



# ***Why is clinical information not reused?***

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# The beautiful vision of unlimited interoperability

Stroetmann, Kalra, Lewalle, Rector, et al. Semantic Interoperability for Better Health and Safer Healthcare. Luxembourg: European Commission; 2009

Health System Interoperability is the ability, facilitated by ICT applications and systems,

- to exchange, understand and act on citizens/patients and other health-related information and knowledge
- among linguistically and culturally disparate health professionals, patients and other actors and organisations
- within and across health system jurisdictions in a collaborative manner.



Reusable clinical information is a prerequisite of health system interoperability

## ***Reusable information is a prerequisite of interoperability***

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In the Danish debate on electronic health records, failing reuse of clinical information has been a major topic.

Failing reuse has often been interpreted as lack of interoperability.

- What are the reasons for failing reuse? Is it always due to lack of reusability?

Technical inability to exchange information between systems has been mentioned again and again as the major reason for failing reuse.

- Are there other reasons why clinical information is not reused?

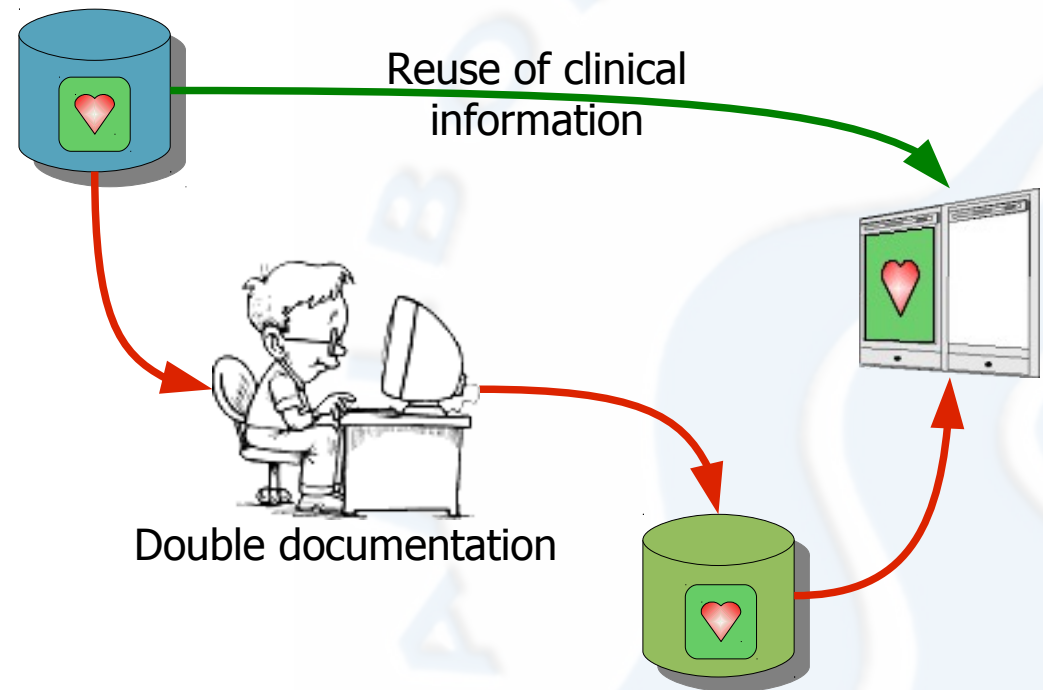
Lack of contextual information has been stated as a significant reason for failing interoperability.

- Can lack of context be a reason for failing reuse?

# What is “failing reuse”?

## Double documentation

- manual registration of information that - within the relevant sources - already exists



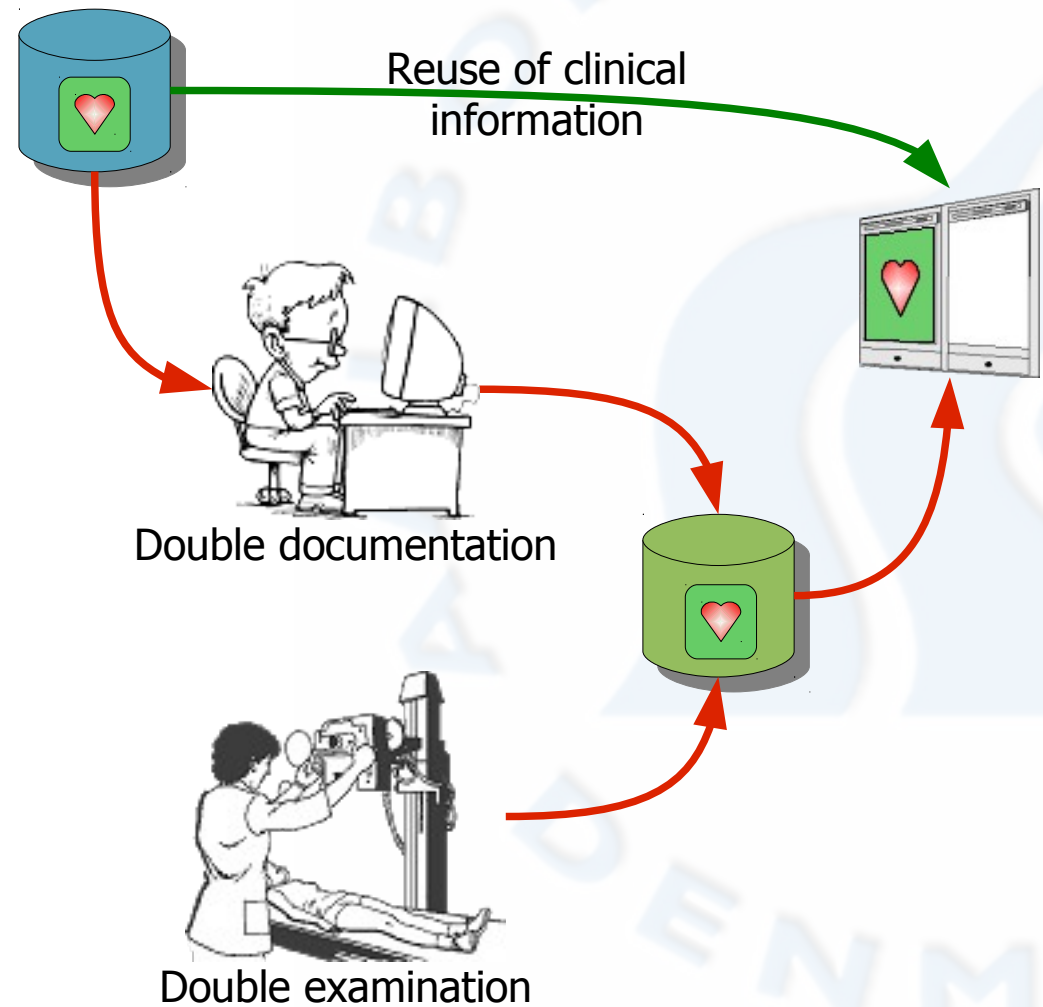
# What is “failing reuse”?

## Double documentation

- manual registration of information that - within the relevant sources - already exists

## Double examination

- repeated procurement of information that - within the relevant sources - already exists





## Reasons to refrain from reuse

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A

The information is not available when or where it is needed



The health record is being written, so I have to ask the patient the same questions as my colleague

The health systems are not accessible at the bedside, so I have to carry a handwritten note about my patients.

# Reasons to refrain from reuse

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A

The information is not available when or where it is needed

B

The information is present, but usage of the existing source is prohibited



The information is present in the clinical database, but I am not authorised to have access

The patient has not consented that I can see the health record



# Reasons to refrain from reuse

A  
The information is not available when or where it is needed

B  
The information is present, but usage of the existing source is prohibited

C  
The information is present but not routinely used in its available form for ...

- 1) technical reasons
- 2) political reasons
- 3) quality reasons

① The lab-results must be copied to the health record by hand

② If I do not document that I too have examined the patient, then my purpose may not be evident.

③ The information does exist in the nationwide registry, but the overall quality is not sufficient for clinical use



# Reasons to refrain from reuse

**A**  
The information is not available when or where it is needed

**B**  
The information is present, but usage of the existing source is prohibited

**C**  
The information is present but not routinely used in its available form for ...

- 1) technical reasons
- 2) political reasons
- 3) quality reasons

**D**  
The information is apparently present, but in the specific situation it is considered inadequate due to ...

- 1) insufficient reliability
- 2) inadequate relevance



①

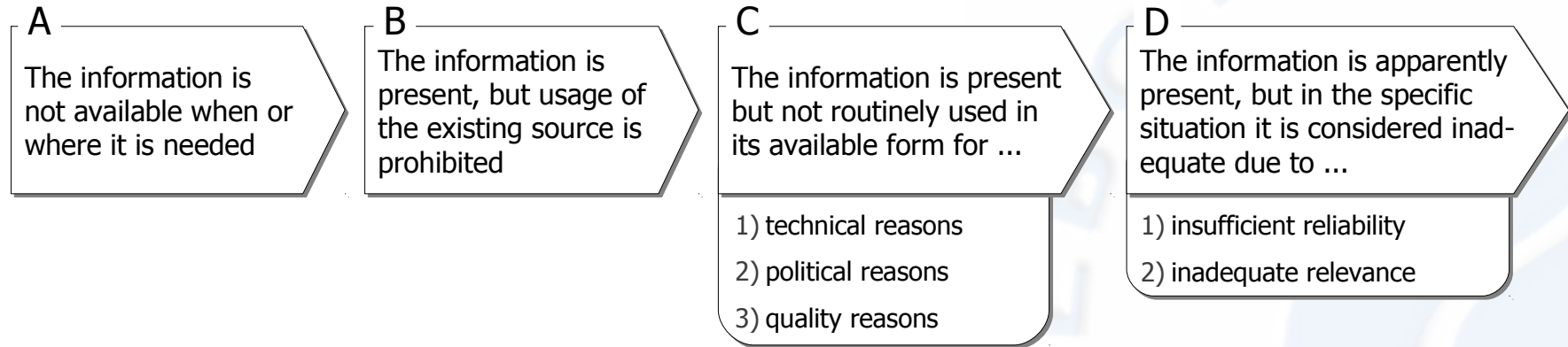
I think there is an error with this prescription. I cannot administer the medicine without further checks.

②

Clinical information has a shelf life. The temperature from yesterday cannot be reused today.

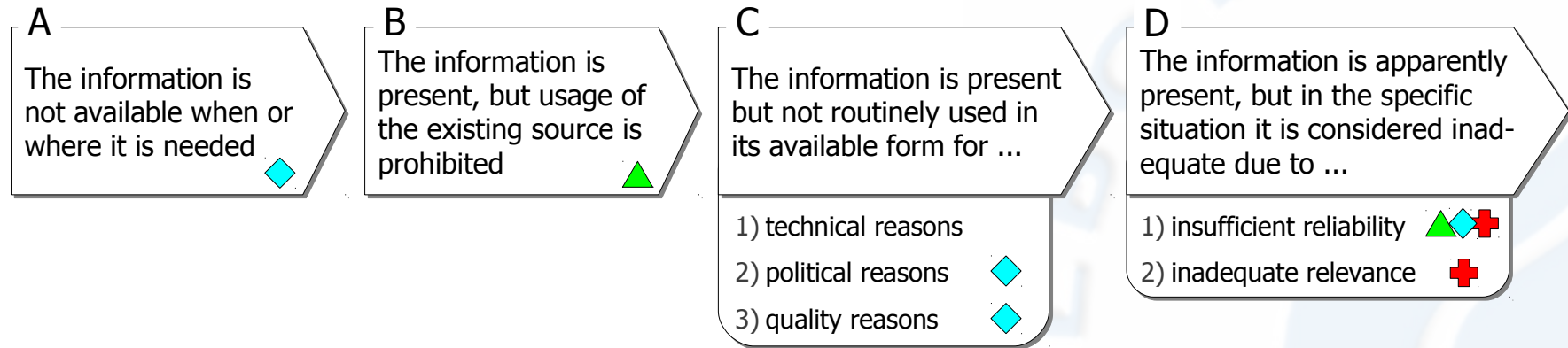
## Reasons to refrain from reuse

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Are there other reasons to refrain from reuse of clinical information than technical inability to exchange information between systems?

# Reasons to refrain from reuse



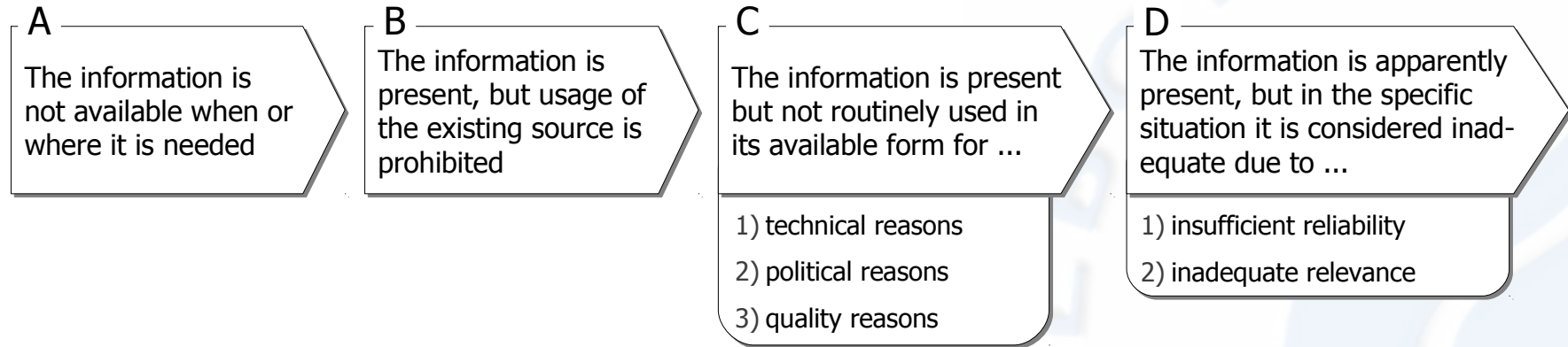
Are there other reasons to refrain from reuse of clinical information than technical inability to exchange information between systems?

Yes,

- organisational reasons
- legal reasons
- medical reasons

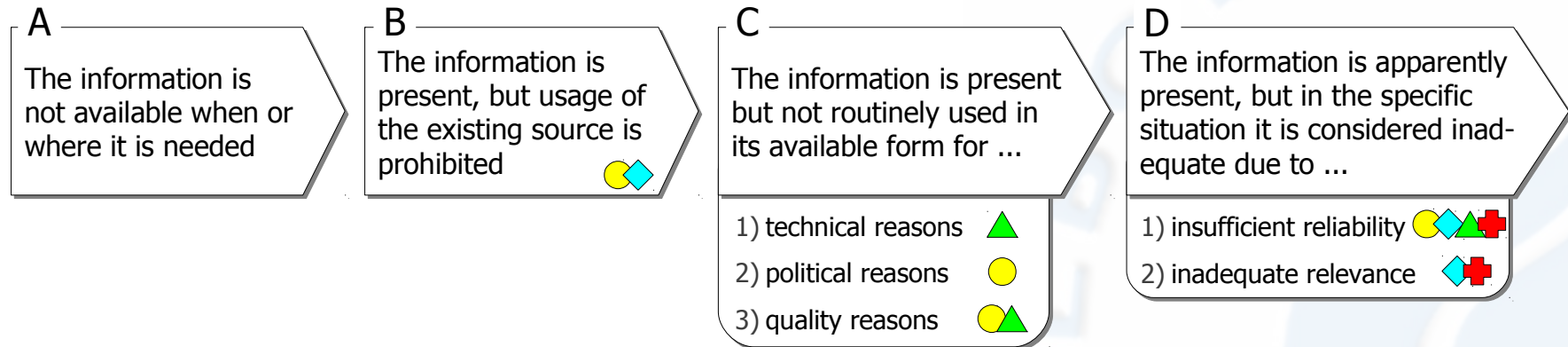
## Reasons to refrain from reuse

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Can lack of context be a reason for failing reuse of clinical information?

# Reasons to refrain from reuse



Can lack of context be a reason for failing reuse of clinical information?

Yes, e.g. context in the form of

-  source of information
-  timing of information
-  type of documentation system
-  clinical contextual information

## ***Why is clinical information not reused?***

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There are several reasons. Not only technical reasons, about which there has been much debate, but even organisational, legal and medical reasons.

Failing reuse of clinical information is not always a consequence of failing reusability.

Lack of contextual information can be pivotal to whether clinical information is reused or procured.

Thank you  
for your attention!



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