Health Technology Stress -Challenges and Opportunities

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Pain Points

- Time Spent Documenting
- Information Overload/Cognitive Burden
- Poor Data Output
- 'Get rid of the stupid stuff' Ashton



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25 By 5 Symposium Series

Six Domains of Burden

1	Reimbursem
2	Regulatory
3	Quality
4	Usability
5	Interoperabi
6	Self-Impose



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Usability Challenges

- Variability from EHR to EHR
- Duplicate Documentation/copy-paste
- "Silofication" of Notes
- Note Bloat/Kitchen Sink Approach
- Readability of the Output

Ratwani et al., 2018



Workflow Challenges

- Modular Approach to Design
- Interruption-oriented Communication Patterns
- Disruption of Patient-provider Relationship
- Inappropriate Allocation of EHR Tasks
- Technology-supported Guidelines with Hard Stops
- Changing Care Settings "pajama time"

Unertl et al., 2009, Unertl et al., 2010, Arndt et al., 2017

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Implementation Challenges

- Efficient Clinical Decision Support
- Problematic Drug-drug Interaction Alerts
- Full Electronic Medication Reconciliation
- Poor System Performance
- Disruption of the Nurse-patient Relationship

McBride et al., 2017

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Complex Alarm Conditions

- Alarm Fatigue, Alarm Desensitization, Missed Alarms
- Inappropriate Parameter Settings
- Under Reporting of Alarm-related Events

Yue et al., 2016

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Promising Interventions

- Use of Scribes
- Voice Recognition
- Ambient Voice
- Interoperability
- Terminology and Classifications



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The Path Forward

- Organizational Priorities
- Partnership with Vendors
- Policy and Advocacy



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