ROI from Data-Driven Clinical Optimization

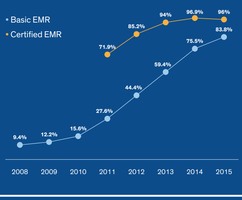
GALEN HEALTHCARE SOLUTIONS

$20 BILLION

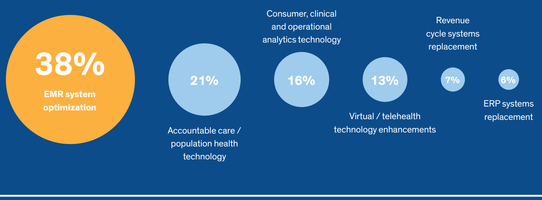
Healthcare Organizations expenditure on the adoption of Electronic Medical Record (EMR) Systems from 2008 – 2016[1]

Although the 2009 American Recovery and Reinvestment Act gave health systems a financial incentive to achieve Meaningful Use of EMRs, many healthcare organizations have struggled to capture value. As the capabilities and sophistication of EMRs continue to grow, there is a widening divide between healthcare organizations that harness the capabilities for a competitive advantage and those that are crippled by poor usability, workflows and adoption.

EMR ADOPTION (BASIC VS. CERTIFIED)[2]



CAPITAL INVESTMENT PRIORITIES OVER NEXT 3 YEARS[3]

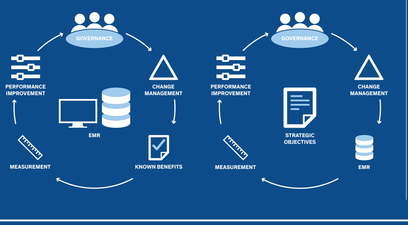


The Widening EMR Gap: Valuable Asset vs. Required Repository

As EMR adoption approaches maximum levels, healthcare organizations are refining EMR strategy from a short-term clinical documentation data repository to a long-term asset with substantial functionality surrounding clinical decision support, health maintenance planning and quality reporting.

Initial Focus
EMR-Centric Improvement Effort

Long-Term Focus
Strategic Improvement Effort



Positive Possibilities
- Improved quality and efficiency
- Sustainable financial advantage

Negative Consequences
- Reduced capital resources
- Higher costs
- Financial disadvantage

Replacement vs. Clinical Optimization

490 ACUTE CARE HOSPITALS

10%
OF U.S. HOSPITAL MARKET
involved in an EMR contract decisions of some kind in 2015[4]

200% INCREASE FROM 2014[4]

50%
OF ALL HEALTHCARE ORGANIZATIONS
will be on their second EMR by 2020[4]

Drivers for replacement include:

- Single database
- Integrated system across care settings (inpatient, outpatient)

Clinical Optimization – Improving patient care through:

- Better system utilization
- Efficient work processes
- Better trained staff

Clinical Optimization Goals & Benefits[5]

As organizations seek to optimize EMRs, they need to recognize that EMRs deliver value when data can be leveraged to drive strategic decisions, improve patient care and control costs.

- Save 28-36 minutes of time per nurse, per shift
- Reduce lab test use and drug costs by 15%
- Reduce average lengths of stay by 5% to 10%
- Prevent 334 to 481 ADEs anually
- Reduce order turnaround time by at least by 1 hour
- Ensure 99% compliance with vaccinations
- Reduce paper forms costs (67% reporting)
- Improve charge capture (64% reporting)
- Reduce transcriptions costs (61% reporting)

Physicians using optimized EMRs report[6] measurable benefits:

- **59%** report cost savings by eliminating management and storage of paper records
- **70%** report faster, more accurate service billing and overall time savings
- **53%** report worksite efficiency increased

Types of Clinical Optimization

- Functional optimization: tasking, worklists, menu, chart structure, flowsheet, preferences
- Specialty-based notes & templates
- Nomenclature harmonization: dictionary synchronization & consolidation
- HMP workflows, care guides & QSets
- Infection prevention & syndromic surveillance
- Automation: macros, scripting
- Integrated clinical decision support through alerting and notifications
- Specialty-based note template, chart structure, flowsheet, preferences & security
- Rationalization and consolidation of duplicative legacy & ancillary clinical systems
- Clinical quality benchmarking - clinical pathways from HIMSS (markers that indicate comorbidities or an increased infection risk)
- Leverage full capacity and capabilities of EHR note functionality
- Alerting and notifications - driving actionable insights to the point of care

Clinical Optimization Effort & ROI Matrix

OUTCOME	VALUE	LEVER	COST OPTIMIZATION	REVENUE MAXIMIZATION	QUALITY IMPROVEMENT	EFFORT	MONETARY ROI
Improve Caregiver Productivity & Patient Throughput	• Decrease length of stay and increase the number of patients seen • Access to care through greater efficiency	• Charting tools • Bed management • Access to imaging • Discharge planning	Little to no impact	Direct impact	Secondary impact	4	$$$$$
Improve Patient Safety Support	• Mitigate risks associated with hospital acquired conditions, adverse drug events and readmissions	• Infection control • Virtual patient monitoring	Direct impact	Secondary impact	Direct impact	3	$$$$
Streamline Key Patient Access Functions	• Standardize processes and centralize quality assurance to reduce denials and limit back-end rework	• Scheduling • Insurance verification • Registration	Little to no impact	Direct impact	Secondary impact	3	$$$$
Reduce Variability of Care	• Use the software and workflows as designed and enhance EHR and operational governance • Improved Clinical Pathways • Standardization on best practice workflows	• Organizational change management • Clinical adoption • Workflow standardization • Insights gathered from advanced analytics	Little to no impact	Direct impact	Secondary impact	3	$$$$
Reduce Volume Leakage	• Keep patients in network	• Identification of patients' comorbidities	Little to no impact	Direct impact	Little to no impact	2	$$$$
Improve Clinical Decision Support	• Drive care delivery and manage acute and chronic diseases by evaluating the patient's problem list in clinical documentation	• Automated rules & documentation	Little to no impact	Secondary impact	Direct impact	3	$$$
Improve Operations	• Real-time performance tracking	• Business intelligence & integrated dashboards	Little to no impact	Secondary impact	Direct impact	4	$$$
Improve Quality of Care	• Enhance patient care while minimizing provider risk associated with reduced reimbursement • Decrease clinical variability	• Population health & disease management • Quality monitoring & reporting • Transparent performance metrics	Secondary impact	Little to no impact	Direct impact	5	$$$
Increase Patient Satisfaction	• Increase volume of select services and procedures • Enable patients to better manage their health	• Wait times & throughput • Access to information (patient portal, online statement review, mobile technology)	Secondary impact	Secondary impact	Direct impact	2	$$
Optimize supply usage	• Flag tests, orders and medications as high cost • Embed alternate suggestions reducing unnecessary costs	• Rules engine allows for outlining additional protocols in documentation and ordering tools	Direct impact	Little to no impact	Secondary impact	3	$$

Learn how we do IT at www.galenhealthcare.com/emr-clinical-optimization/
to access our clinical optimization whitepaper.

Sources 1. Gartner & McKinsey 2016 CIO/COO Survey 2. ONC/American Hospital Association (AHA), AHA Annual Survey Information Technology Supplement. 3. KPMG/CHIME poll, January 2017 4. 2015 KLAS Report 5. "Enhancing and Optimizing Your EMR for Usability and Long-Term Value," Doug Thompson, The Advisory Board, October 27, 2015 6. Deloitte Center for Health Solutions 2013 Survey of U.S. Physicians