Developing a System to Provide Patient-centered Information Handouts about Laboratory Tests

Emiko Yamada[a], Yutaka Yatomi[b], Kazuhiko Ohe[a]

[a] Department of Medical Informatics and Economics, University of Tokyo, Japan

[b] Department of Clinical Laboratory, University of Tokyo Hospital, Japan

Introduction

Explanation given to patients scheduled for laboratory tests tend to be insufficient

- Physicians' workload
  - Too busy [1,2]
  - Laboratory tests is less invasive

Purpose

1. Clarify patient's needs for information about blood test
   - a questionnaire survey

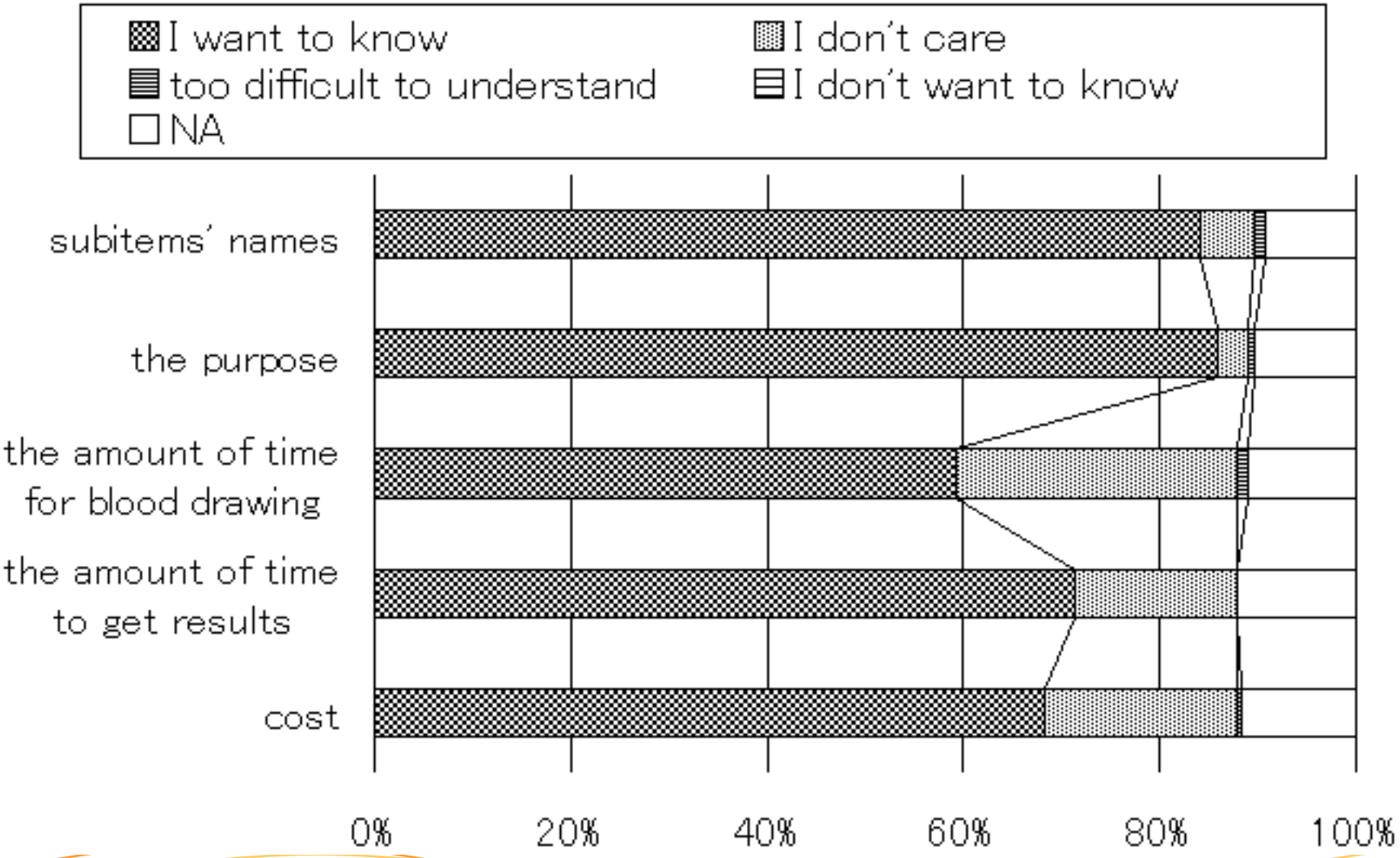
2. Develop a system to provide handouts
   - Make use of Hospital Information System

A Questionnaire survey

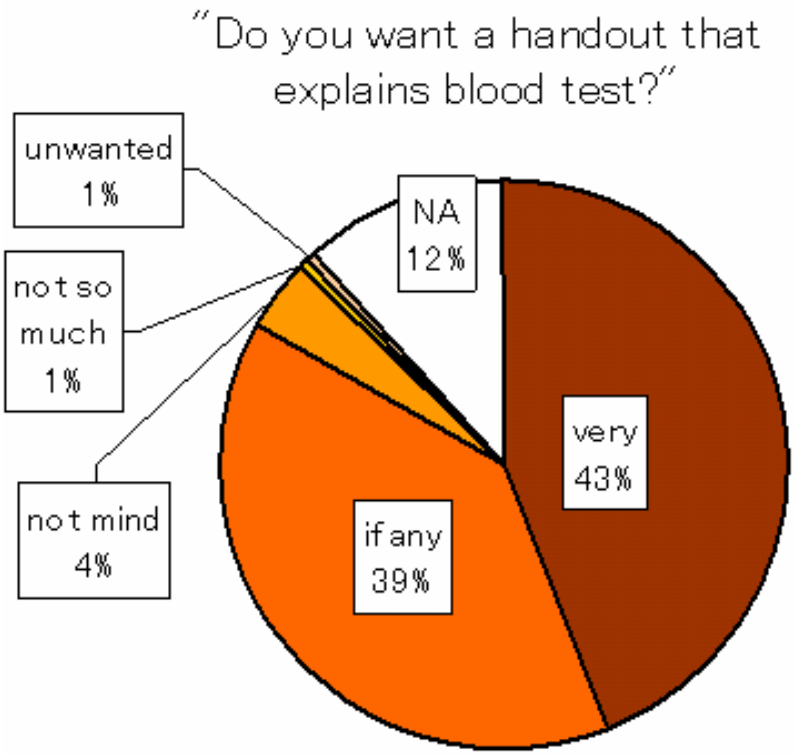
- Purpose
  - Which information of blood tests do patients need?
  - Do patients need handouts that explain blood tests?
- Method
  - Self-administering method
  - Period : 2005/7/1, 2005/7/2 (2 days)
  - Outpatients at the University of Tokyo Hospital
- 164 respondents

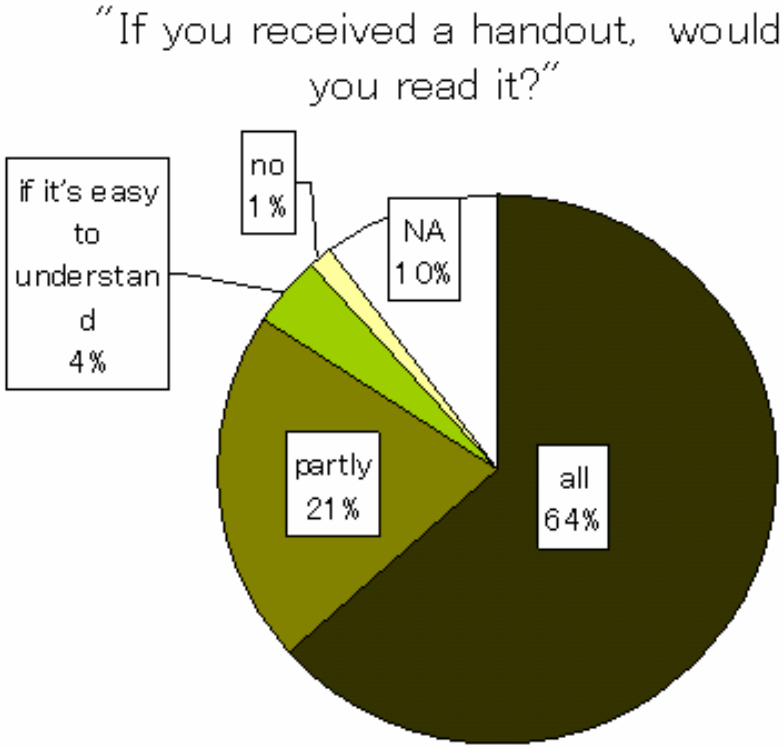
A Questionnaire Survey : Result

“Would you like to know this information?”



Do patients need handouts?

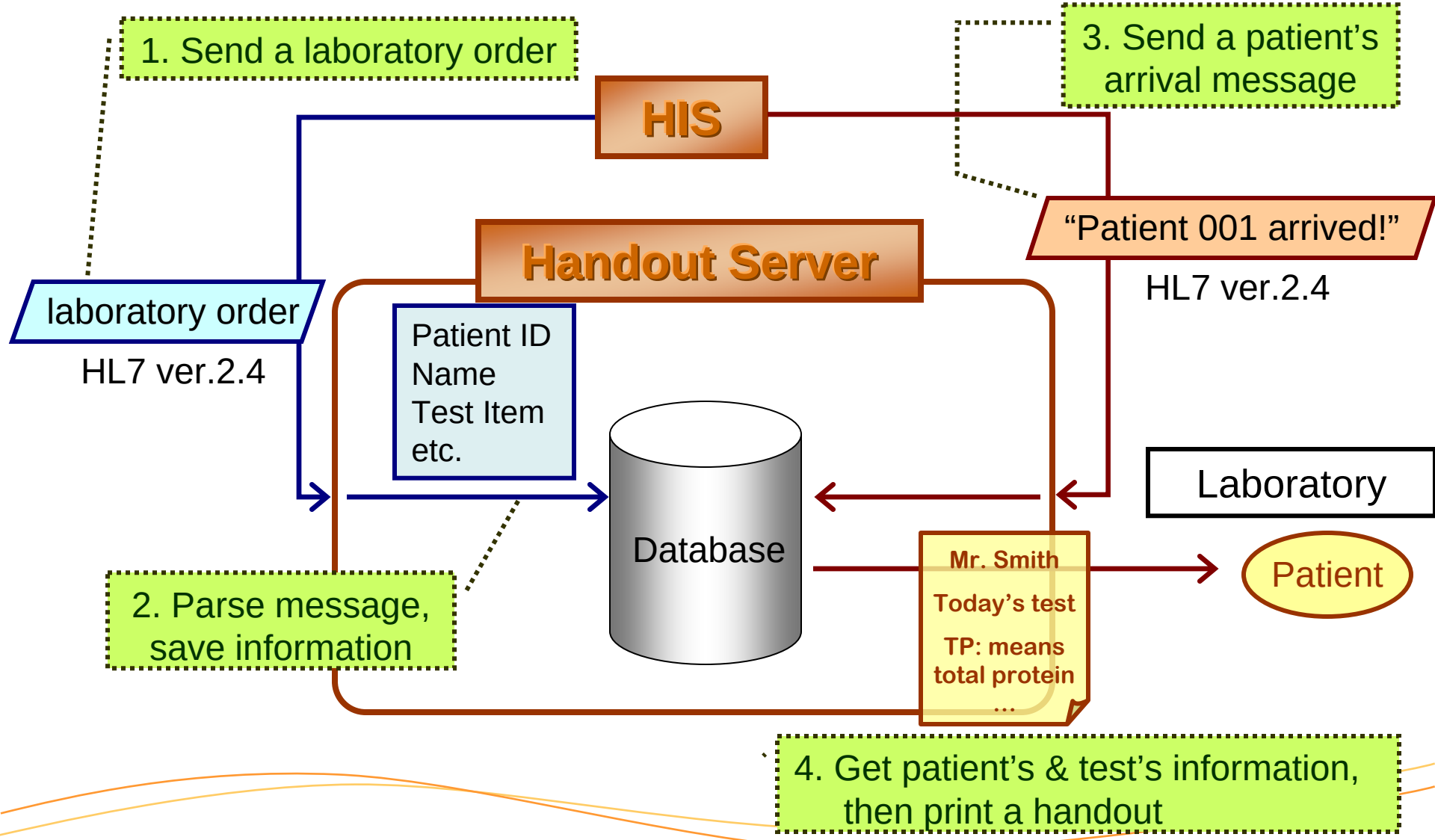




System development

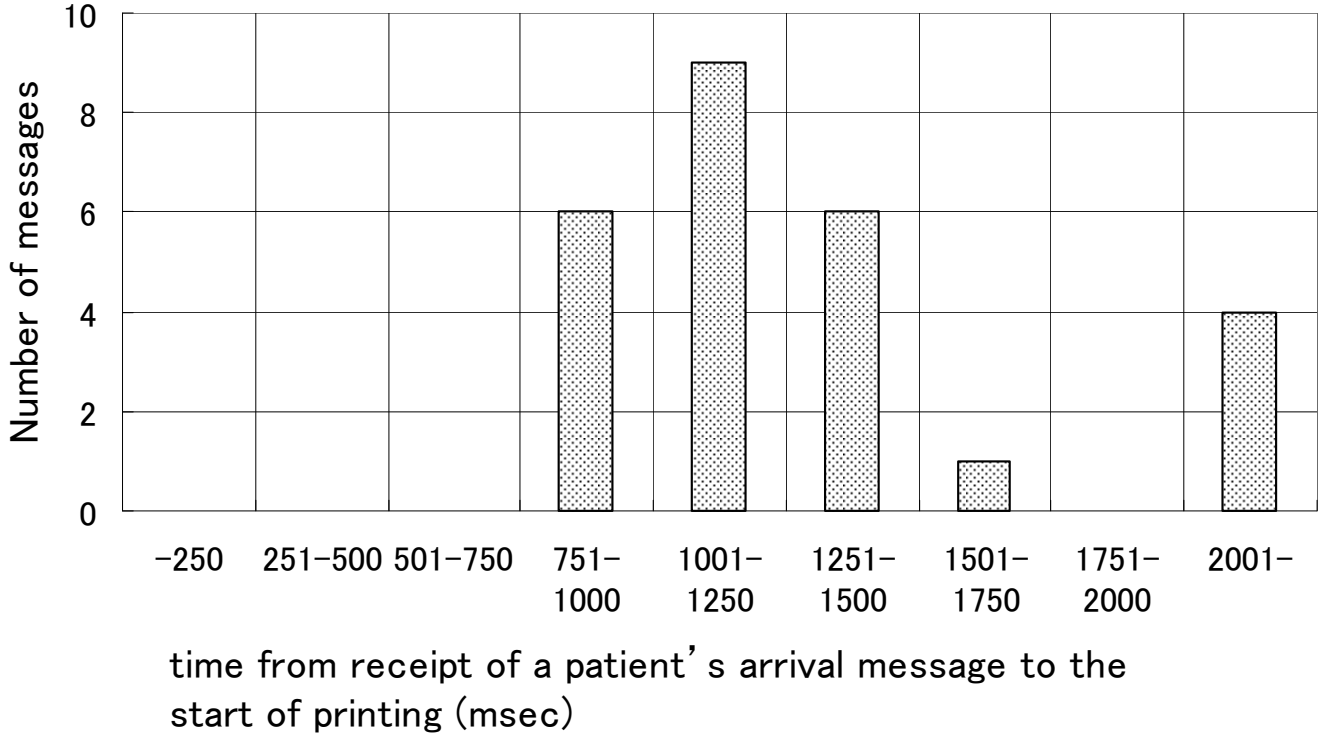
- The information medium : paper
  - Able to be ‘read anytime, anyplace, without any tools’ [3]
- The handout server
  - The HIS sends a laboratory order
  - Print a handout when a patient arrived at the laboratory
    - Connected to the HIS over HL7
- The handout
  - Patient’s name, date
  - Explanation of blood test
  - Names and the explanations of each items
    - Verified by a physician and the staff of the clinical laboratory center

System architecture



system evaluation

- The response time speed from receipt of a patient's arrival message to the start of printing (1.36 sec on average) → ***practical***



Discussion

- High connectivity
  - HL7
  - Easy to introduce the handout server in another hospital
- The information medium
  - Paper: limited quality and quantity of information
    - Provide minimal information
  - Compensate by directing patients to other information sources (e.g. Books, web pages)

Conclusion

- We have …
  - seen that many patients have needs for information about specific blood tests
  - developed a system to provide them with handouts that explained blood tests

- A further evaluation on the usefulness of the handouts
  - scheduled in 2007

- **References**

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- **Address for correspondence :**

Emiko Yamada, MMS
Hongo 7-3-1, Bunkyo-ku, Tokyo 113-8655, Japan
E-mail: emiko-tky@umin.ac.jp