ICT for Shared Care: Connecting Practices

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Background

Studies of *Computer-Mediated Communication* (CMC)
- Intranets, Extranets
- Knowledge / Information repositories
- Virtual workspaces

Application areas
- Large multinational companies
  - Product development
  - Cross border communication
    - Different locations
    - Different skills and expertise
Research Approach

Management and organizational issues
- *Mutual adaptation* of technology and organization
- The role of *sensemaking* in new technologies

Processual approach
- Design, implementation, and use
- Longitudinal field studies
  - Qualitative interviews
  - Document analysis
Pervasive Communication Problems

“The lack of continuity and coordination is one of the greatest problems facing the healthcare system. A large minority of patients experience their treatment as an orienteering race.”

Amtsrådsforeningen (Danish Regions)
ICT Support for Shared Care

- “Shared care applies when the responsibility for the healthcare of the patient is shared between individuals or teams who are part of separate organizations, or where substantial organizational boundaries exist.” (Pritchard & Hughes, 1995)

- “One of the keys to the successful implementation of shared care projects is to ensure that the training of future practitioners equips them to work effectively in collaborative partnerships” (http://www.shared-care.ca)

- “Within a multidisciplinary team, care should be taken to ensure the continuity of care and advice given to patients. This involves the development of effective lines of communication to ensure that all parties involved are informed of decisions and management plans” (http://www.ranzcog.edu.au)
Implementation of Shared Care Programs

- Improve communication
  - Organizational change
  - Cultural change
  - Use of ICT

- Empower patients
  - Access to information
  - Active participants in their own treatment

- Improve efficiency and curb spending
Research Questions

- What are the major *barriers* to establishing effective communication across professional and organizational boundaries in the Danish healthcare system?
  - Professional languages, terminologies and classification systems
  - Professional identities and cultures
  - Institutional, legal, political and economic obstacles

- How should ICT systems be *designed* and *implemented* to successfully support shared care?
Pilot Project: Obstetrics

- A web-based EHR
- Communication medium
  - General practitioner
  - Midwife
  - Obstetrics ward
  - Pregnant woman
- Pilot implementations
  - Fyns Amt
  - Frederiksborg Amt
Partners and Future Plans

**Partners**
- Sundhed.dk (the Public National Healthcare Portal)
- Fyns Amt
- Frederiksborg Amt
- Acure – an IBM company
- Rambøll Management

**Planned initiatives**
- Type 2 diabetes
- Chronic obstructive pulmonary disease (COPD)
HIT Program

- Long-term strategic initiative
- External funding
  - The Danish Council for Strategic Research
  - NordICT
- Research partners
  - IT University of Copenhagen
  - Roskilde University, Dept. of Computer Science
  - Technical University of Denmark, CICT
External Partners

- Healthcare partners
  - Sundhed.dk (the Public National Healthcare Portal)
  - H:S (Copenhagen Hospital Corporation)
  - Fyns Amt
  - Frederiksborg Amt
  - Roskilde Amt
  - City of Copenhagen (Health Administration)

- Industry partners
  - Acure – an IBM Company
  - Rambøll Management
HIT Projects

- IT-support for obstetrics shared care
- Empowering diabetes patients
- Mobile devices in home care
- Personal mobile devices in diabetes shared care