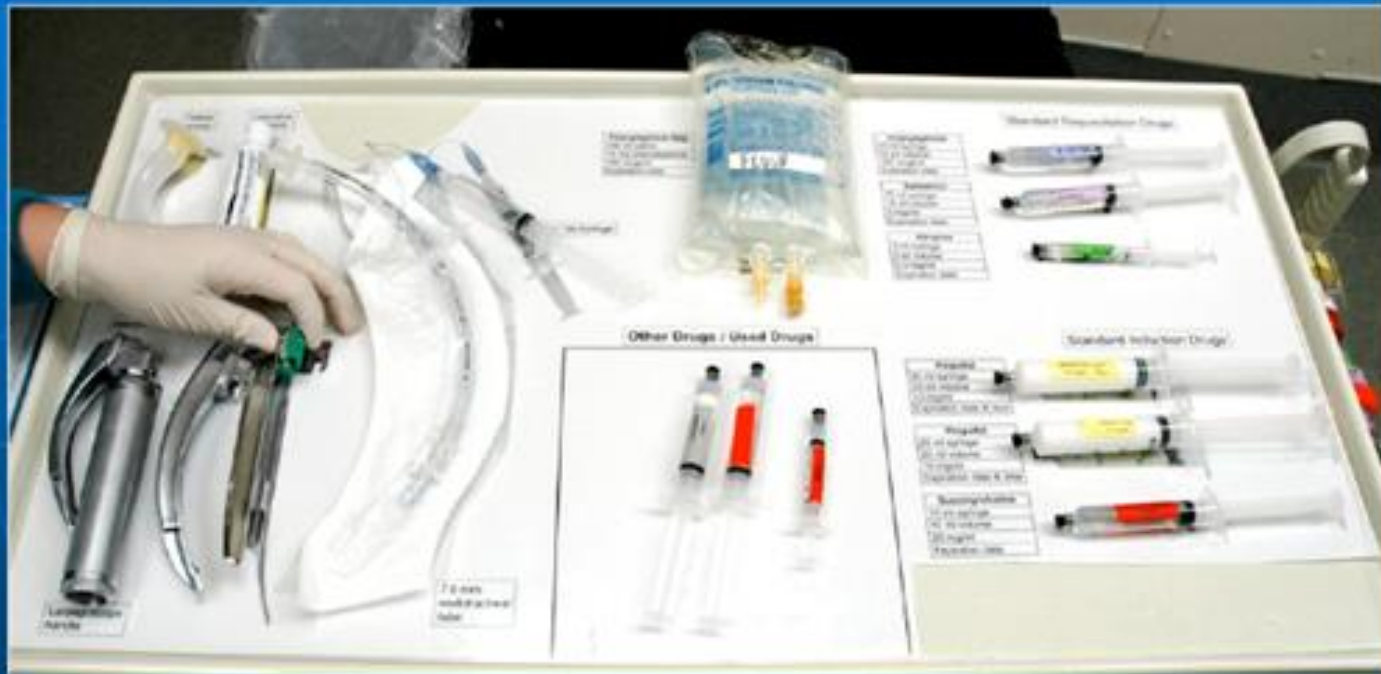
Visual Control for Safety



5S Anesthesia "Shadow Board" - Before

Typical process improvement: AFTER

Visual Control for Safety



5S Anesthesia Shadow Board - After

Q6 MONITORING – Performance tracking

- What kind of performance or quality indicators would you use for performance tracking? How frequently are these measured?
- Who gets to see these data?
- If I were to walk through your hospital wards and surgical rooms, could I tell how you were doing against your performance goals?

Score	(1): Measures tracked do not indicate directly if overall objectives are being met; tracking is an ad-hoc process (certain processes are not tracked at all)	(3): Most important performance or quality indicators are tracked formally; tracking is overseen by senior staff	(5): Performance or quality indicators are continuously tracked and communicated against most critical measures, both formally and informally, to all staff using a range of visual management tools

Performance tracking: Healthcare

Tuesday "Stand Up"



Agenda

1

Measuring management practices in healthcare

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Describing management across hospitals

3

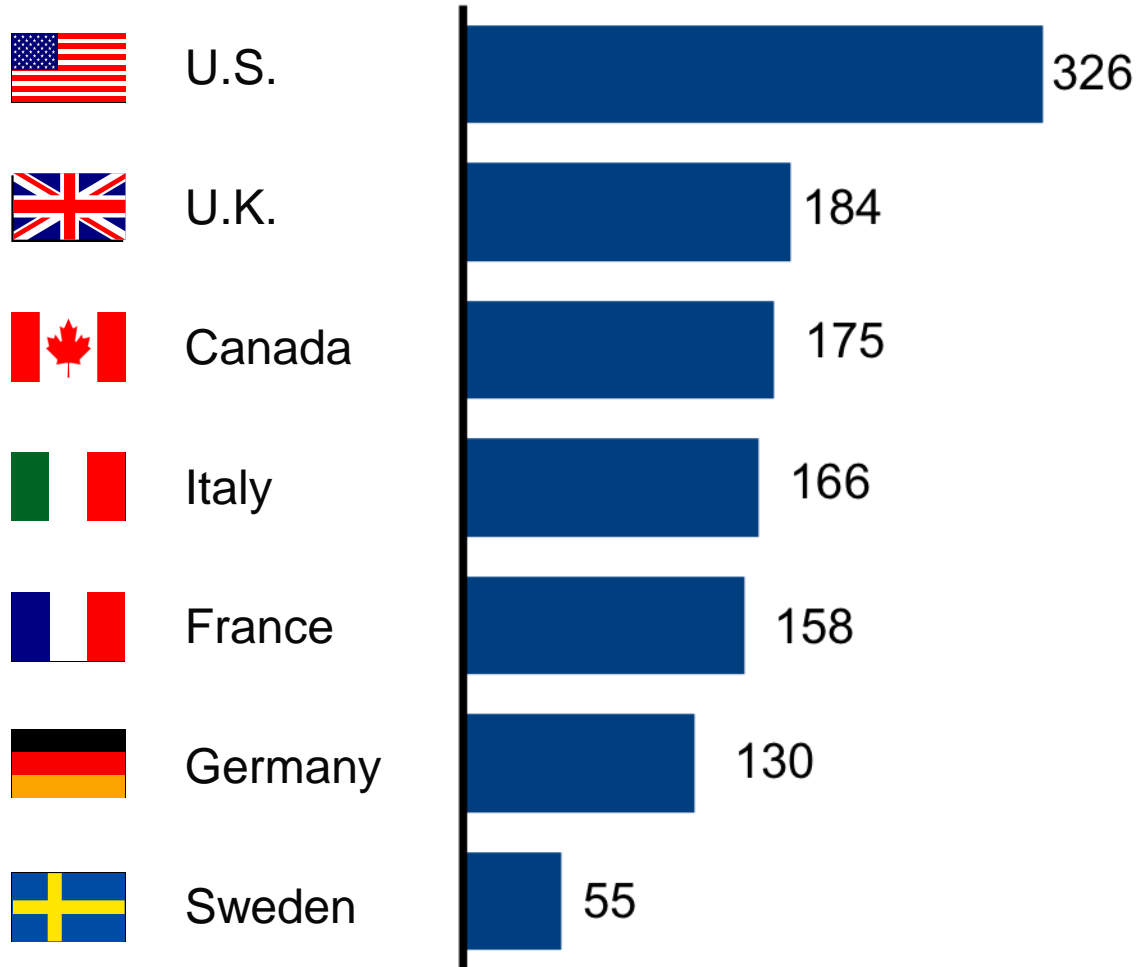
“Drivers” of management practices

4

Implications

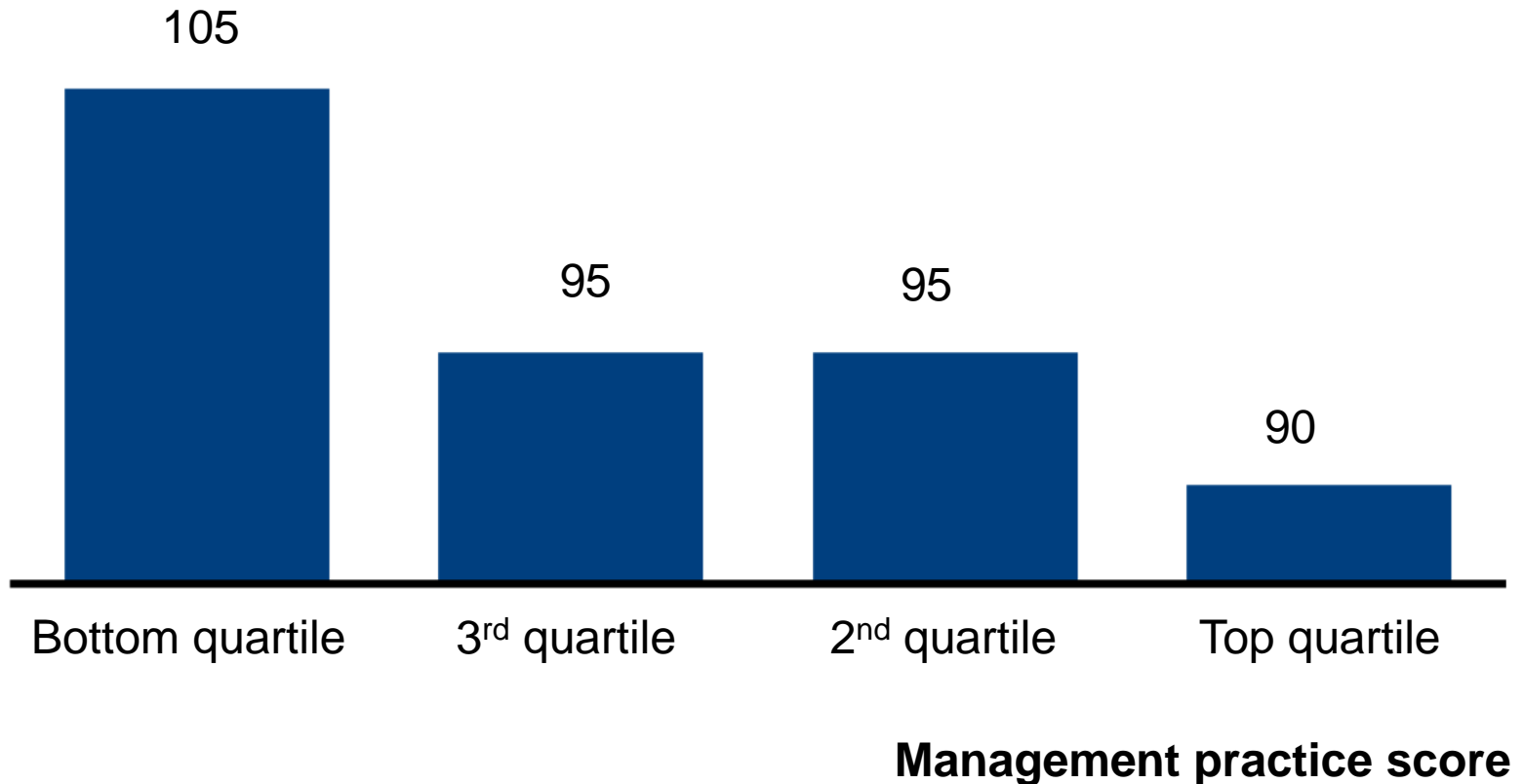
We interviewed 1,200 hospitals across 7 countries

Number of interviews



There is a strong relationship between management practice and health outcomes

UK heart attack mortality rates relative to national mean



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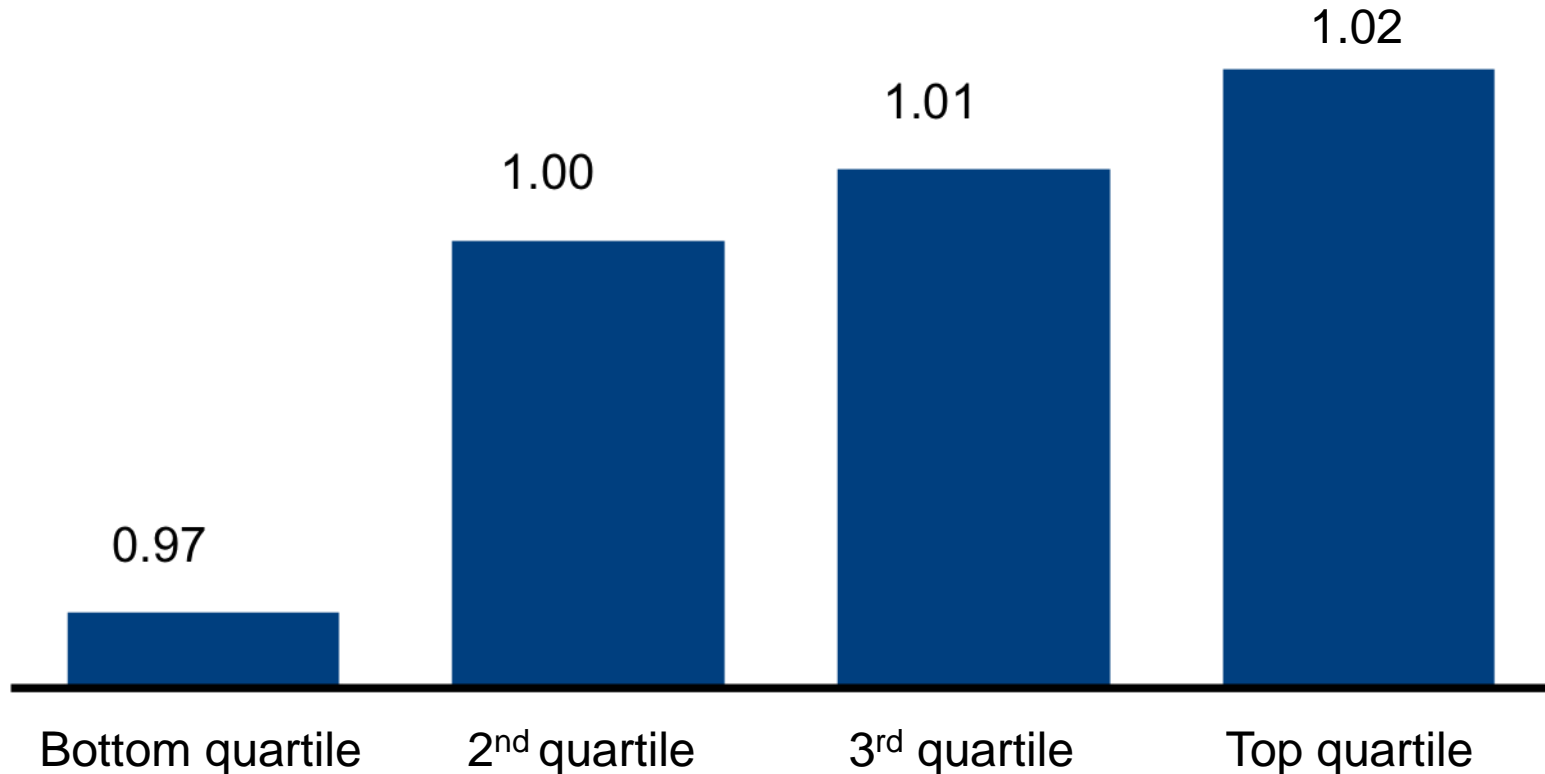
Implications

Examined many “drivers” of management practices

- Competition
- Ownership
- Size
- **Human capital** (% senior managers with a clinical degree)
- **Theoretical Pros** are (i) better communication; (ii) reduce agency problem; (iii) higher ability
- **Theoretical Cons** are (i) less general management expertise; (ii) captured by internal lobbying/favouritism

Human Capital: Hospitals with more clinicians as managers have better management

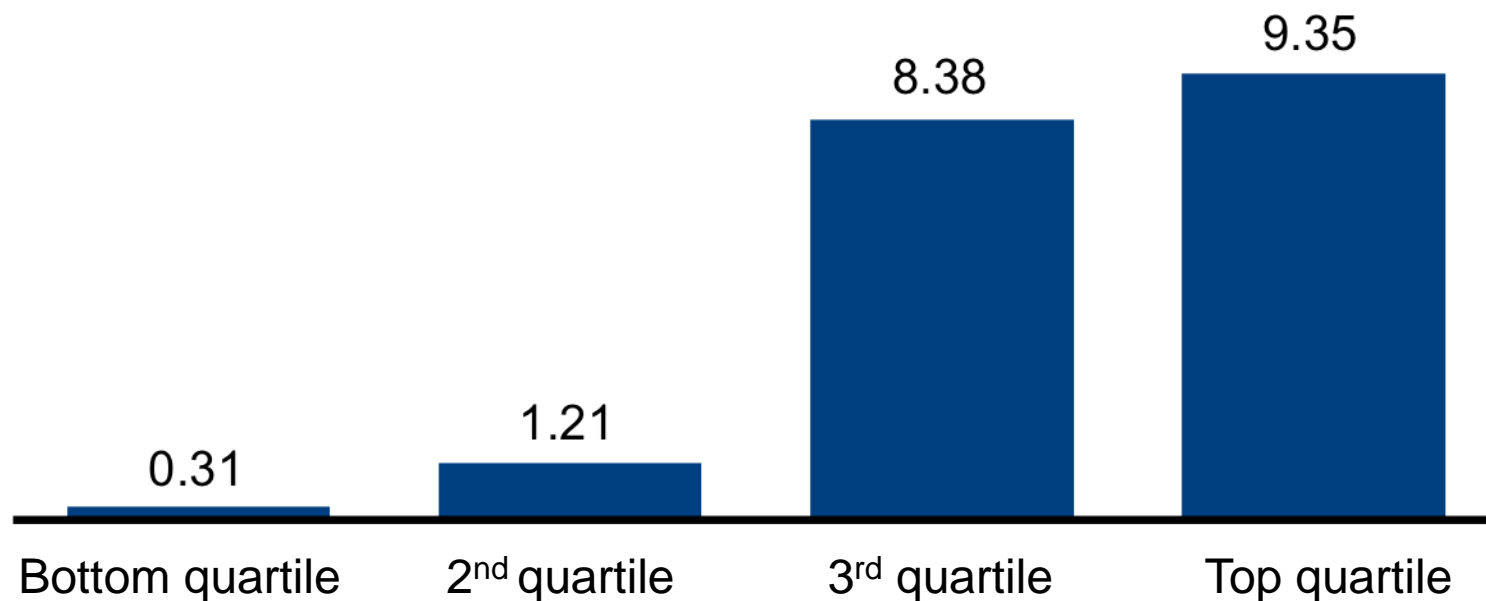
Management score relative to national mean (all countries)



Proportion of senior managers with a clinical degree

Changes in clinically trained managers are also correlated with improved management practices

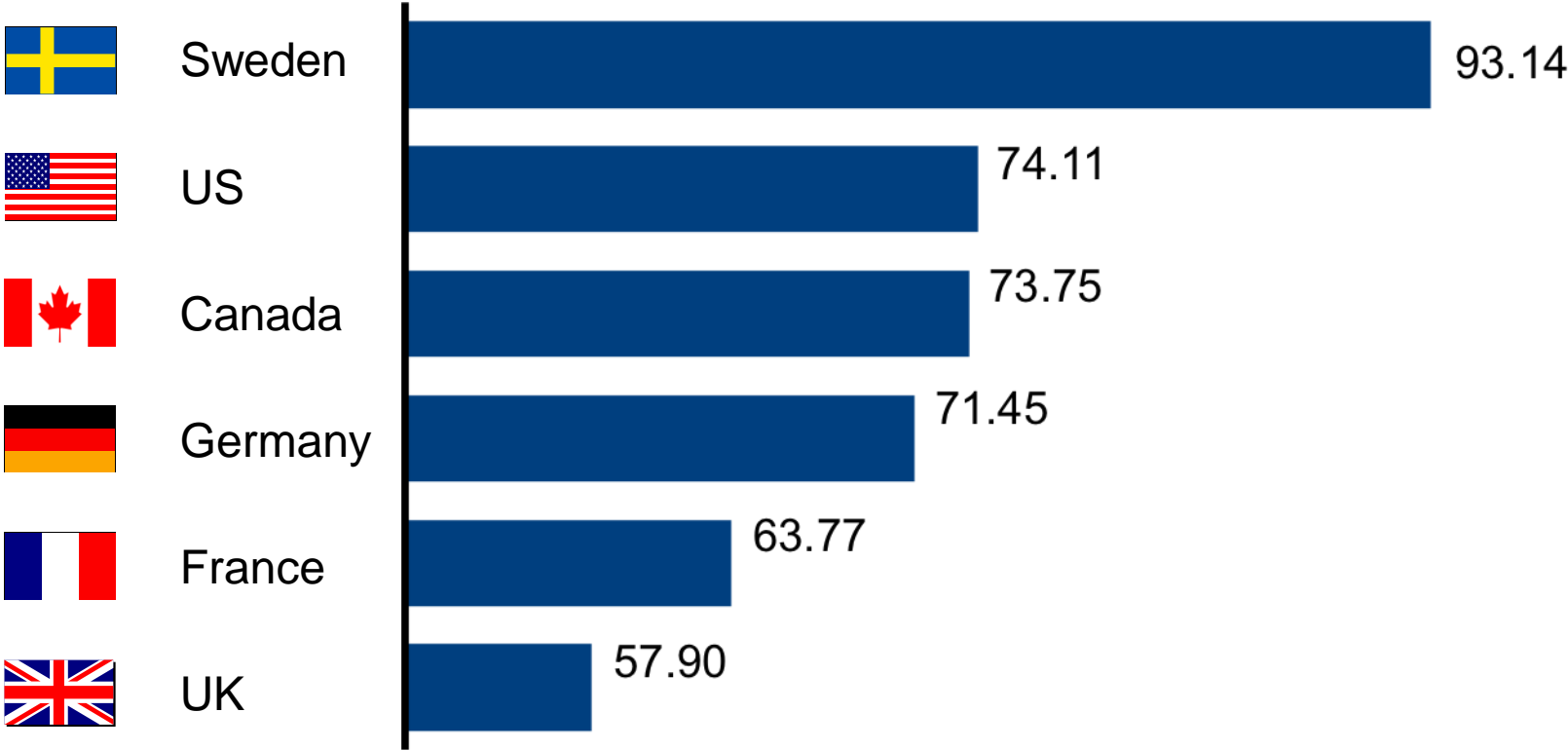
Change in management score 2006 to 2009 (UK)



Change in the proportion of senior managers with a clinical degree

There is wide variation in the prevalence of clinically trained managers by country

Percentage of managers with a clinical degree¹



¹ Italy excluded as it is a legal requirement that all general managers have clinical degrees

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- There is huge variation in management practices across hospitals & it matters for performance, just as it does in other sectors
- Having senior managers with clinical skills *associated* with better outcomes
- Current questions & next steps
 - Causality
 - Mechanisms
 - How to transfer the relevant leadership skills?
 - Is this true in other sectors (e.g. universities)?

MY FAVOURITE QUOTES:

Don't get sick in Britain

Interviewer : “Do staff sometimes end up doing the wrong sort of work for their skills?”

NHS Manager: “You mean like doctors doing nurses jobs, and nurses doing porter jobs? Yeah, all the time. Last week, we had to get the healthier patients to push around the beds for the sicker patients”

BACK UP SLIDES

What is next in this research agenda?

- Improve understanding of best practices
 - Combine “hard” and “soft” information
 - International comparisons
 - Within hospital differences
- Study causality mechanisms
 - Trial and error
 - Management experiments

Plant locations from World Management Survey



Americas



Europe



Asia

Q15 INCENTIVES - Removing poor performers

- If you had a nurse who could not do her job adequately, what would you do? Could you give me a recent example?
- How long would underperformance be tolerated?
- Do some individuals always just manage to avoid being re-trained/fired?

Score

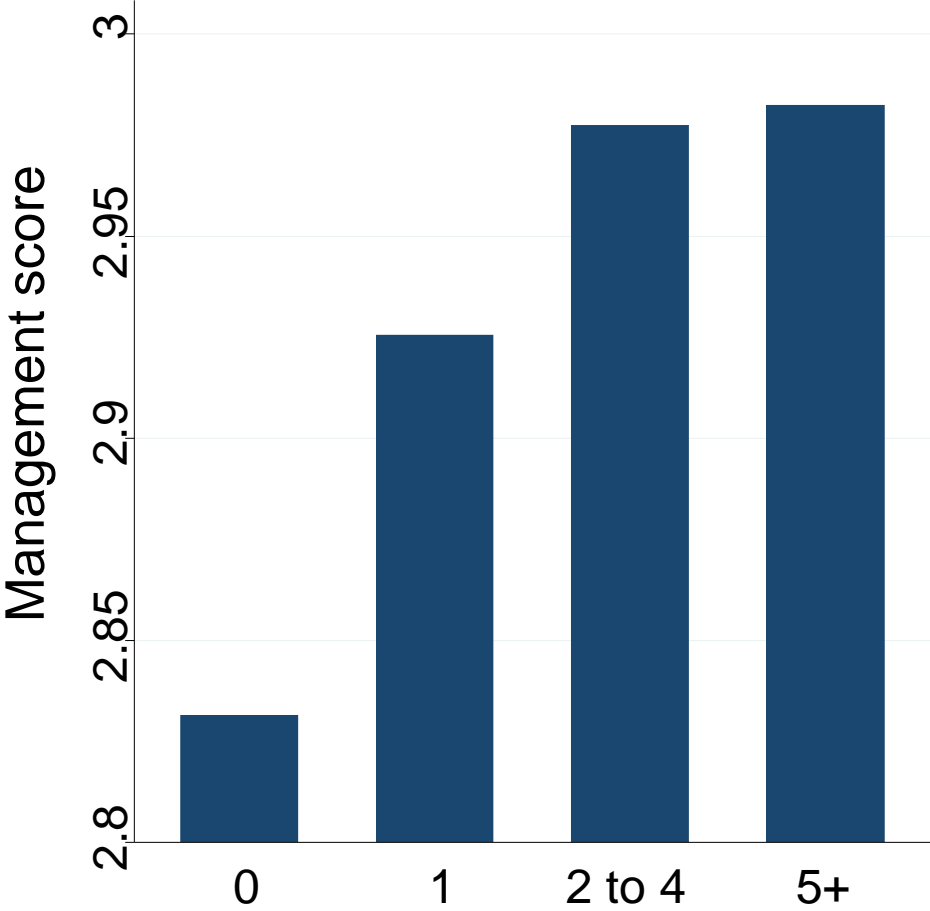
(1): Poor performers are rarely removed from their positions

(3) Suspected poor performers stay in a position for a few years before action is taken

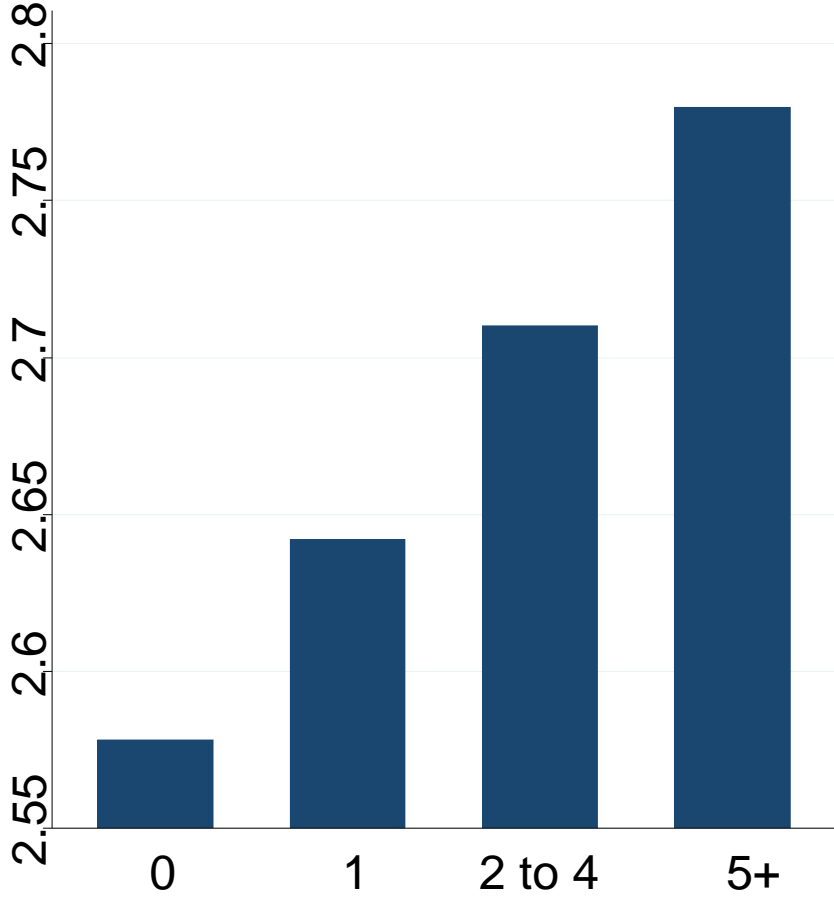
(5): We move poor performers out of the hospital/department or to less critical roles as soon as a weakness is identified

Competition appears to matter in every industry we studied

Manufacturing and Retail



Hospitals and Schools



Number of Reported Competitors

Sample of 9469 manufacturing and 661 retail firms (private sector panel) and 1183 hospitals and 780 schools (public sector panel). Reported competitors defined from the response to the question “How many competitors does your [organization] face?”

We find that good management is strongly correlated with better clinical AND financial performance

A one point increase in management practice is associated with:

UK Hospitals

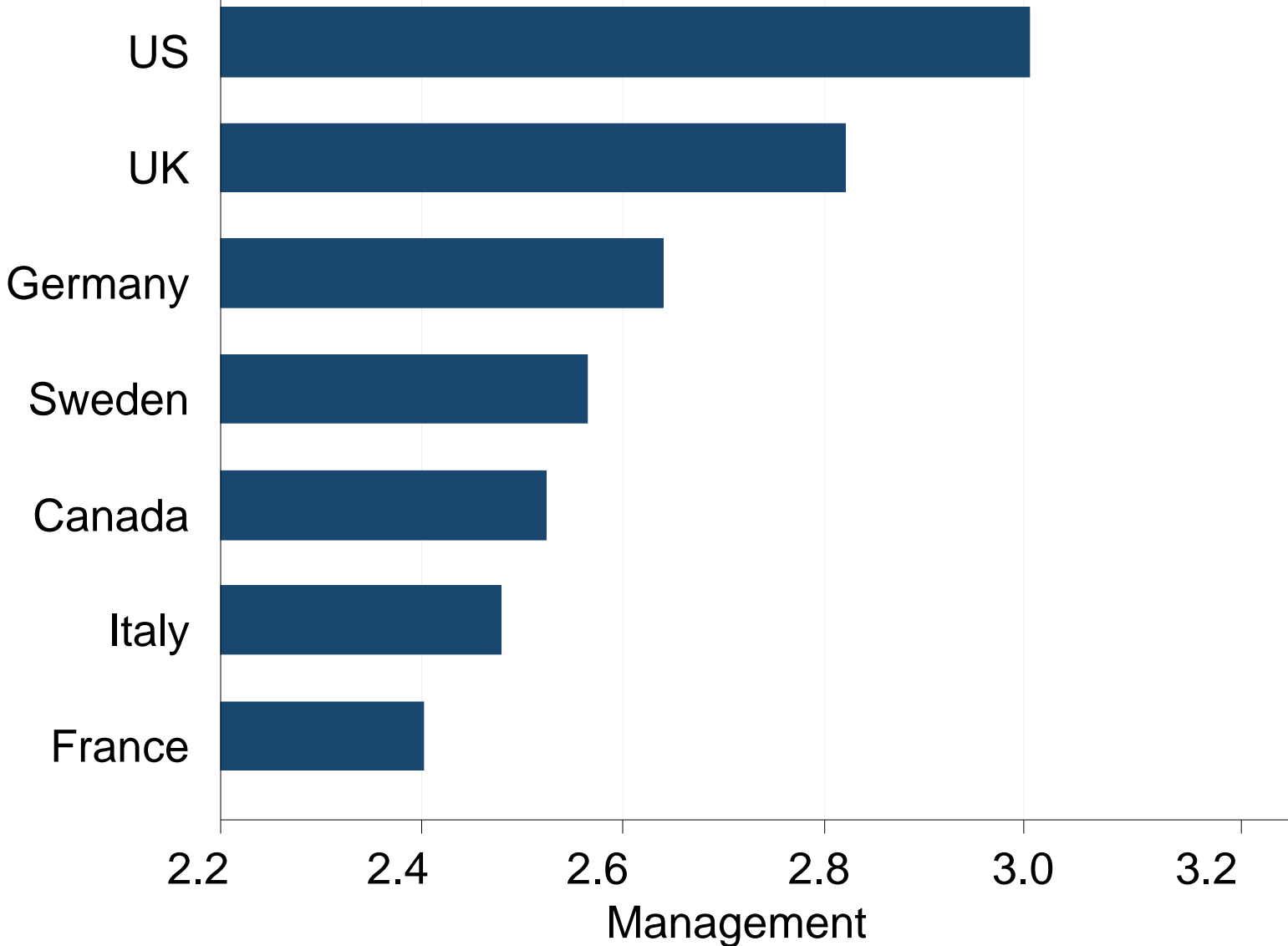
- 6.5% reduction in risk adjusted 30 days AMI mortality rates
- 33% increase in income per bed
- 20% increase in the probability that the hospital is above average in terms of patients satisfaction

US Hospitals

- 7% reduction in risk adjusted 30 days AMI mortality rates¹
- 14% increase in EBITDA per bed
- 0.8 increase in the percentage of people that would recommend the hospital

US leads hospital rankings...

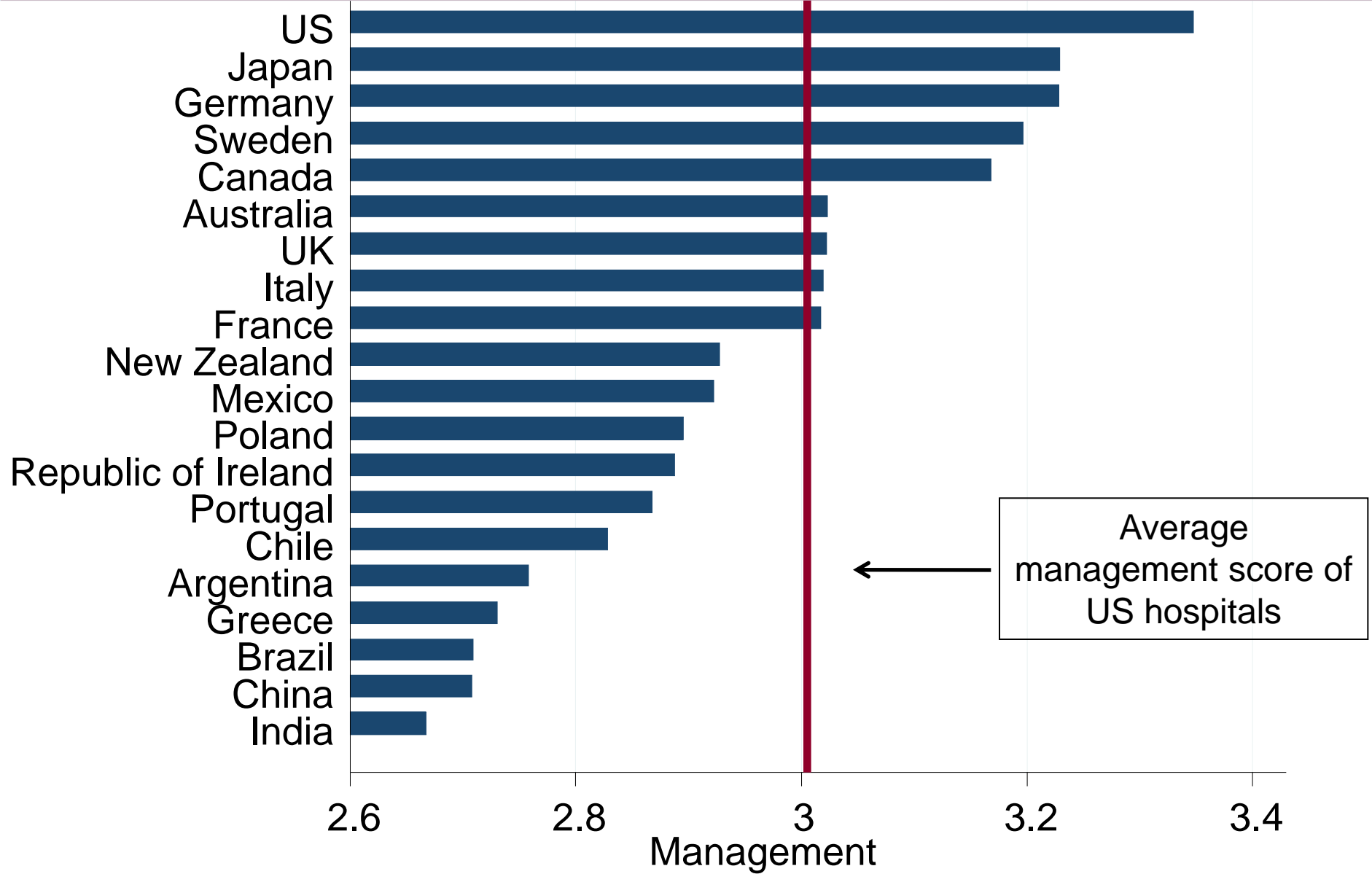
Hospitals



Note: Averages taken across all organizations within each country. 1,183 hospitals

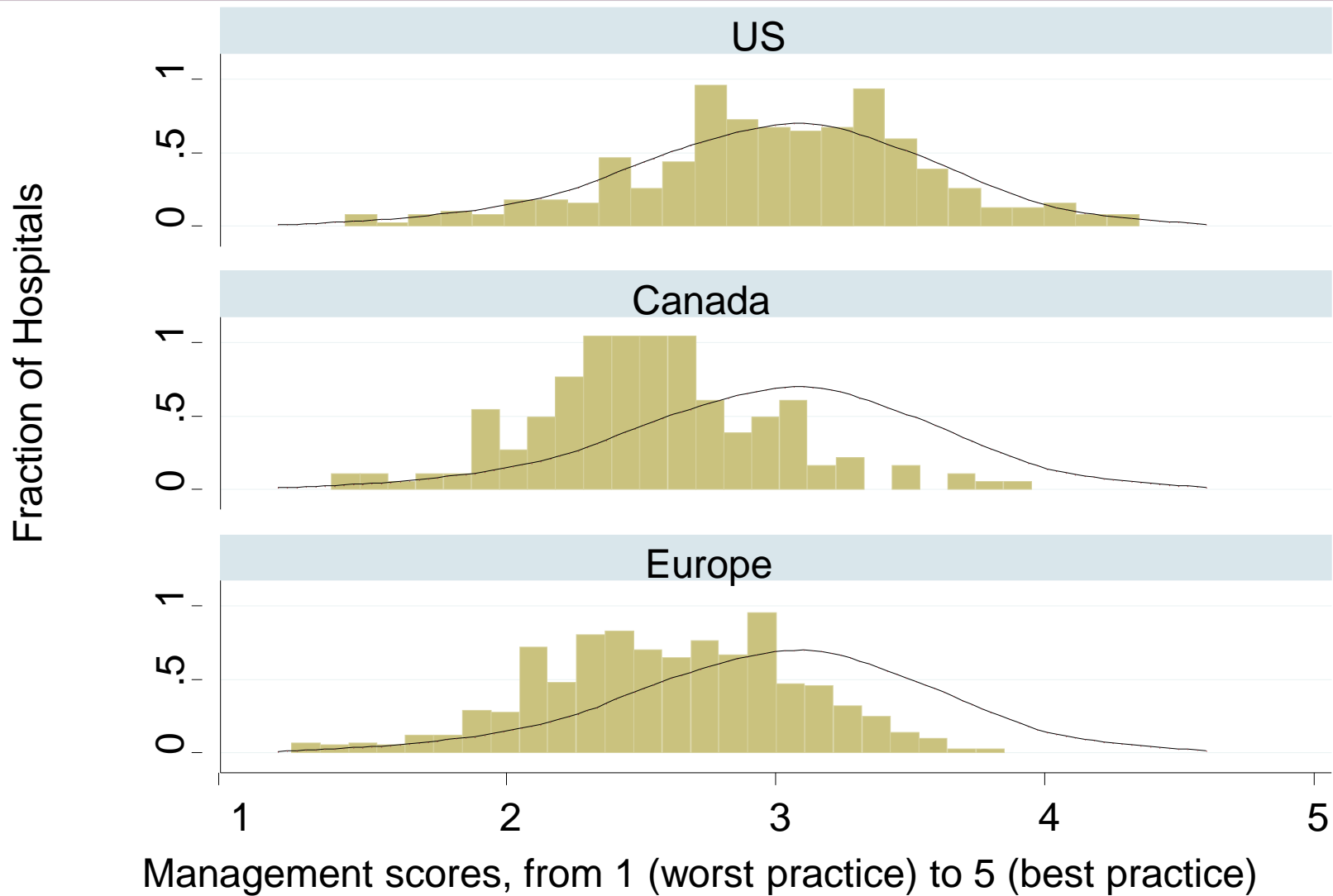
...but the average score is significantly lower than manufacturing

Manufacturing



Similar to other industries, there is a wide dispersion of management practices across hospitals

Hospitals



Note: Bars are the histogram of the actual density. The line is the smoothed (kernel) of the US density for comparison.