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Title: Large Scale Collaboration in Critical Environments



Research Objectives:

- Develop coordination theories in large scale collaboration (LSC) in high risk, high uncertainty settings, using real trauma patient care as “laboratory”
- Develop design principles of supporting technology for managing multiple task trajectories

Approach

- Multi-disciplinary, multi-university (Univ of MD, CMU, Univ of AZ)
- Combining field studies, laboratory experimentation, and technology development.
- Field studies in a trauma surgery suite where errors and delays have high stakes in human and economical terms
- Technology development for supporting large scale collaboration integrated with field studies

Broader Impact:

- Potential to improve the way hospitals and other vital organizations manage teams, people, and resources
- Guiding development of next generation of tools for computer supported cooperative work in LSC

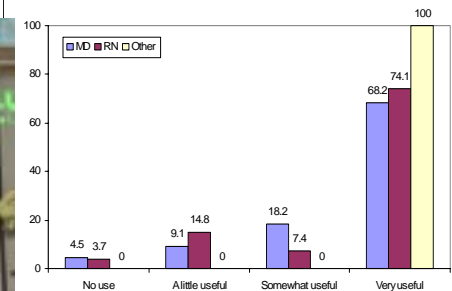
Significant Results:

There are parallel, continual negotiations (**social aspects**) in managing intricate, dynamic interdependencies in LSC (mechanistic aspects).

LSC tools should support **both** mechanistic and social aspects.

VideoBoard system deployed in a leading **trauma center** resulting in high user acceptance, satisfaction and reliance

- Context rich data with passive distribution
- Communal displays to facilitate social processes



<http://www.hfrp.umm.edu/LSC>