

## Background

- Importance of increased collaborative care delivery as way of improving healthcare delivery [1]
- Need to develop a better understanding of the “collaboration space” [4]
- Inventory of collaborative care structures, processes and outcomes enable us to better design, implement and evaluate technology to support meaningful collaboration

## Challenges

- Complexity of designing and implementing technologies to support collaborative practices
- Wide variety of contexts and processes that comprise collaborative care delivery [2]
- Integrating research from different disciplines to support the development of meaningful interventions for collaborative care delivery

## “Collaboration Space”

- Comprised of processes, people, and contexts where collaboration occurs [4]
- Focuses us on the sociotechnical aspects of collaboration – both the social aspects of collaboration and the technical mechanism of supporting it
- Is an extension of Coiera’s notion of a communication space [5]

## Methodology

We conducted a systematic review of collaboration research published in the medical informatics community from 1990 to 2013. We identified 170 papers from this time period that discussed collaboration.

## Journals & conferences included:

Journal of American Medical Informatics Association, Journal of Biomedical Informatics, International Journal of Medical Informatics, Methods of Information in Medicine, MedInfo, and AMIA

## Findings

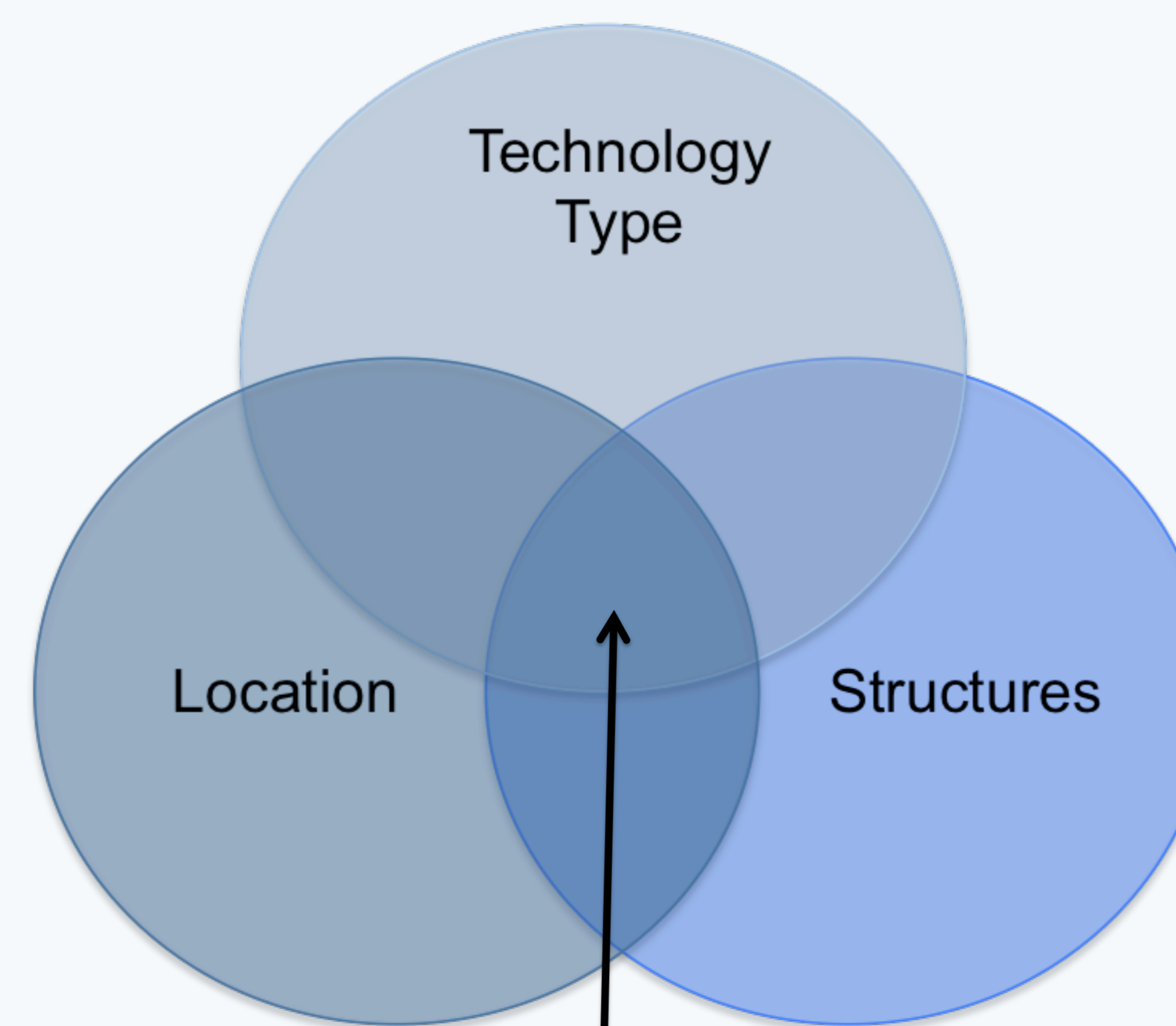
Technology Type	Co-located (e.g. CPOE)	Non-located (e.g. 3D telepresence, telemedicine systems)	
Study Location	Within hospitals (e.g. ED & ICU)	Outside hospitals (e.g. ambulatory clinics, hospice, nursing homes)	
Study Methodology	Qualitative	Qualitative & Quantitative (Mixed)	Quantitative (not very common)
Structure	Awareness	Common ground	Communication

Table 1. Findings from systematic literature review

## “Issues” of Collaboration

- Collaboration is a multi-faceted concept.
- Collaboration is often implicit within workflow.
- HITs are not often designed to support collaboration as effectively as they could.
- Many parts of collaboration spaces intersect to conduct tasks.
- Integration of parts causes problems.

## Ways to Begin Thinking of Collaboration Spaces



## Moving Forward

### Understanding of collaborative spaces

- Enable us to better design HIT to support collaboration
- Help us develop work practices and technologies to support “meaningful collaboration”

### Integrating research

Collaboration, like many parts of healthcare delivery, is a set of complex interactions. No single field on its own can fully understand the nature of collaboration spaces. Therefore, we need to integrate research from a variety of different fields (i.e., CSCW, HCI, Organizational Studies, Biomedical Informatics) in order to better understand collaboration spaces in healthcare.

## References

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