

The Best Kept Secret in Population Health: Engaging Your Physicians to Reduce Unwanted Clinical Variation and Save Money

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Summary

- **Unwanted clinical variation is a plague that gives us poor quality & high costs.**
- **You have tried many cures... with modest or no success**
 - Consultants, EMR alerts, guidelines, CM, M&M conferences, etc.
- **The missing piece may be engaging your doctors/providers.**
- **We have been using patient simulations in a group setting to engage:**
 - Everyone cares for the same patients
 - Give individual and group feedback
 - We benchmark their care to peers and guidelines
- **This serial engagement consistently leads to lower costs and higher revenue for systems all over the country**

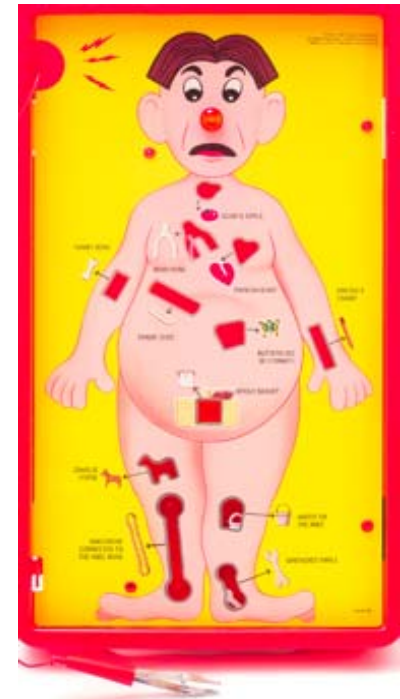
Cutting Costs Is Not the Answer: The Goal Is to Create Value

Value = Quality / Costs

Value Comes from
Raising Quality.

It Requires
Leadership, Vision,
Passion and Creativity

- The old saying is true, “You can’t cut your way to prosperity”:
 - Cuts affect doctors, services, or morale and often all three
- Cuts don’t get at the root of the issue:
 - 80% of health care spending is controlled by physician decisions



Clinical Variation's Impact on Patients Is Real



Only 55% of recommended care for her chronic condition

29% of the time, she will get the wrong (or incomplete) diagnosis

33% of the time, she will have an inappropriate imaging study ordered

40% more costly based on the physician she sees within the same hospital

Clinical Variation Makes Your Job as a Healthcare Leader More Difficult

How do you control costs as reimbursement pressures increase?

▷ Clinical variation is a hidden spending tax (>\$200B in unneeded spending annually).

How do you improve quality?

▷ Top hospitals have 16% lower complication rates and 26% lower mortality rates.

How do you increase your patient satisfaction?

▷ Engaged providers and staff lead to satisfied patients and higher margin.



Moving the Needle on Variation Is Simply Difficult: One Example

Important Mission

- Support evidence-based care decisions
- +5 years old
- >80 medical society partners
- 525 society recommendations
- >1,300 journal articles (2016)

...But Only Modest Impact So Far







- Slight Decreases**
 - Imaging for headache
 - Cardiac imaging
- Slight Increases**
 - NSAIDS
 - HPV testing young women
- Stayed Flat**
 - Antibiotics for sinusitis
 - Low back pain imaging
 - Pre-operative chest x-rays



An initiative of the ABIM Foundation

"We've learned is that it's just really hard to change practice"
- Dr. Eve Kerr, Choosing Wisely 5 Year Report Author

Hospitals and Health Systems Address Variation in A Variety of Ways

	Solution	Example Companies
	EHR: Clinical Decision Support and Order sets, Reminders	Cerner, NextGen, Allscripts, Epic, Elsevier, Zynx, Stanson
	Clinical Pathways, Guidelines	Via Oncology, InterQual, NCCN, New Century Health
	Consulting Services	Deloitte, McKinsey, PwC, Navigant, Huron
	Traditional CME Programs	Medscape, travel seminars, ACP, AMA, UptoDate
	Analytic Dashboards	Health Catalyst, Crimson, QualityAdvisor
	In-house Solutions	More Medical Directors, Care Managers, Six-Sigma

Why Have Effective Variation Solutions Been So Hard to Find?





Lot's of reasons...

The solution is
Engagement.



- Clinical data is imperfect
- Little/no feedback on clinical decision making
- Alert fatigue, EMR time
- Evolving practice guidelines
- Few opportunities for peer discussion
- Busy schedules, limited time

We Took a New Approach To Address These Challenges

	Engage Physicians	Actively involve physicians with modest time investment
	Scalable	Easily deployed system-wide, scalable solution
	Standardized Comparison & Feedback	Remove “my-patients-are-sicker” concerns
	Results, Results, Results	Able to be executed flawlessly, that delivers quality improvement to patients and cost savings to providers

QURE Healthcare: Established in 2013 Is Uniquely Focused On Reducing Clinical Variation, Standardizing Practice

QURE Healthcare



**Lower
Costs**



**Build Clinical
Consensus**



**Raise
Quality**

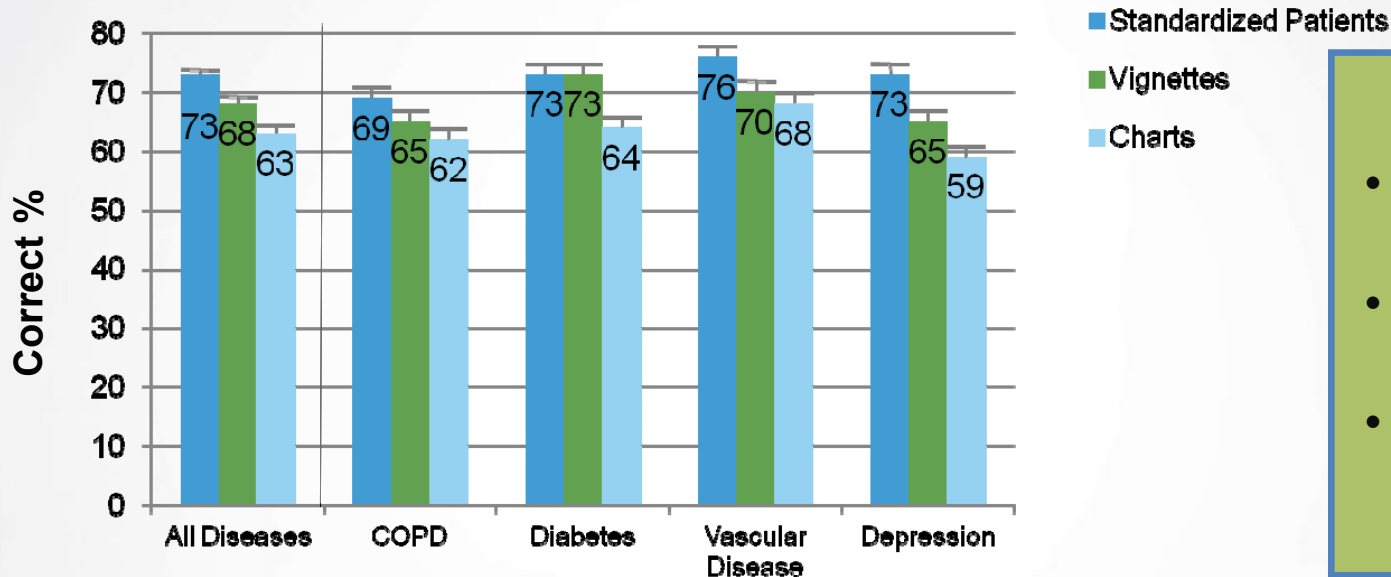
**Based upon 15 years of
Research:**

- **Group level participation**
- **Customized Feedback**
- **Benchmarking**

**Our Tool:
Clinical Performance and
Value (CPV) vignettes**

Vignettes Were Validated Against Standardized Patients: CPVs Consistently Outperform Charts as a Measure of Quality of Care

Validation papers published in JAMA, Annals of Internal Medicine



CPV® vignettes:

- Superior to chart abstraction
- Close to standard patients
- More practical and less expensive than either alternative

CPV Cases Are Online: Everyone Cares for Mr. Ballard

CPV® Vignettes are:

- **Patient simulations** that target variety of high priority disease areas.
- **Validated** to measure actual practice.
- Rooted in **evidence-based guidelines**.
- Opportunity to have everyone care for the **exact same patients**



The screenshot shows a digital vignette interface. At the top is a circular profile picture of George Ballard, a 67-year-old male. Below the photo, the text reads "George Ballard 67 year old Male". The main body of the vignette contains a paragraph: "Mr. Ballard, 67 years old, has come to the ED for evaluation of persistent shortness of breath, despite taking his medications." This is followed by a bulleted list of clinical findings: "Patient is awake and alert, in mild distress, speaks in short sentences, and is unable to tolerate lying supine.", "Blood pressure 130/72 mm Hg, pulse rate 92/min, respiratory rate 26/min, temperature 97.9 deg F", "O2 saturation 88% on ambient air. At the time he was seen he was on oxygen support at 4 liters/minute via nasal cannula and his oxygen saturation has improved to 95%", and "Weight 164 lbs, height 68 inches, BMI 25 kg/m^2". At the bottom of the vignette is a blue "Continue" button.

**Each CPV
takes ~20
minutes.**

Everyone Gets Individualized Feedback with Practical Clinical Advice to Standardize Their Care

Personalized Prioritized Feedback

- Admission to an area with telemetry (general floor or progressive care unit) is recommended for patients with acute HF decompensation who do not require ICU care (e.g. cardiogenic shock, acute coronary event, need for invasive monitoring). This is to ensure proper monitoring to detect arrhythmias which may occur due to heart failure or as a consequence of treatment.
- A referral to an EP specialist is indicated in this case because cardiac resynchronization therapy is advisable due to EF being less than 35% and ECG findings of LBBB with QRS > 0.15 sec.
- Prescribing the combination of hydralazine/isosorbide dinitrate is recommended for African Americans with NYHA class III/IV HFrEF who remain symptomatic with GDMT.

Quality Score

My Case Score **41.2%**
Group Round Avg. **56.0%**

Peer Benchmarks



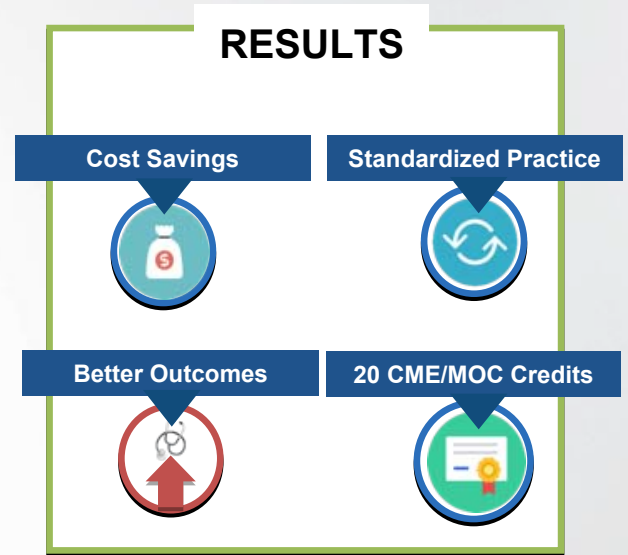
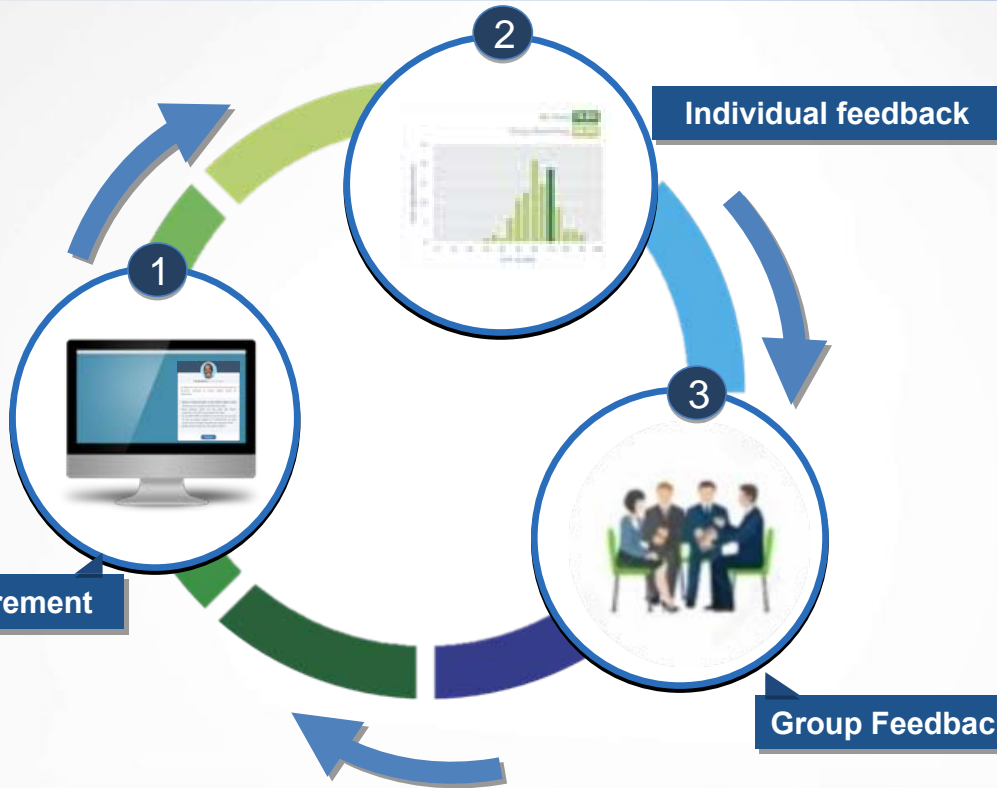
Unneeded Tests



References

- Yancy CW, Jessup M, Bozkurt B, et al. [2013 ACCF/AHA guideline for the management of heart failure: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines](#). *Circulation*. 2013;128:e240-e327.
- Tomczyk S, Bennett NM, Stoecker C, Gierke R, Moore MR, Whitney CG, et al. [Use of PCV-13 and PPSV-23 vaccine among adults aged 65 and older: recommendations of the ACIP](#). *MMWR*. 2014;63(37):822-5.

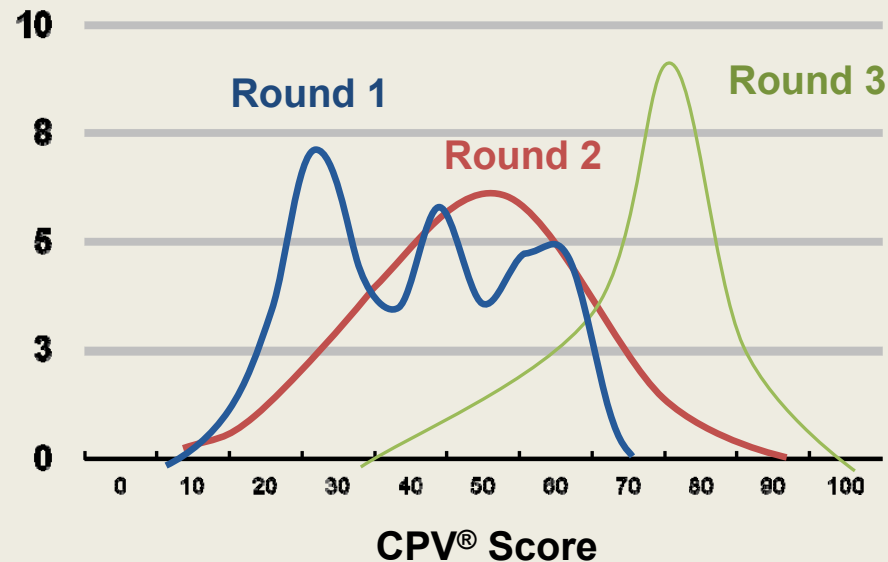
Serial Measurement & Feedback to Standardized Care: Implementation Is 3 Rounds a Year



Results in Oncology: CPV Measurement & Feedback Raised Quality and Decreased Variation Quickly

Results from an NCI designated Hospital:
Distribution of CPV® Scores, Round 1-3

Better CPV scores correlate higher quality and better alignment with evidence based guidelines



Lead abstract
at ASCO,
Quality Boston
2014

Results in Primary Care: Proven Patient-Level Impact

CPV quality improvements are mirrored in clinical practice.

Measure	CPV Improvement	Pre Project	Post Project	Net Patient Improvement
ACE/ARB CAD and Diabetes and/or LVSD*	+5%	73%	82%	+9%
Beta Blocker for LVSD*	+10%	90%	100%	+10%
Breast Cancer Screening	+22%	30%	75%	+45%
Adult Pneumococcal	+38%	67%	86%	+19%
IVD and Aspirin*	+24%	78%	92%	+14%

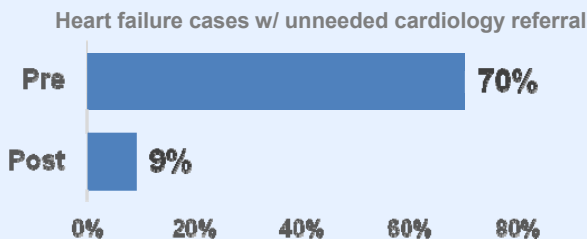
*Baseline is 2015 year because measure was not tracked in 2014

Patient Level Data

Results in Accountable Care: QURE Engagements Deliver Cost Savings

Unneeded Cardiology Referrals \$2.6 M Savings

Practice
change:



Economic
Impact:

\$2,630 saved per referral*
*
1,000 avoided referrals / year across
100 physicians

\$2.6M Savings

Unneeded Diagnostic Testing \$6.2 M Savings

Practice
change:

\$312 saved per patient*

*

Economic
Impact:

**20,000 diabetes and heart
failure patients**

\$6.2M Savings

Project included 70 primary care providers spread across the North East

*Based, conservatively, on Medicare OPSS costs

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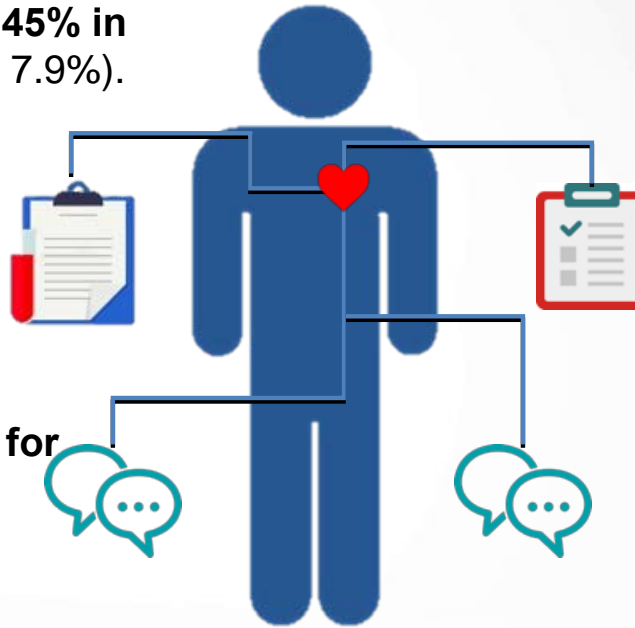
Results in Inpatient Care: Less Testing, Lower Utilization and Better Quality



Readmission rates fell 18% in heart failure (from 17.5% to 14.3%) and **45% in pneumonia** (from 14.3% to 7.9%).

Guideline-appropriate troponin use for HF patients increased 45%.

Palliative care referrals increased 75% for heart failure and **65% for pneumonia patients.**



Heart Failure + Pneumonia

Case management consults rose 14% in heart failure and **15% in pneumonia.**

Cardiac rehab referrals for heart failure patients increased 36%.

Engagements Deliver Cost Savings and.... Saved Lives

Significant Annual Cost Savings (Change in Observed/Expected Cost per Case)

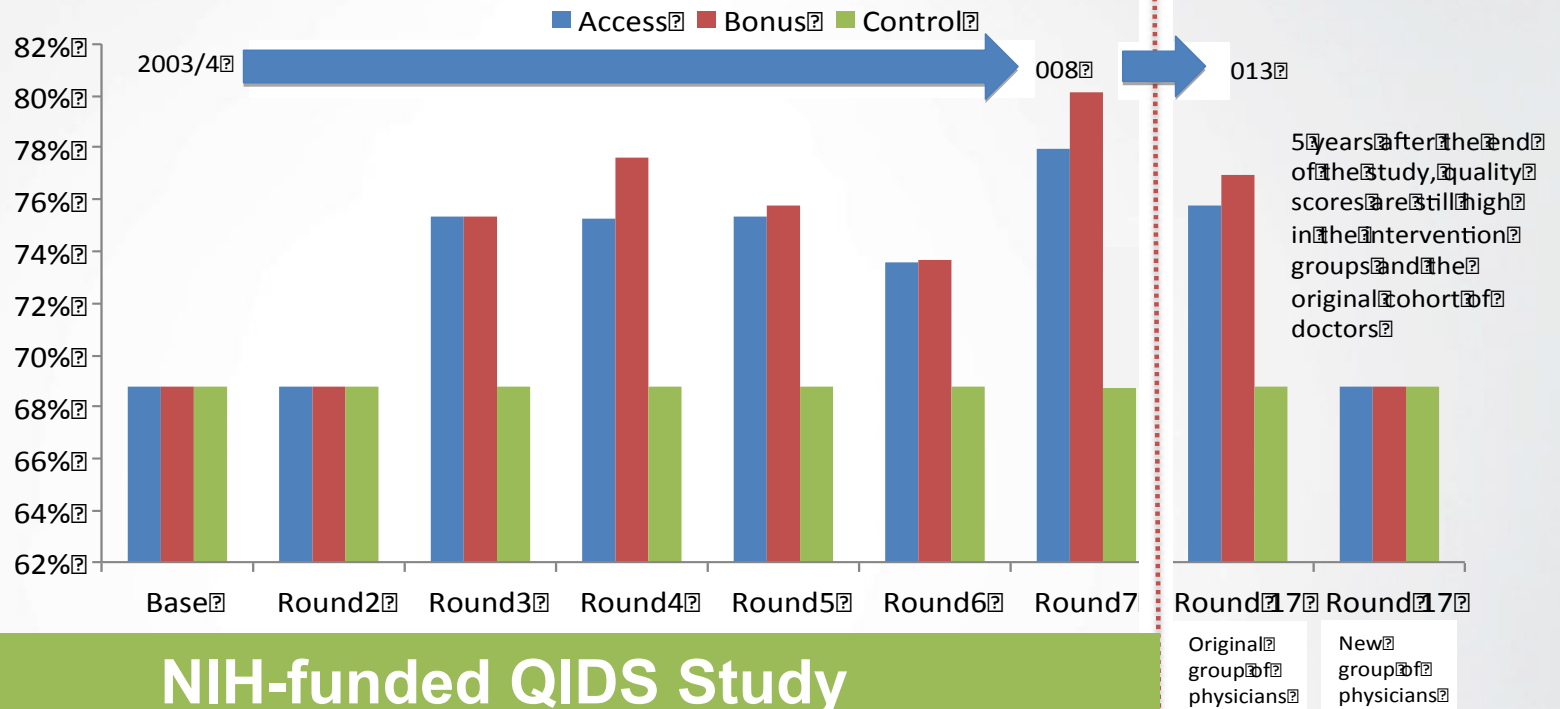
- COPD: ↓ **11.7%** = \$2.1M in savings
- Sepsis: ↓ **20.6%** = \$3.1M in savings

**\$5.2 M in
annual savings**

And Lives Saved (Change in Observed/Expected Mortality)

- COPD: ↓ **28.1% mortality rate**
- Sepsis: ↓ **21.6% mortality rate**

Results Are Sustainable: Quality Improvements Durable After 5 Years



Serial Measurement and Feedback with Simulations, Is a Flexible Approach for Pursuing a Variety of Clinical Disciplines and Financial Goals

QURE's Clinical Performance and Value (CPV[®]) Vignettes Projects address...

Examples of Common Clinical Areas

- ✓ Hospitalist Services
- ✓ Pediatrics
- ✓ Cardiology
- ✓ Oncology
- ✓ Intensivist Medicine
- ✓ Orthopedics
- ✓ Primary Care (eg, diabetes, COPD)
- ✓ Much more...

Examples of Common Strategic Goals

- ✓ Reduce unwarranted variation
- ✓ Improve clinical quality
- ✓ Lower unnecessary costs
- ✓ Build cohesive networks
- ✓ Direct appropriate referrals
- ✓ Enhance care coordination

Cutting Costs Will Only Get You So Far, Invest In Your Docs For The Real Returns



It's in the 'trenches', where providers see patients, and care happens.

- Physicians and other providers want to improve
- Results from our engagement studies using CPVs:
 - Patients get better
 - Health systems have generated ROIs between \$4M - \$13M per year



Thank You

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