



Strategies to Advance St. Mark's Mission

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Overview

St. Mark's Mission

Opportunity Identification

Current Landscape

Proposed Intervention

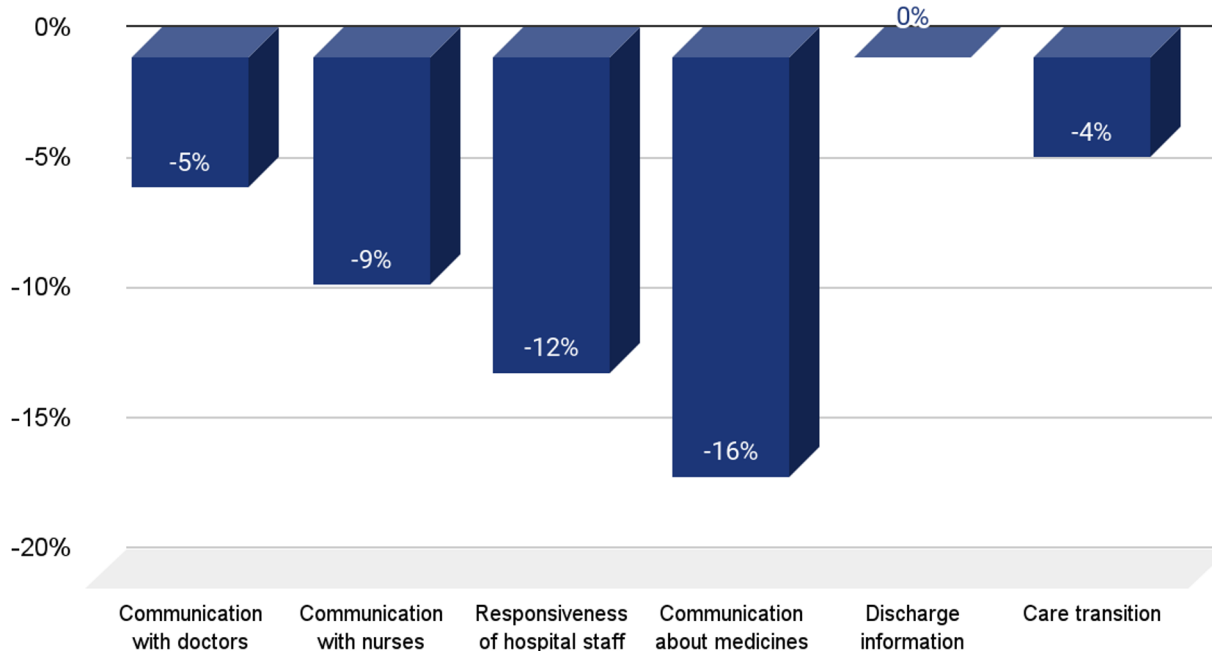
Next Steps

St. Mark's mission:

“Above all else, we are committed to the care and improvement of human life. In recognition of this commitment, we will strive to deliver **high-quality, cost-effective** healthcare in the communities we serve.”

Current patient experience lags behind national averages¹

St. Mark's Health Grades vs. National Average





Partners and competitors are using AI to enhance their missions



Substantial predicted savings with AI

According to NBER AI Economics Conference paper co-authored by McKinsey and Harvard economists²:

4-10%

Reduction of total hospital costs

30%

Additional operating room time through dynamic scheduling

30%

Call volume decrease with help of virtual assistant

Opportunity

Create a **cost-effective** way to gather and analyze data to provide **higher-quality** patient care.

Negative Consequences

- Poor patient experience
- Less competitive with other hospitals

Intervention

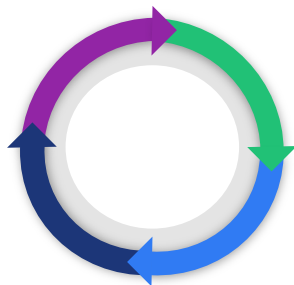
- Use AI to improve:
 - patient feedback gathering methods
 - medical scribe function
 - staff-patient relations
 - diagnoses
 - access to medical info for doctors

Outputs

- Save physicians time
- Cut costs
- Improve diagnostic abilities

Impacts

- Better patient experience
- More competitive with other medical facilities/ hospitals
- Advance St. Mark's mission



Validate | Re-Test

Proposed intervention: data-driven AI implementation

1. Implement better systems for patient feedback
2. Use AI to automate medical scribe function
3. Utilize AI to improve staff-patient relations
4. Use AI to improve diagnoses
5. Pursue the emerging technology of medical LLMs

1. Implement systems to further patient feedback

- Traditional surveys have several challenges
- Use a simple survey
 - 3 questions - incentivised
 - Discharge nurse uses iPad
 - Immediate results

**Please select the top 3 things that
made your experience positive!**

Nurse Staff	Your Doctor	Hospital Cleanliness	Helpful Hospital Exit Experience
Staff Attentiveness	Staff Helpfulness	CNA	Bathroom Assistance
Good Care Explanation	Felt Respected	Speedy Call light Response	Treatment of Family

2. Use AI to automate medical scribe function

- Scribes are costly and untrained³
- 58% of physicians believe documentation time limits patient interaction⁴
- HCA piloting AI documentation with Augmedix^{4,5}
 - Improving physician work-life satisfaction by 35%
 - Reduces minutes spent per patient EHR by 44%
 - Increased clinician productivity by 20%



3. Utilize AI and big data to improve staff-patient relations

- Machine learning speech processing techniques⁶
 - Emotion and pitch
 - Word choice
- Video processing¹¹
 - Body language and facial expressions
- Data linked with patient surveys
- Data can be used to improve bedside manner

4. Use AI tools to improve diagnoses

The Harvard School of Public Health anticipates using diagnostic AI to have a:

250,000

Harmful diagnostic errors annually⁷

50%

Reduction in treatment costs⁸

40%

Improvement of health outcomes⁸

Examples of AI tools improving patient diagnoses

01	Intermountain Health and pneumonia diagnosis ⁹	<ul style="list-style-type: none">• 36% decrease in 30-day mortality for pneumonia patients by using AI software
02	AI mammogram screening ¹⁰	<ul style="list-style-type: none">• 9.4% reduction in false negatives when compared to radiologists

5. Pursue the emerging technology of medical LLMs

- Google's Med-PaLM 2 has the potential to provide highly specific medical answers to doctor queries
- HCA is currently in partnership with Google to bring this technology to their hospitals in the future



Next steps

1

**Employ AI Implementation
Team**

2

**Utilize HCA AI
Resources**

3

**Implement Better Patient
Surveys**

4

Evaluate Effectiveness

Thank you

Sources

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