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AMHERST

Jointly Visualizing Patient-Generated and Clinic Blood Pressure Readings

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The authors have no conflicts of interests to disclose

Vision

- Seamlessly integrate patient-generated data into the EHR
 - Engage and empower patients
 - Improve basis for shared decision-making

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Information overload?

Data reliability?

Meaningfulness?

Vision

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Our Goal:

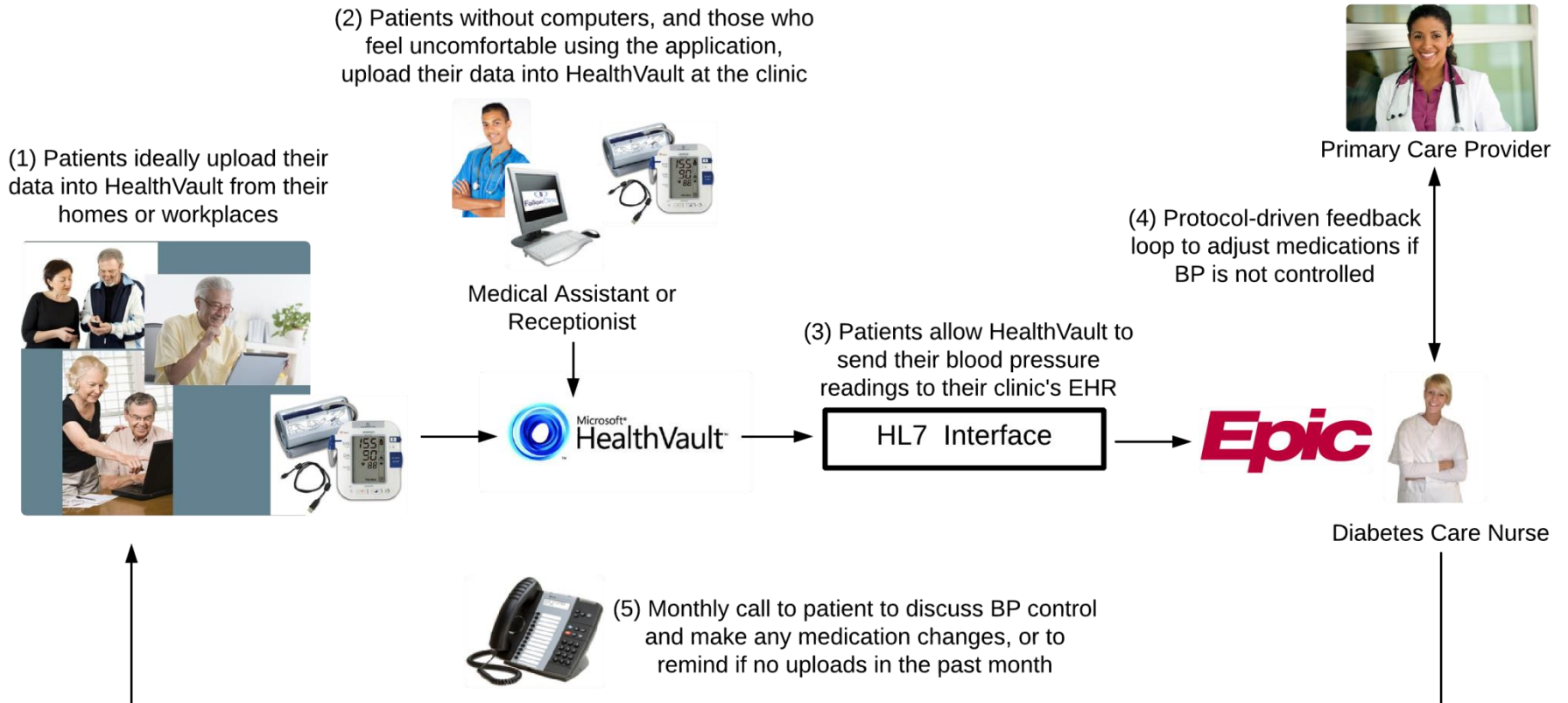
Create a well-designed data visualization that explicitly addresses these concerns

Information overload?

Data reliability?

Meaningfulness?

CONtrolling Disease Using Inexpensive IT - Hypertension in Diabetes (CONDUIT-HID)



Visualization Overview

- Individuals with hypertension and diabetes (n=99)
 - Clinic readings
 - Home BP readings from Omron electronic cuff
- Visualization users
 - Primary care physicians
 - Chronic care nurses
- Prototype visualization tool built using Tableau

Conclusions

- We can create well-designed data visualizations that
 - Integrate PGHD and clinically-generated EHR data
 - Explicitly addresses concerns of information overload, reliability, and meaningfulness

Limitations and Future Work

- Initial iterative design by our engineering + clinician team
 - Need to formally evaluate the design
- Used Tableau to give us (a good deal of) control over the design
 - Integrated PGHD into the EHR
 - Integrate new viz into the EHR?

Thank you

Please contact me at

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To view a system demo