An Analysis of the Benefits and Barriers to the Full Implementation of a HIPAA Compliant Secure Messaging System Within Lehigh Valley Health Network

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An Analysis of the Benefits and Barriers to the Full Implementation of a HIPAA Compliant Secure Messaging System Within Lehigh Valley Health Network

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Background: TigerConnect

- TigerConnect is a smartphone-based secure messaging system used by some providers within LVHN.
- Used to send PHI (Protected Health Information) in compliance with HIPAA.
- First implemented on December 27, 2016
- Ensures confidentiality through closed-loop traceability, encryption of data at the network level, and messages that self-delete after five days.
- SMS texting and pagers are not encrypted, and messages containing PHI could be read by unintended recipients.
- Inefficiencies of communication in healthcare are estimated to result in 45 minutes of lost time daily per provider.

Research Methodology

Purpose: Take an in-depth look at TigerConnect benefits and barriers to use within the network. Gather physician feedback and input on usage, and develop possible ways to overcome barriers.

Methods: A survey was sent out to 1,231 physicians, NPs, and PAs. 194 responses were received (15.76%). Additionally, interviews were conducted with physicians throughout the network.

- The survey asked providers about usage rates, general opinions on TigerConnect, demographic, and reasons why some are against using it.

<table>
<thead>
<tr>
<th>Role of Respondents</th>
<th>Other</th>
<th>PA</th>
<th>NP</th>
<th>Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>4</td>
<td>25</td>
<td>38</td>
<td>127</td>
</tr>
</tbody>
</table>

Qualitative results based on provider comments:
1. Not everyone uses it (36)
2. Poor Wi-Fi/cell signal (35)
3. Unfamiliar with app (18)
4. Don’t want to use personal device (18)
5. Too easy to miss messages (15)

Benefits (LVPG)

Before Implementation: Pagers only
- Inefficient communication
  - Annual spending: ~$100,000

Current State of Use: Pagers & TigerConnect
- Frequent miscommunication between providers
  - Annual spending: ~$125,000

Future: 100% Implementation of TigerConnect
- Seamless communication, all providers on same page
  - Annual spending: ~$25,000
  - Annual savings: ~$75,000

Recommendations and Conclusion

1. Robust rollout of TC similar to EPIC
2. Provide physicians with work cellphones
3. Educational seminars explaining how to use TC at basic and then more complex levels
4. Show providers new interface
5. Place charging stations around hospital

- The survey found that 76% of all physicians ‘agreed’ or ‘strongly agreed’ TigerConnect would be more useful if all doctors used it.
- Full implementation of TigerConnect could help increase coordination of care within the network resulting in better care, better cost, and better health for the Lehigh Valley.

References:

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