Reducing Documentation Time with Virtual Assistants in Family Medicine

Paul Dow MSHI, eHealth Innovation Strategist, AAFP
Jennivine Lee Simon, Sr Director, Communications & Content, Suki

September 14, 2020
The future is already here, It’s just not widely distributed yet.

- William Gibson
Learning Objectives

• Explain the top three challenges faced by physicians during their clinical interactions with patients.

• Identify two technical solutions to decrease the time spent documenting clinical data.

• Integrate a clinical digital assistant into a workflow that expands beyond documentation.
What Are The Problems?
Primary Care’s Burning Problems

- Clerical Burden
- AI / ML
- Practice Viability
- VBC

Drive Innovation Focused on the Needs of Primary Care

Now with 100% More COVID-19!
Why is Family Medicine/Primary Care so effected?

Burnout
Shallow Medicine
EHR Complexity

Professional Satisfaction
Meaningful Communications
The Big Picture

Milestones on the Way to the Optimal Family Medicine Experience

- Routine Integration of AI/ML into practice
- Solutions support value-based care
- Solutions reduce documentation burden
- COVID-19
- Self-documenting Record
- Family Medicine becomes the most desired specialty and is synonymous with the quadruple aim

Tech Best Practice + Clinical Best Practice
Innovation Lab Solutions
Innovation Lab Solution Diagram

- Technical
- Workflow
- Regulatory

Rights
- Tools
- Times
- Places
- Costs

$
Innovation Lab to Optimize Family Medicine Experience

• Drive innovation with the latest proven technologies:
  • Cloud, AI/ML,
  • Voice and mobile
  • Wearable devices
• Based on a deep physician-patient interaction that requires support from technology
• Enhancing, rather than eroding the experience
Why Trust Technology?

6 Apollo Landings = 6 Pilots Turned Off Computers

- Electronics “Always” Fail
- Only Trust Your Ability to Control *Everything*
- New = Different = Discomfort
The IEEE* Global Initiative on Ethics of Autonomous and Intelligent Systems

1. Human Rights
2. Well-being
3. Data Agency
4. Effectiveness
5. Transparency
6. Accountability
7. Awareness of Misuse
8. Competence

* Institute of Electrical and Electronics Engineers (IEEE)
# Levels of Autonomous Driving

<table>
<thead>
<tr>
<th>Level</th>
<th>Automation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - No Automation</td>
<td>Cruise Control</td>
<td>Limited Self Driving</td>
</tr>
<tr>
<td>1 – Driver Assistance</td>
<td>Adaptive Cruise Control</td>
<td>Full Self Driving – Conditional</td>
</tr>
<tr>
<td>2 - Partial Automation</td>
<td>Steering Assist</td>
<td>No Driver Needed</td>
</tr>
</tbody>
</table>

**Human Monitors Driving Environment**

**Automation Monitors Driving Environment**
Potential Levels of Autonomous Medicine

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Automation Monitors</th>
<th>Human Monitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No Automation</td>
<td></td>
<td>Clinical Environment</td>
</tr>
<tr>
<td></td>
<td>Paper Records</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Physician Assistance</td>
<td></td>
<td>Clinical Environment</td>
</tr>
<tr>
<td></td>
<td>Display of Results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Partial Automation</td>
<td></td>
<td>Clinical Environment</td>
</tr>
<tr>
<td></td>
<td>Clinical Order Sets Suggested</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Conditional Automation</td>
<td></td>
<td>Clinical Environment</td>
</tr>
<tr>
<td></td>
<td>Clinical Order Sets Triggered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>High Automation</td>
<td></td>
<td>Clinical Environment</td>
</tr>
<tr>
<td></td>
<td>Surgical Assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Full Automation</td>
<td></td>
<td>Clinical Environment</td>
</tr>
<tr>
<td></td>
<td>No Human Intervention</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Benefits Delivered by the Innovation Lab

- Effectiveness
- Efficiency
- Transform
- Joy

Essential
## Clinical Technology Integration Matrix

<table>
<thead>
<tr>
<th>Level 1: Productivity</th>
<th>Level 2: Augmentation</th>
<th>Level 3: Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote InBox Mgmt</td>
<td>Open Notes</td>
<td>Team-Based Documentation</td>
</tr>
<tr>
<td>Digital Check-In</td>
<td>Patient Wearables</td>
<td>Clinical Decision Support</td>
</tr>
<tr>
<td>Digital Infrastructure</td>
<td></td>
<td>Virtual Digital Assistant</td>
</tr>
</tbody>
</table>

**Phase 1:**
- Proof of Concept
  - Remote InBox Mgmt

**Phase 2:**
- Validation
  - Digital Check-In
  - Patient Wearables

**Phase 3:**
- Broad Adoption
  - Digital Infrastructure

*PRE COVID-19*
Clinical Technology Integration Matrix*

Phase 2: Validation
+/- 10 FP

Phase 3: Broad Adoption
> 100 FP

Level 1: Productivity

Remote Office Mgmt

Level 2: Augmentation

Virtual Patient Engagement / Outreach

Digital Infrastructure

Level 3: Transformation

TeleHealth

Virtual Digital Assistant

* POST COVID-19
Why We Exist

Our vision is to make healthcare tech invisible and assistive, allowing doctors to do what they love

Take care of patients
The Power of Suki

76% reduction in documentation time

$47,000 in increased revenue per doctor

51 NPS score, average healthcare tech is negative
The Healthcare Leader in Voice AI

Google AI/ML Partner of the Year

Fast Company Most Innovative

Straight A's in KLAS Spotlight Report
## AAFP Pilot

### Charting Time (mins)
- **Before Suki:**
  - Per patient: 13.5
  - Clinic: 149.5
  - After hours: 66.5
  - Overall: 6.5
  - EMR: 7.5
  - Documentation: 5

- **With Suki:**
  - Per patient: 5.1
  - Clinic: 72.7
  - After hours: 20.0
  - Overall: 9.5
  - EMR: 9.5
  - Documentation: 10

- *Stressed, don't feel burnt out*

### Satisfaction
- **Before Suki:**
  - Burnout: 70%
  - Time: Poor

- **With Suki:**
  - Burnout: 90%
  - Time: Good

### Comments
- **Suki:**
  - The best part about Suki is a better record to look back on. I know that - when I look back at my note - I took care of the patient. There is a joy in confidently going into the room knowing that.

- **Doctor:**
  - I feel a better connection with my patients. I feel like I am more engaged with them.

- **Suki:**
  - Suki is superior to a scribe. The scribe will go off to school and you will have to train someone else. Also... you have to correct their notes.

- **Doctor:**
  - I wanted to spend more time with my family and wanted to exercise. I am now able to do both...

- **Suki:**
  - Suki will give me 10-15 more years of practice.
The Problem List

Overwhelming documentation and administrative burden, lost revenue opportunities, unnecessary incurred costs.
Leticia Ramirez
MRN 6444

DATE OF SERVICE
07/18/2019

DATE OF BIRTH
05/01/1963

History
Leticia Ramirez is a 56 year old woman with a large ventral hernia. She has a history of C-section via a vertical midline incision. The hernia has been causing significant discomfort of late, especially during physical activity.

Review of Systems
Constitutional - The patient reports no fever, no significant weight gain, and no unintended weight loss.

Neuro - No weakness, numbness, dizziness, headaches, or vision changes.

CV - No chest pain, no palpitations, and no edema.

Respiratory - No cough, no wheezing, and no shortness of breath.

Introducing Suki
Suki at a Glance

AI-powered  Scalable  EHR integrated

100% accurate  Fast on-boarding  Supports Telehealth

Clinical notes  Problem based notes with coding

Information retrieval  Order entry*

Leticia Ramirez  56 - F

date of service: 07/19/2019  date of birth: 05/01/1963

history
Leticia Ramirez is a 56 year old woman with a large ventral hernia. She has a history of C-section via a vertical midline incision. The hernia has been causing significant discomfort of late, especially during physical activity.

Review of Systems
Constitutional - The patient reports no fever, no significant weight gain, and no unintended weight loss.

Neuro - No weakness, numbness, dizziness, headaches, or vision changes.

CV - No chest pain, no palpitations, and no edema.

Respiratory - No cough, no wheezing, and no shortness of breath.
Phase 2 Pilot with AAFP

• Actively recruiting 100 AAFP members to validate Phase 1 findings
• 30 day trial period + 1 hour post pilot interview

Interested in participating? Email jenni@suki.ai
Help Us, Help You

- Share Challenges
- Partner w/ AAFP to Develop Solutions
- Build Communication Across Practices

Contact Paul Dow
pdow@aafp.org
(913) 906-6005
References


The future is already here, it’s now widely distributed.

- AAFP Innovation Lab
© 2020 American Academy of Family Physicians. All rights reserved.

All materials/content herein are protected by copyright and are for the sole, personal use of the user.

No part of the materials/content may be copied, duplicated, distributed or retransmitted in any form or medium without the prior permission of the applicable copyright owner.