



Hospital activities

First findings from the European *e-Business W@tch* 2006

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Strategic seminar
High Level eHealth Conference
Malaga, 10 May 2006

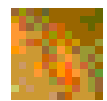
An initiative of the



European
Commission

Presentation overview

- **Survey characteristics**
- **General findings**
- **Hospital Information Systems integration**
- **A changing role of hospitals due to ICT?**
- **Outlook: complete findings**



Survey characteristics

e-Business W@tch 2006 hospital survey

- **Only acute care hospitals included**
 - > no psychiatric hospitals, no rehabilitation centres,
no geriatric homes

- **Computer-Assisted Telephone Interviews (CATI) with hospital IT managers in March and April 2006**

- **Empirical basis in total**
 - random sample (representative)
 - interviews with around 1,000 hospitals
 - 18 European countries covered

Empirical basis of today's presentation

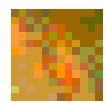
Preliminary survey data

- 8 countries: France, Germany, UK, Greece, Poland, Czech Republic, Latvia, Lithuania
- 491 interviews
- data subject to error-check

Sample characteristics

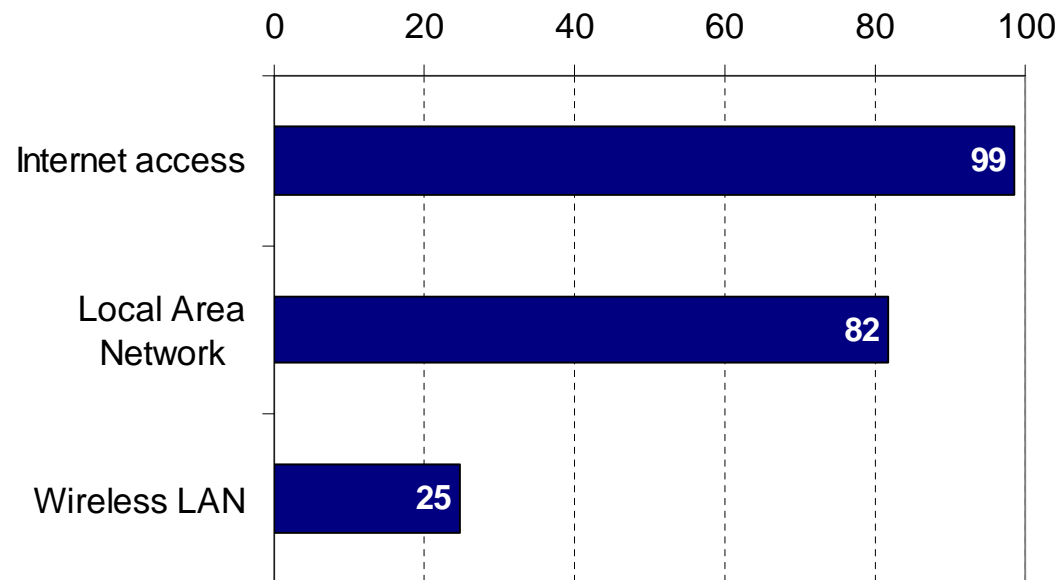
- 302 general, 189 specialised hospitals
- 217 public, 200 private for-profit, 64 private non-profit
- around 50% with > 100 beds, 50% with < 100 beds

Additional qualitative information from personal interviews with e-health experts



General findings

ICT infrastructure in hospitals



Source: e-Business W@tch 2006

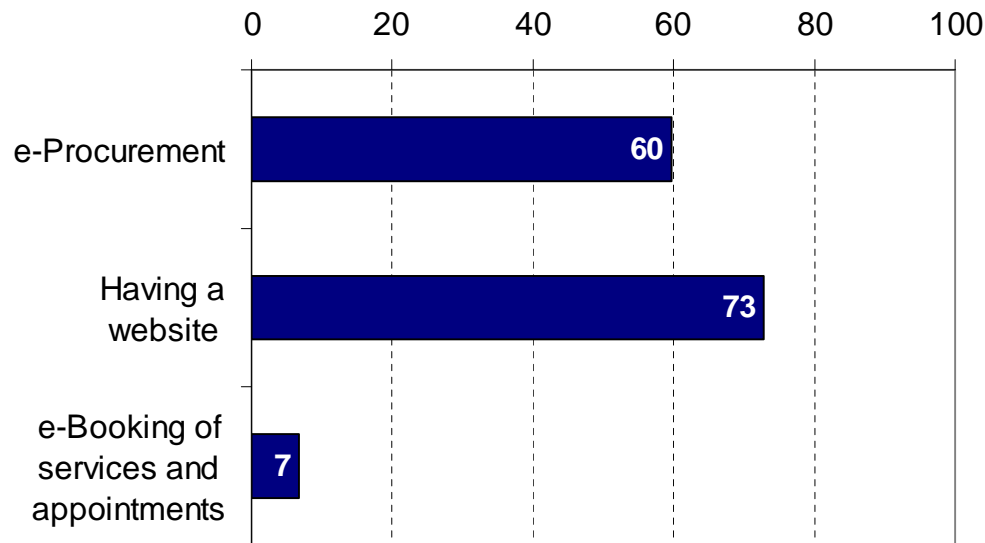
■ Almost all hospitals have Internet access

■ Local Area Networks (LANs) are very widespread

■ Wireless LAN is not so common

⇒ Infrastructure is good but there is scope for improvement

e-Procurement and e-booking

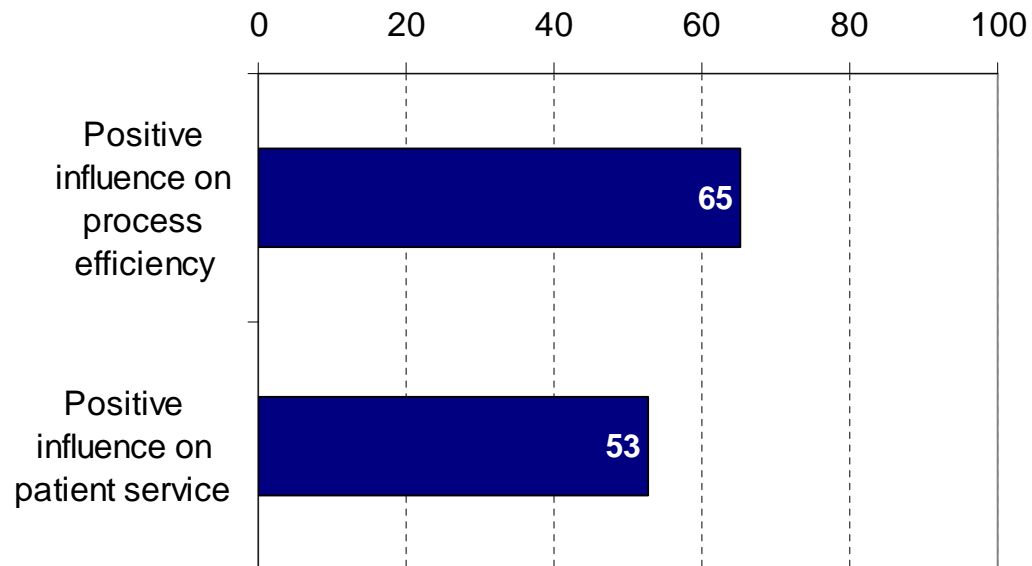


Source: e-Business W@tch 2006

- Majority of hospitals places orders online
- Three quarters of all hospitals have a website
- Small percentage of hospitals offers patients to book services or appointments online

⇒ Hospitals' online practice focused on supply-side, not on patients

Most important impacts of ICT use



Source: e-Business W@tch 2006

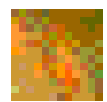
Interviewee's assessment:

- Positive influence of ICT on process efficiency in most hospitals
 - Positive ICT influence on patient service in half of the cases
- ⇒ hospitals realise ICT benefits rather for cost reduction than for service improvement

First survey findings – theses

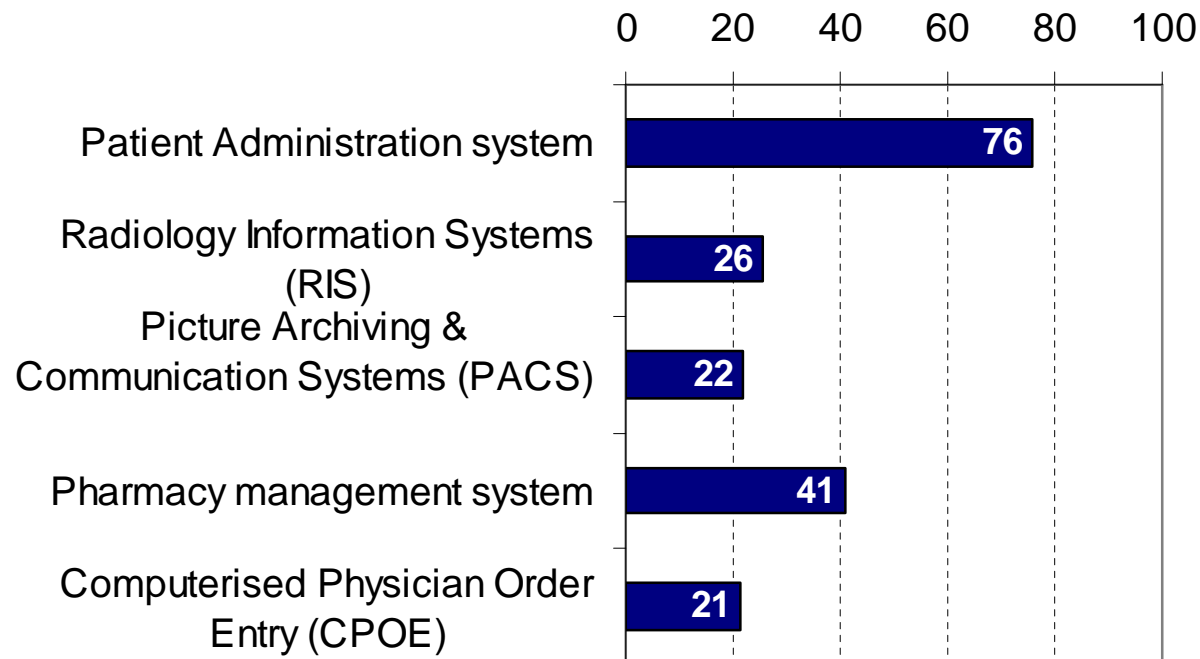
Thesis 1:

Hospitals tend to have a good ICT infrastructure but do not yet fully use ICT opportunities, for example with regard to improvement of patient service.



Hospital Information Systems integration

Hospital Information System use



Source: e-Business W@tch 2006

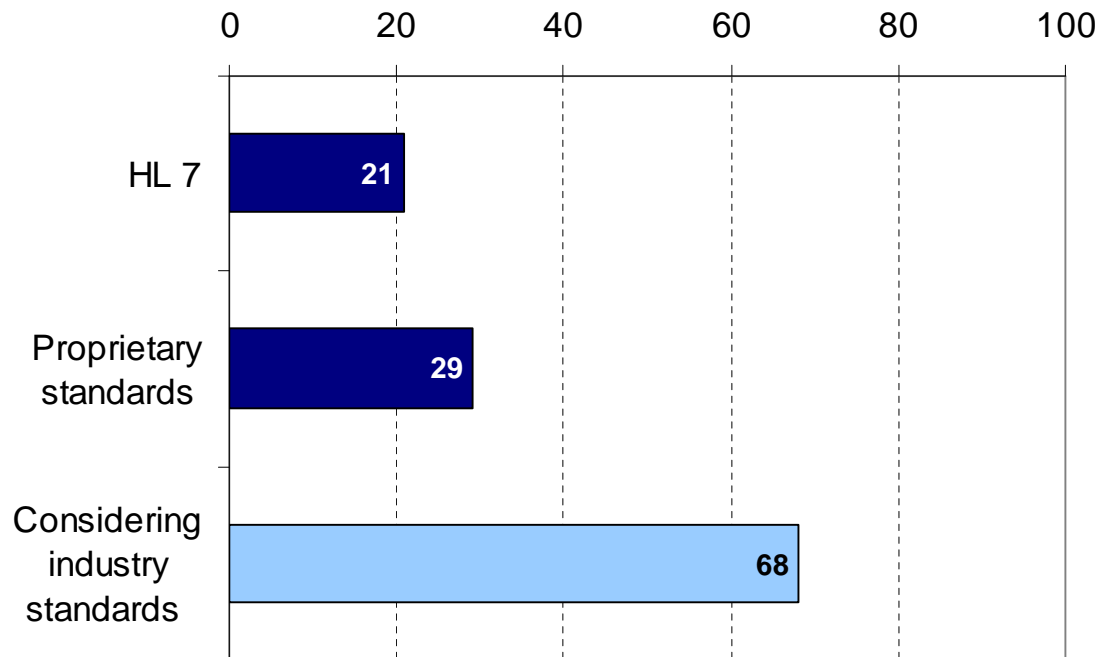
■ **Patient Administration System very common**

■ **Pharmacy system quite often**

■ **Minority uses RIS and PACS as well as CPOE**

⇒ **Prevalence of particular systems varies**

Standards use in hospitals

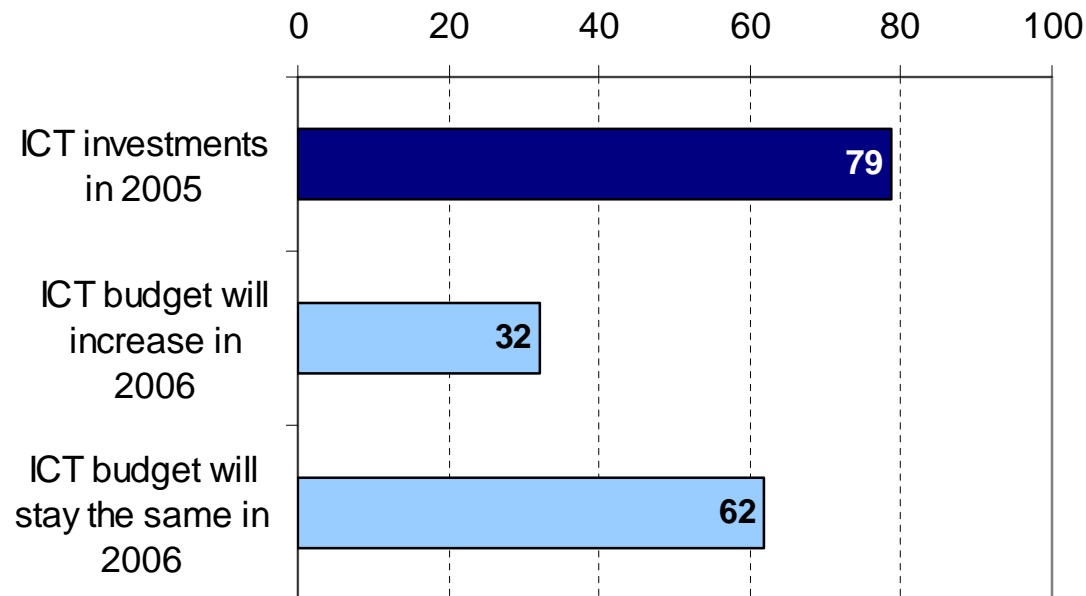


Source: e-Business W@tch 2006

- **HL7 use uncommon**
- **Strong minority uses proprietary standards**
- **Two thirds consider e-health standards when making decisions**
- **Literature finding: lack of systems integration**

⇒ **Need for e-health standardisation**

ICT investment in hospitals



Source: e-Business W@tch 2006

- Most hospitals invested in ICT in 2005
- ICT investment budget will increase in one third and remain stable in most hospitals

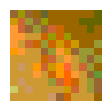
⇒ Ability/willingness to invest does not necessarily appear to be a problem (but no data yet on investment level)

HIS integration – theses

Thesis 2:

Integration of Hospital Information Systems is hampered by a lack of common e-health standards, not so much by lack of funds.

The key issue may be lack of management capabilities facing a fragmented hospital structure and culture (not covered by survey; outcome of personal interviews)



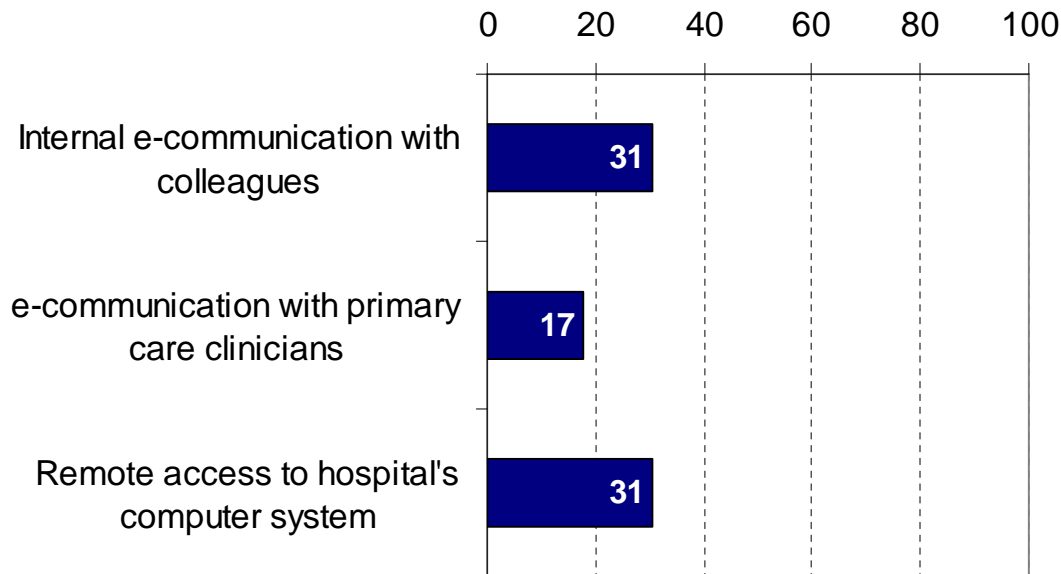
A changing role of hospitals due to ICT?

Hospitals' role: variables considered

- **Secondary versus primary care:**
 - Does the labour division between hospitals and general practitioners shift due to ICT?

- **Public versus private hospitals**
 - Are private hospitals taking lead role over public ones due to ICT?

Hospitals communicating electronically



Source: e-Business W@tch 2006

Internal and external e-communication with means other than normal e-mail is uncommon

Same applies to remote access to hospital's computer system (with potential access also by GPs)

⇒ There appear to be unused opportunities for e-communication between hospitals and GPs

Secondary versus primary care – thesis

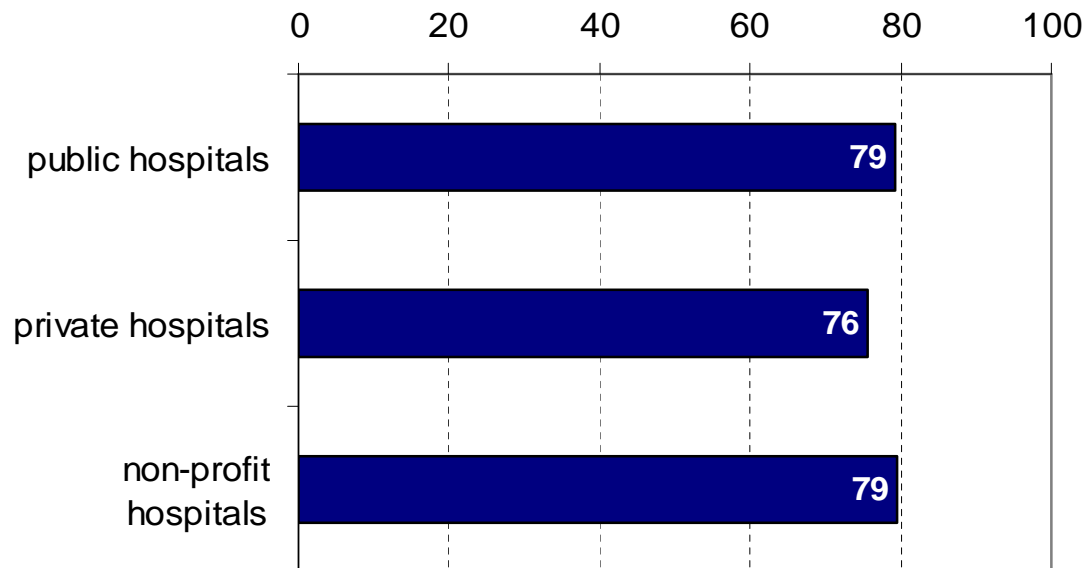
Thesis 3:

The role of hospitals in relation to general practitioners is not really changing due to ICT, but ICT communication is reducing the boundaries between them. (Finding in personal interviews.)

However, this trend is not (yet) intense.

ICT investment: public versus private hospitals

ICT investment in 2005: yes



Source: e-Business W@tch 2006

■ Share of public, private and non-profit hospitals investing in ICT in 2005 is quite similar

■ Without picture: Planned investment increase in next twelve months is similar, too

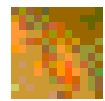
⇒ Private hospitals do not generally appear to lead in ICT investment

Public versus private hospitals – thesis

Thesis 4:

There are currently no differences in ICT investment between public and private hospitals that could affect their role distribution.

This may be different in some countries, e.g. Germany, as literature findings show.



Outlook

Complete findings

- Report with complete data (1,000 interviews with hospitals in 18 countries) available by end 2006
- "Table Report" with preliminary results (electronically) and Pocketbook 2006 (print) in July
- Hospital report and survey data will be available for free at <http://www.ebusiness-watch.org>
- Further information: stefan.lilischkis@empirica.com

