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#### The Art of Workarounds

# Two case studies of documentation systems in the healthcare sector

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# The Art of Workarounds

Two case studies of documentation systems in the healthcare sector

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## The Art of Workarounds

- Healthcare work: complex and evolving, unexpected contingencies, ambiguities
- Documentation in this setting is a challenging task!

"Working around means intentionally using computing in ways for which it was not designed or avoiding its use and relying on an alternative means of accomplishing work." (Gasser 1986, p.216)



## Setting the Stage: case settings and methodology

### Methodology:

Ethnographic approach

#### The Austrian case:

- Oncology clinic: chronic disease management, interdisciplinarity
- Paper-based patient record: folders storing medical and care documentation as well as different documents (examination results, informed consent...)

#### The Canadian case:

- Non-profit clinic: 9 service providers
- Electronic Patient Record (EPR): billing, scheduling, medical and administrative components (also linked to other external programs)



## Discussion: paper-based and electronic documentation

- When do workarounds occur? paper: retrieval of data problematic computer: data entry problematic
- We found that in some cases:
   paper: computer systems used as workaround
   computer: papers used as workaround
- What are the consequences of workarounds? paper: for provisional/temporary solutions, messages that do not leave traces computer: electronic traces of every activity; incomplete/false documentation



### Discussion: The Art of Workarounds

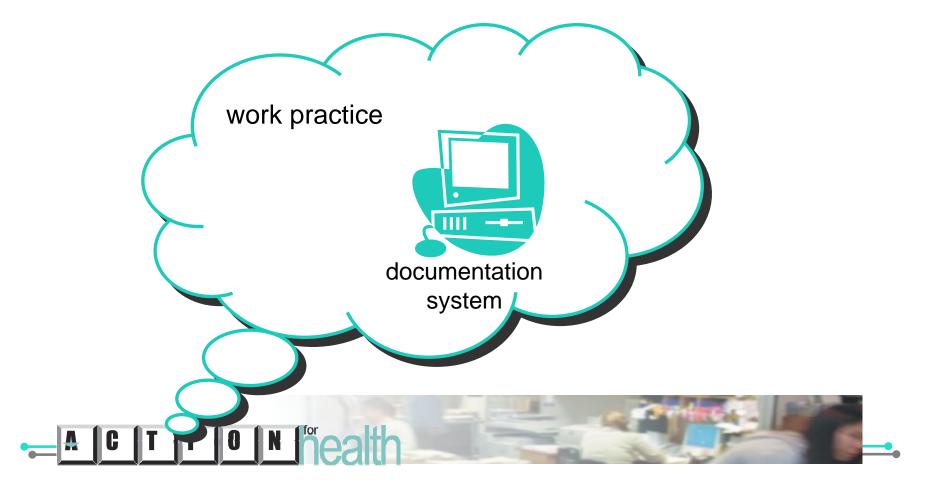
- Taking a closer look at the work practice in two different settings some questions came up:
  - What is the workaround? What is the system?
     Workarounds that become the system?
     Working around 'the system' or rather working around 'work practices' (i.e. standard medical procedures)
  - Visibility / invisibility of workarounds on different levels: healthcare personnel versus management

 Concept of workarounds helps to shed light on issues that are often overlooked by healthcare authorities, hospital management and system developers



## Discussion: The Art of Workarounds

- Dialectic link between 'the system' and 'work practices'
- Configurability and adaptability of the system important!
- Documentation systems evolve during use





## Workarounds: examples

#### In the paper-based documentation:

1. System: folders are retrieved when patients arrive however it happens that they are not where they are supposed to be Workaround: tracking sheet used

2. When folders are not available some information can be looked up in the computer

#### In the electronic realm:

1. System: The EPR is designed to be used by healthcare personnel from one clinic. This raises the challenge regarding how to document external services (i.e. dietician encounters) in the EPR?

Workaround: The chronic disease coordinator enters this info into EPR.

2. System: The EPR restrict editing previously entered information i.e. vaccination shots

Workaround: Going back to the paper-book

