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## Impact of MyChart Communication on Provider Burden

Samantha R. Schuetz

*Larner College of Medicine at the University of Vermont*

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# Impact of MyChart communication on provider burden

Samantha Schuetz

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Berlin, VT

Project Mentor: Dr. Lopez

# Problem Identification

- Berlin family medicine clinic has utilized MyChart messaging for patient health concerns for ~5 years.
- Patient portals have shown promise in engaging individuals in the management of chronic conditions by allowing patients input and exchange of secure electronic messages with their providers<sub>2</sub>
  - This comes with patient barriers to portal use including usability issues and low health literacy AS WELL AS provider concerns such as increased time spent responding to messages and inappropriate use of communication for emergent concerns
  - While this area is a new source of research and thus a paucity of studies exist on the topic, some early studies show that patients have a more positive view of electronic health portals than providers <sub>1</sub>
- Increased avenues of patient communication without adequate physician support and time creates a greater workload for healthcare providers

# Impact on Public Health

- It is well described that physicians and other healthcare providers experience burnout<sub>3</sub>
  - Vermont is no exception to this trend. This is exacerbated by a shortage of healthcare workers, especially in rural areas
  - Physicians are highly concentrated in Chittenden county, while other counties experience higher rates of physician shortages. In Washington County, the ratio of primary care physicians per 100,000 population is 70.8:1 <sub>4</sub>
  - Since the early 2000s, specialty care has increased while numbers of physicians in primary care has declined <sub>4</sub>
- The 21<sup>st</sup> Century Cures Act has given patients increased access to their health records. With more data accessibility comes more patient questions that need provider attention
  - The burden of answering these questions is largely placed on primary care providers, as the gatekeepers of health in the community

# Community Perspective

- “Words on a screen can be misinterpreted by patients- we practice clinical medicine, and many issues require a conversation, not just a message exchange.”  
- **Physician**
- “Messaging is convenient, but it is abused and overused. The content is often not something that can or should be addressed online. It needs an office visit, but I can’t let the messages go unaddressed. ” - **Physician**
- “I like messaging because it feels like a personal connection straight to my doctor. When something worries me but I don’t have an appointment set up in the immediate future, it gives me comfort to know someone is aware of what I’m going through.” **Patient**, age 45
- “Sometimes I worry I’m overwhelming my doctor with messages- I certainly don’t want to do that! But sending a message seems less demanding than calling the office.” – **Patient**, age 67

(Patient and physician identities were kept confidential in order to promote honest conversation)

# Intervention and Methodology

- Several in-depth semi-structured provider and patient interviews were conducted in person in the family medicine clinic in Berlin, VT
  - The first set of questions were process driven to understand the messaging triage system, patient education requirements, and the history of messaging in Berlin
  - The second set of questions were more open-ended and intended to assess provider burden from messaging, opinions on workflow, and personal examples of experiences where messaging either succeeded in improving patient care or made physician's jobs more difficult
- All physicians and NPs who review, triage, and answer MyChart messages as well as patients who use MyChart messaging were eligible to participate
- The intervention goal was to obtain provider and patient perspective on MyChart messaging and to identify areas of improvement

# Results A

- Providers in the practice spend anywhere from 30 minutes to 1 hour every day responding to MyChart messages from patients
  - This is time spent outside of patient visits, returning phone calls, documentation, etc.
  - This time is not specifically compensated
- The most common patient messages have the following content:
  - 1) Asking about the results of a test
  - 2) Medication management: refill requests, dosage questions, general inquiries
  - 3) Questions regarding new or existing health concerns
- 100% of providers believed that patients were not well-educated on the purpose and proper use of MyChart messaging
  - 100% of patients interviewed (16 patients) stated that they knew not to use the portal for emergency messages, yet 3 physicians noted multiple occasions where they have received concerning messages regarding urgent health complaints (such as chest pain)
  - This clearly underscores the discrepancy between patient and provider expectations for portal use

# Results B

- 50% of physicians agreed that having a clearer workflow with better messaging triage would reduce physician burden. Some examples noted:
  - A clearer understanding by support staff about what needs to be handled by physicians versus what can be taken care of by schedulers
  - More nursing involvement for answering questions
- 93% of patients liked having the option to use online messaging for health communication
- 31% of patients remember having a clear explanation about when to use messaging at the time of signup



# Limitations

- This project was targeted at the provider population at one family medicine office in Berlin, representing a small sample size of overall Vermont primary care physicians. More data is needed to determine broader pitfalls with MyChart messaging systems
- Most patients interviewed were over the age of 50. A broader age range would contribute interesting data to the goal of this project
- Data was collected in semi-structured interview format which allowed for a nuanced discussion. This also could have represented a less systematic method for data collection. Further surveys would benefit this project in order to continue to characterize opinions surrounding this issue

# Recommendations for future interventions

- Patients should be required to view a brief interactive educational tool prior to gaining MyChart access
  - This will take the burden off providers to educate patients during busy visits
  - This will also ensure that patients are aware of the role of messaging in the relationship to their physician
  - The after visit summary could include a brief blurb reminding patients about the parameters of messaging
- Clear roles should be established and revisited throughout the medical practice, so messages are responded to as efficiently as possible without burdening any one group

# References

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