Accelerating the Value of Health Information Technology

South Carolina HIMSS

October 17, 2014

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Value
Change
Quality
FUTURE OF CARE
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15.5 mi
ETA 1:45 PM
7th Ave
Main St.
12th Ave
Jones Blvd.
Back
Source
harman/kardon

Introductions

MAESTRO STRATEGIES

Susan Irby
Practice Leader
Business Intelligence

- Over 29 years serving healthcare in the provider arena as well as consultant to the industry
- BI Practice Leader for Maestro, working with clients to develop and execute strategies around strategic decision making and Business Intelligence
- Industry pioneer in Decision Support at Alta Bates (Sutter Health)
- Contributor to HIT Return on Investment series and developer of Maestro's ROI Toolkit©
- Former adjunct faculty member at UAB Healthcare IT, lecturing in decision support

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About Maestro

MAESTRO STRATEGIES

Orchestrating Change

Maestro Strategies combines strategic and operational insight with deep understanding of advanced information technologies and analytic tools to help our healthcare clients execute strategic priorities and accelerate value creation

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Our Return on Investment & Value Management Qualifications

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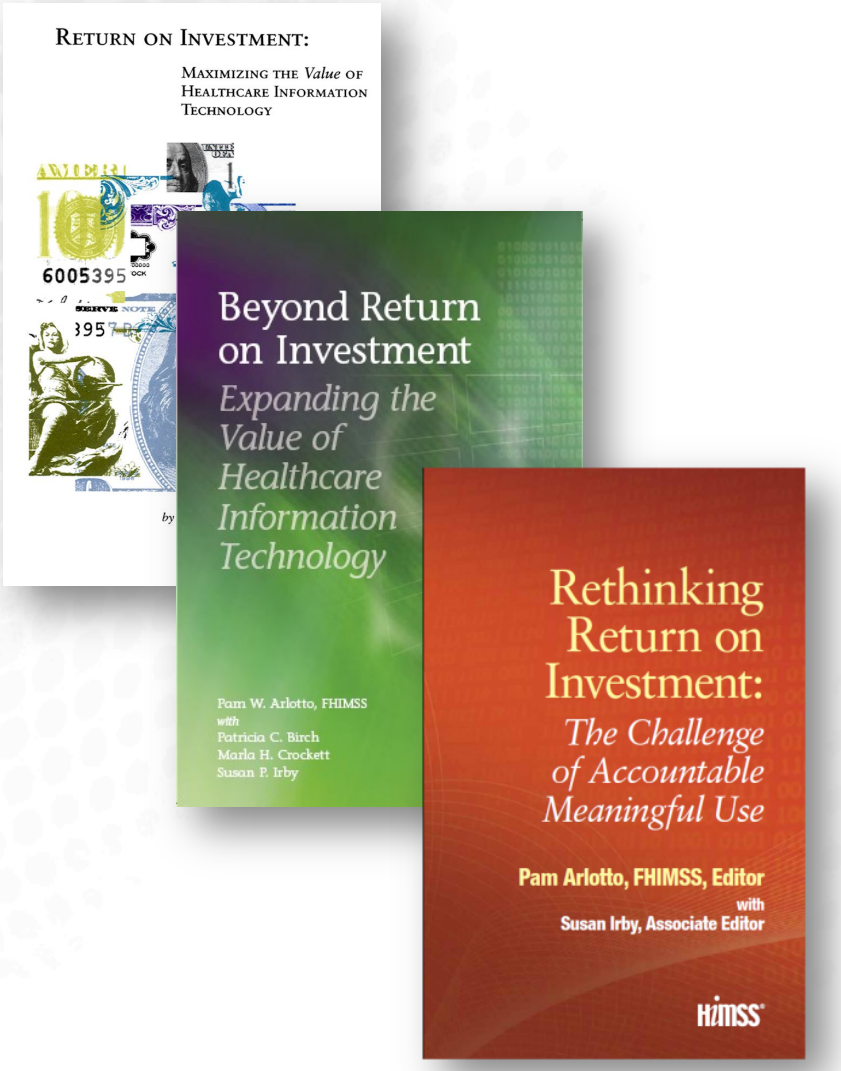

- 15 year track record of thought leadership
  - Authored three books
  - ROI Tookit© and standard methodologies
  - Frequent Key Note Speaker on High Value Healthcare
  - ROI Workshops
- Diverse client base focused on value definition, value management and measurement, and value optimization
  - Hospitals & Health Systems
  - Physician Practice Groups
  - Health Information Exchanges
  - Vendors & Service Companies
  - Life Sciences
  - Payers
  - Associations and Business Coalitions
  - Government Agencies

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Objectives

- Understand the role of Healthcare Information Technology in today's changing landscape
- Learn how to re-think the value of HIT
- Identify and de-bunk some of the myths around realizing value
- Practical take-aways for IT

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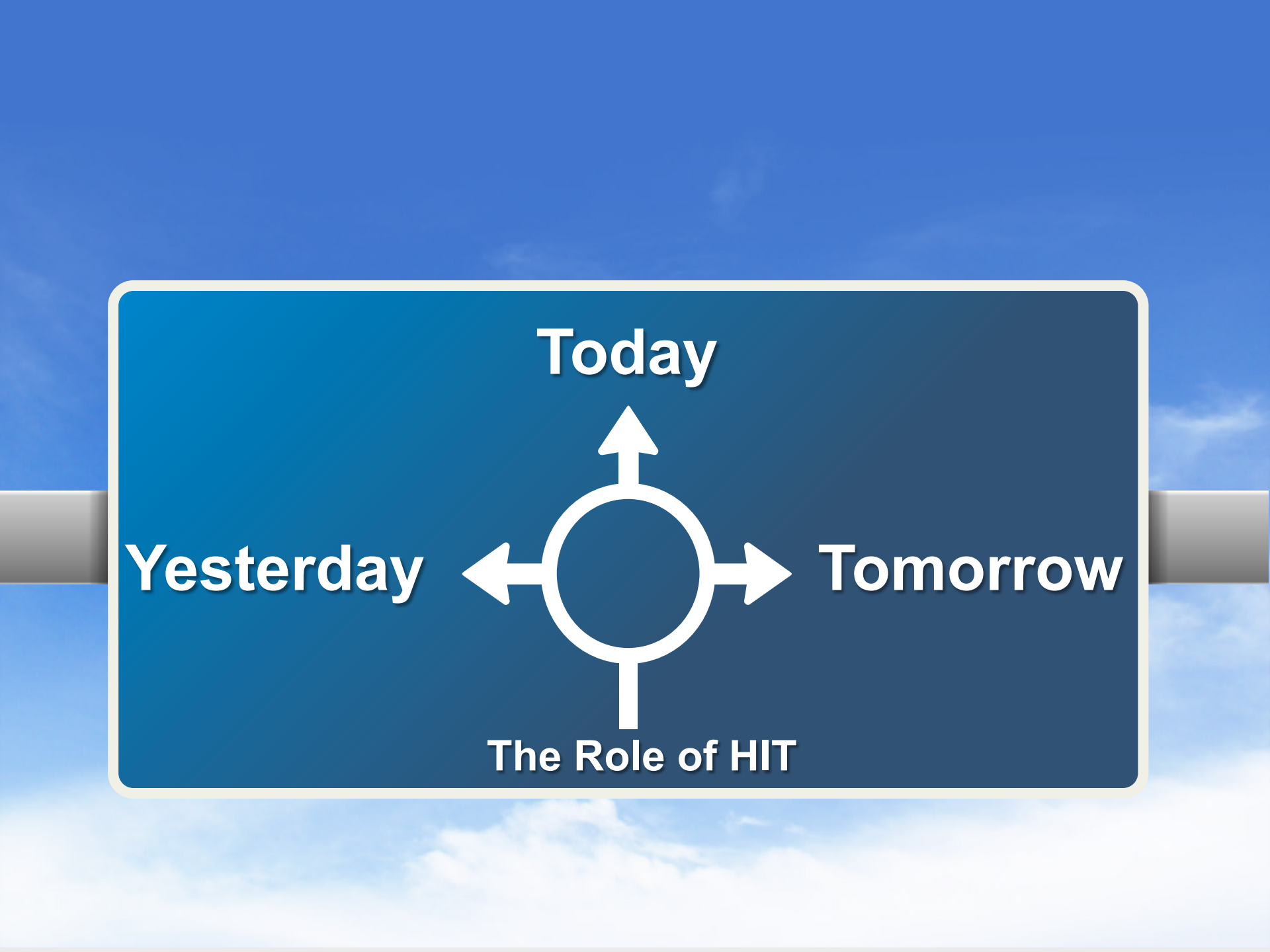
Today
Yesterday
Tomorrow
The Role of HIT

Yesterday, Today & Tomorrow: The Role of HIT

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Care circa 1960…

Care circa 2012…

Care
Today & Tomorrow…

"The complexity of modern American medicine exceeds the capacity of the unaided human mind."

Source: David Eddy, MD, PhD

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Yesterday, Today & Tomorrow: The Role of HIT

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Medicine is More Complex

- A typical primary care physician who treats elderly Medicare patients must coordinate care with 229 other physicians working in 117 different practices Source: Center for Studying Health System Change, 2009
- Most physicians work in practices with insufficient numbers of beneficiaries to reliably detect meaningful differences in cost and quality measures Source: The Commonwealth Fund, 2009
- In 2012, there were 11,000 new Medicare beneficiaries each day Source: HHS Secretary Kathleen Sebelius, Seniors Healthcare TownHall 2012
- There are over 10,000 prescription drugs and biologics and more than 300,000 over-the-counter (OTC) medications on the market. Two-thirds of the U.S. population receive at least one prescription per year, and close to 40% receive prescriptions for four or more medications Source: Institute of Safe Medical Practices, 2007
- Genetic testing is available for approximately 2000 clinical conditions, and the number of available diagnostic tests is increasing exponentially Source: NEJM, January 2012

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Complexity, Confusion and Lack of Coordination

78 y/o WF

Problem List:

1. Type II diabetes with neuropathy
2. Iron deficiency anemia
3. Breast cancer
4. Pernicious anemia
5. Coronary artery disease
6. Peptic ulcer disease
7. Osteoarthritis
8. Hypertension
9. Allergic rhinitis
10. Eczema
11. Glaucoma

McKinsey, Have You Tested Your Strategy Lately?

18 Medications

Calcium	Metformin	Enalapril
Temazepam	Timoptic eye gtts	ASA, KCL
Simvastatin	Lumigan eye gtts	Glipizide
Vitamin B12	Omeprazole	Metamucil
Lasix	Diltiazem, Requip	
Lantus insulin	Zyrtec	

12 Current Physicians

PCP	Ophthalmologist
Neurologist	Gastroenterologist
Podiatrist	Oncologist
General Surgeon	Cardiologist
Endocrinologist	Hospitalist
ENT	Dermatologist

Source: Kaufman Strategic Advisors

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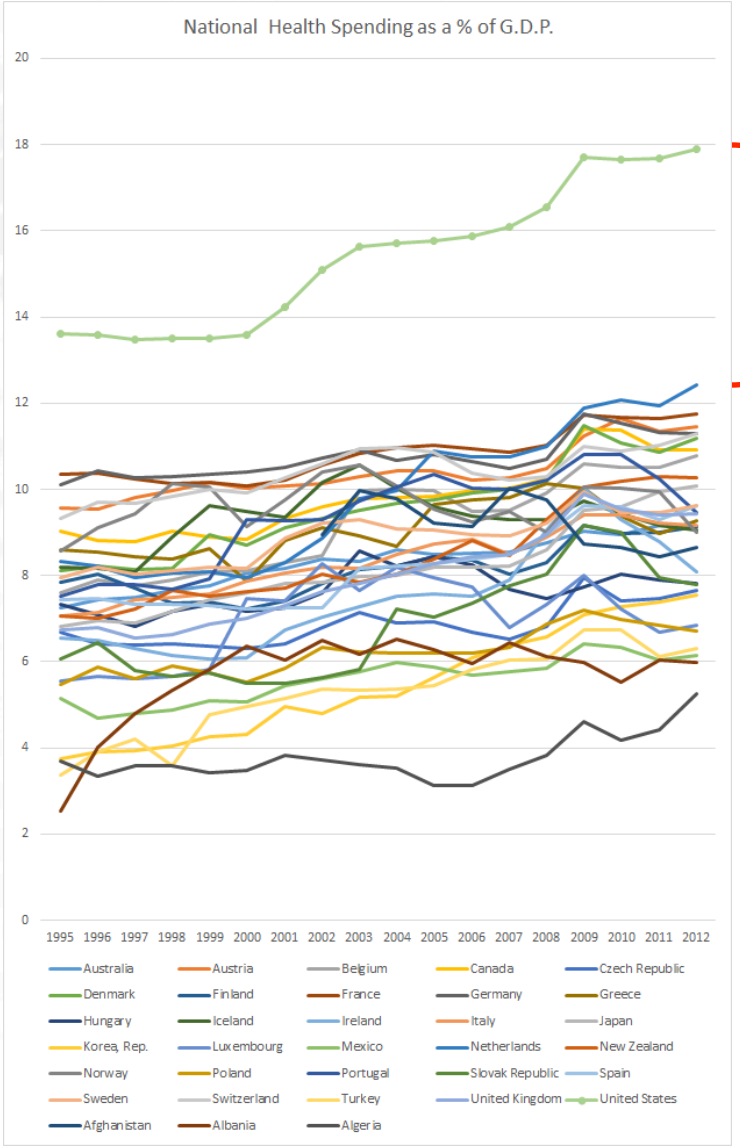

"Our careers, dreams and strategic plans are pinned to this graph…

The next era will be a messy transitional phase that will kill any organization whose leaders get the mix wrong…

As reimbursement changes (and this is happening very quickly), we are all beginners again. This will require different skill sets, different mind sets and different business models"

Source: Joe Flower, Healthcare Futurist to VHA Georgia Trustee Institute, May 2013

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Emerging Health System Leadership Roles

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Strategic Priorities Requiring New Capabilities:

- Improving cost management & efficiency
- Increasing clinical integration
- Expanding coordination of care
- Improving quality and safety
- Innovating and change management
- Increasing patient engagement

Source: AHA Series: Building a Leadership Team for the Healthcare Organization of the Future, 2014

Capabilities Available from Value Driven HIT:

- Reduce human labor by automating processes
- Improve point of care decision making through clinical decision support
- Stratify patients with specific conditions and track disease status
- Improve access and care management across geographic and time differences
- Integrate data across multiple entities, processes and functions
- Improve communications across care teams & transitions of care
- Measure and analyze performance of care for individuals and populations

Source: Adapted from Davenport, Process Innovation: Reengineering Work Through Information Technology

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"One of the most visible examples of innovation, one that few people truly understand, is the profound impact of a successful electronic medical record"

Source: David L. Bernd, FACHE, CEO Sentara Healthcare & Peter S. Fine, FACHE, CEO Banner Health
Frontiers of Health Services Management, Fall 2011

Bruce Vanderhoff, MD, MBA

Chief Medical Officer

OhioHealth

What is The One Thing that will impact Innovation?

"Realize the promise of electronic health records"

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- Healthcare organizations will spend more than $34.5 billion on healthcare IT in 2014 to keep pace with healthcare regulations Source: Clinical Innovation + Technology, Aug. 29, 2013
- The federal government has contributed $24.5 billion in meaningful use incentive payments as of August 2014 Source: cms.gov

"Does EHR Emperor Have Clothes?"

Forbes

The Staggering Cost Of An Epic Electronic Health Record Might Not Be Worth It

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"Does EHR Emperor Have Clothes?"

"A colossal strategic error occurred as a result of the HITECH incentive program. The vast sum of stimulus money flowing into health information technology created a 'race to adopt' mentality—buy the systems today to get government handouts, but figure out how to make them work tomorrow,"

Source: David J. Brailer, MD, PhD, the nation's first health information czar

Reasons for EHR dissatisfaction involved lost productivity

- Too much time on documentation (85 percent)
- Seeing fewer patients (66 percent)

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VERIZON FOR HEALTHCAR

Mike Miliard, Managing Editor

Mike Miliard is Managing Editor at Healthcare IT News. Mike covers topics such as health information exchange privacy and security, analytics and ICD-10. Follow Mike on Twitter @MikeMiliardHITN.

Docs blame EHRs for lost productivity

Also ding them for inappropriate user interfaces, inefficient processes and more

FRAMINGHAM, MA | November 14, 2013

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Nearly 60 percent of ambulatory providers surveyed for a new IDC Health Insights report say they're unsatisfied with the electronic health records, citing frustrations with usability and workflow.

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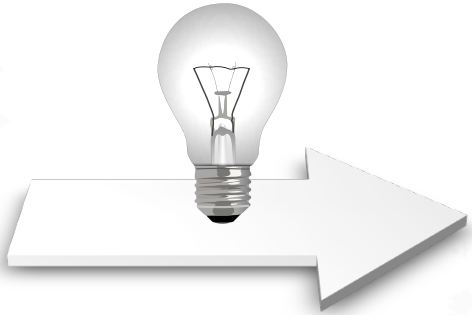

Today

Tomorrow

Care delivery is <u>fragmented</u>, enabled by "bricks & mortar" and paper, and focused on <u>volume</u> and the needs of the <u>provider</u>

Care will be coordinated through a <u>patient centric</u>, connected <u>care management platform</u>. <u>Value</u> will be measured and rewarded

Disruptive change & innovation will not be easy

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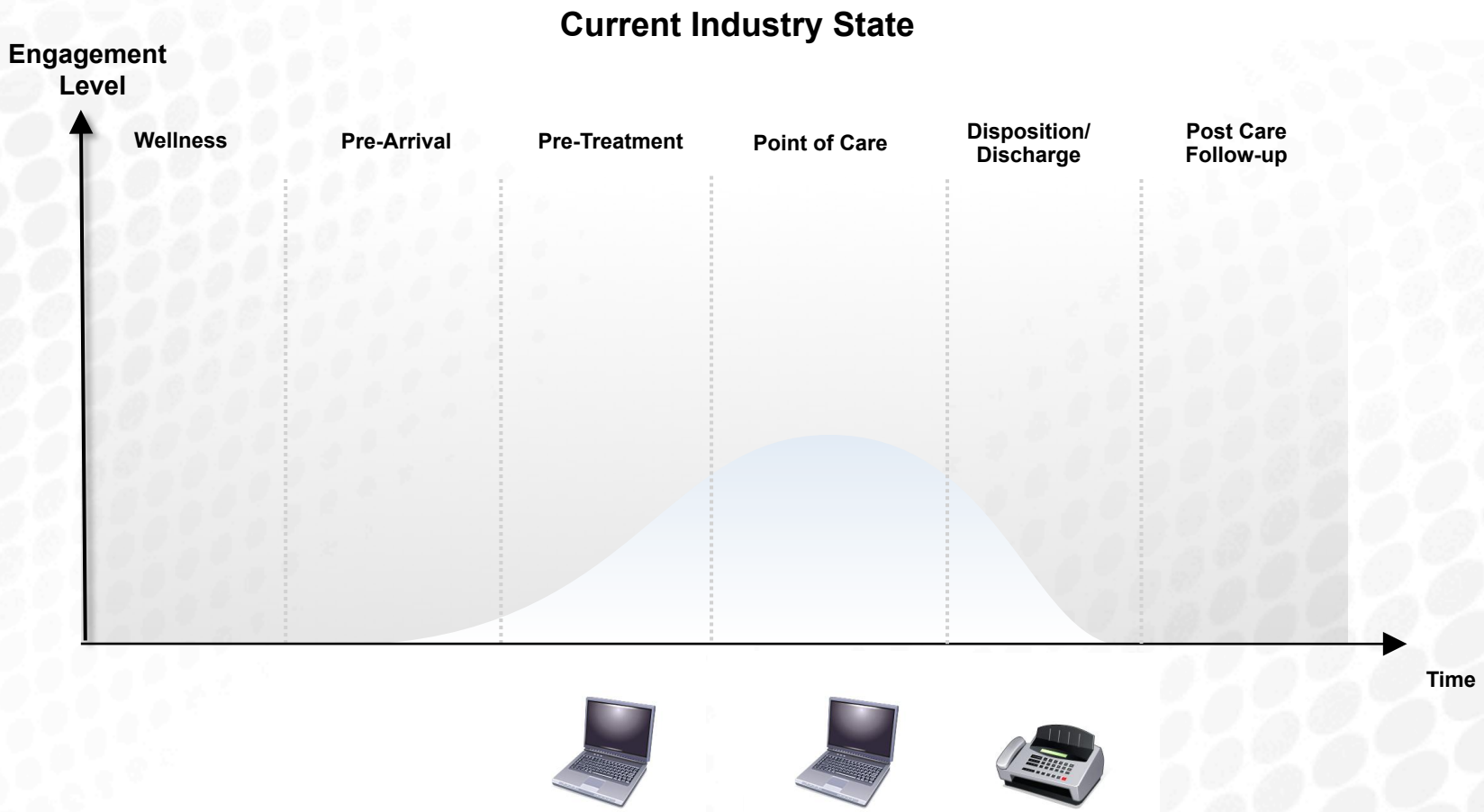

"Only 2% of respondents indicated that healthcare consumer issues were a top clinical IT focus"
Source: Glaser, commenting on HIMSS Survey in HH&N Daily, May 2013

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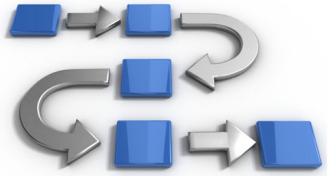
Immediate Future State

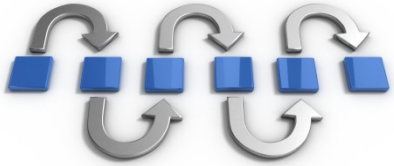
Engagement Level

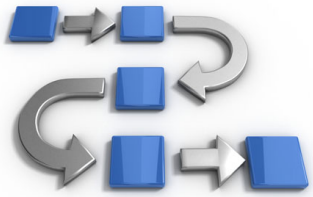
Wellness | Pre-Arrival | Pre-Treatment | Point of Care | Disposition/ Discharge | Post Care Follow-up

Digital and Interactive technologies, plus redesigned processes and staff roles & responsibilities will improve satisfaction, adherence and "self-service"

Time







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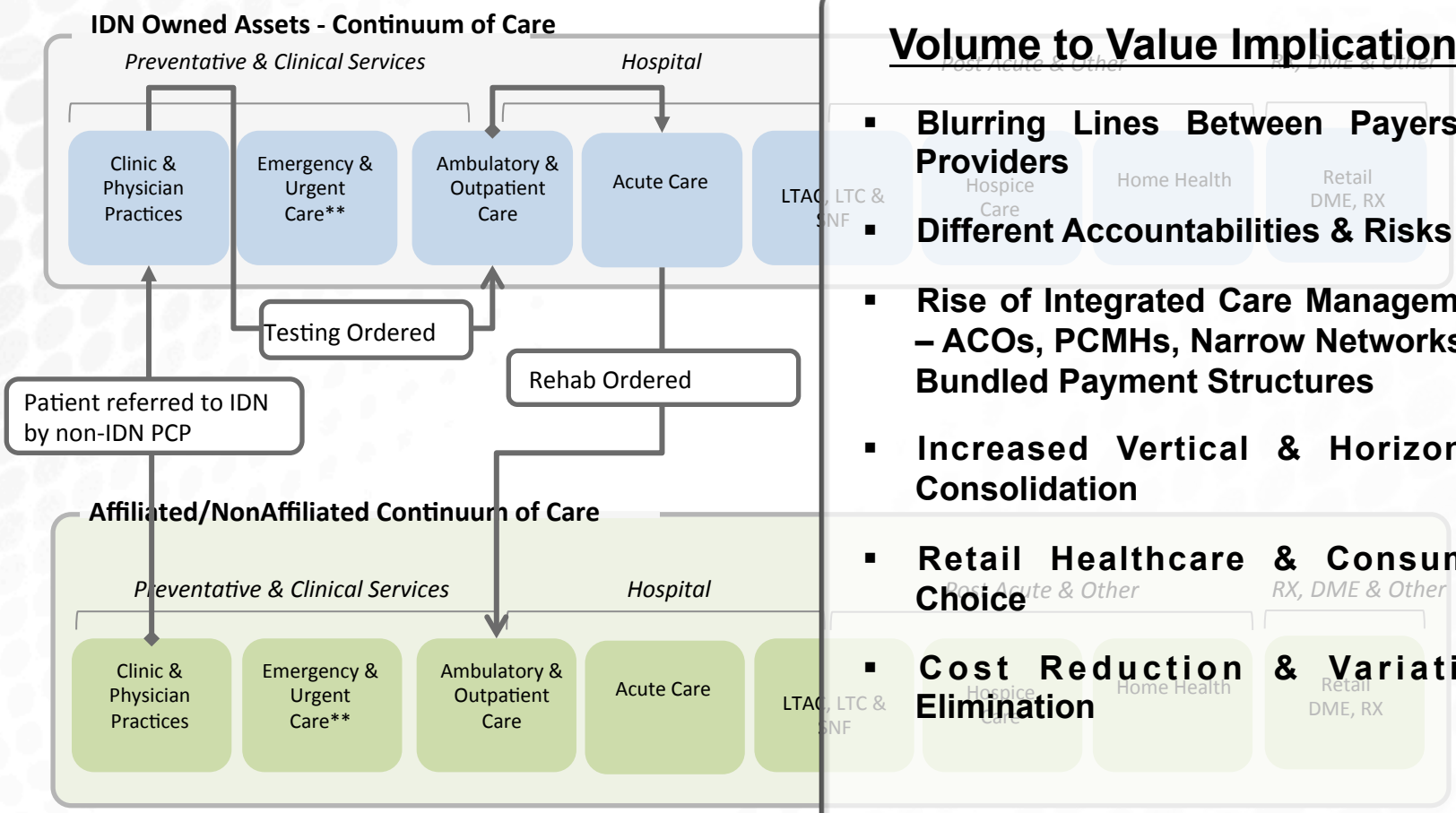

Volume to Value Implications

- Blurring Lines Between Payers & Providers
- Different Accountabilities & Risks
- Rise of Integrated Care Management – ACOs, PCMHs, Narrow Networks, & Bundled Payment Structures
- Increased Vertical & Horizontal Consolidation
- Retail Healthcare & Consumer Choice
- Cost Reduction & Variation Elimination

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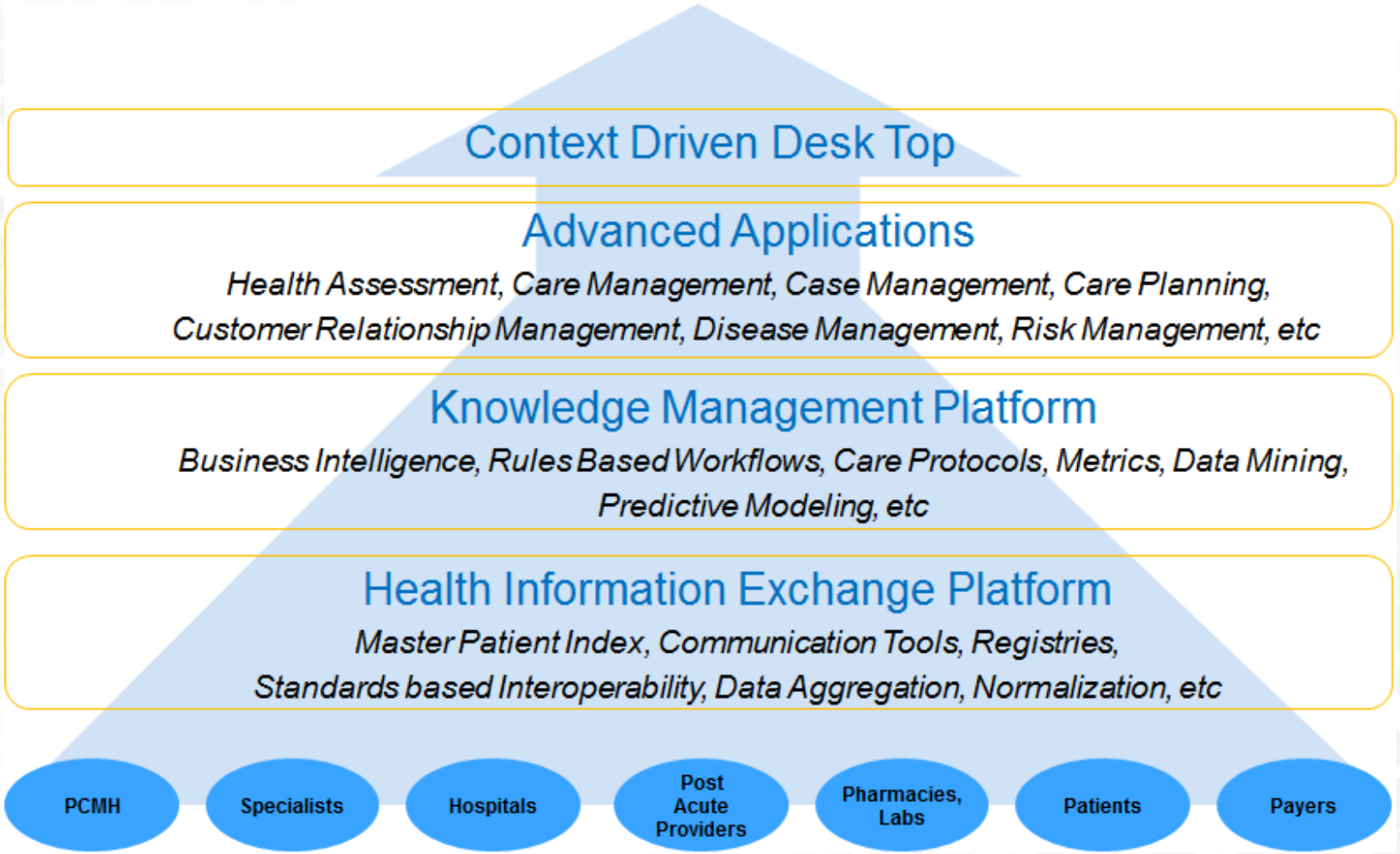

The Care Management Platform Must Align With Enterprise Strategy

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Rethinking
the
Value of HIT

The Value of IT

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Definition of IT Value

$$\frac{\text{The Degree of Change in the Business}}{\text{Total IT and Business Investment}}$$

Source: "Return on Investment: Maximizing the Value of Healthcare Information Technology" Arlotto, Oakes 2003

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ROI/Value is Essential

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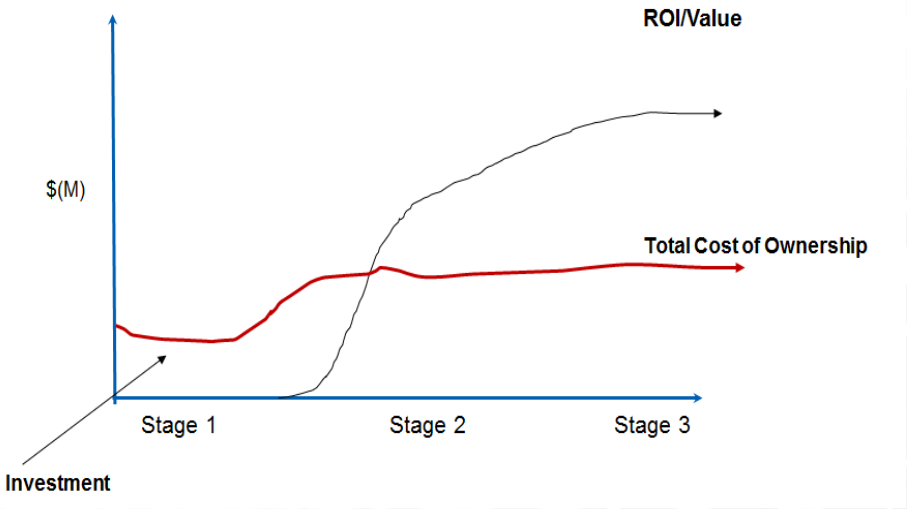
Meaningful Use Incentives Are Not Enough

- Incentive payments only cover 20-25% of costs
- Purpose of thresholds in Stage 1 are to demonstrate implementation of functionality – not immediate impact on outcomes
- RAND Research – Stage 1 MU thresholds electronic orders for EH (30% of pts.) is too low to have impact on deaths from heart failure/attack. Stage 2 levels are more consistently associated with lower mortality
- Leadership must determine whether their overall benefit goal is:
  - Compliance only *or*
  - Value improvement



Source: Jones, et al. Today's 'Meaningful Use' Standard For Medication Orders By Hospitals May Save Few Lives; Later Stages May Do More" Health Affairs, September 2011.

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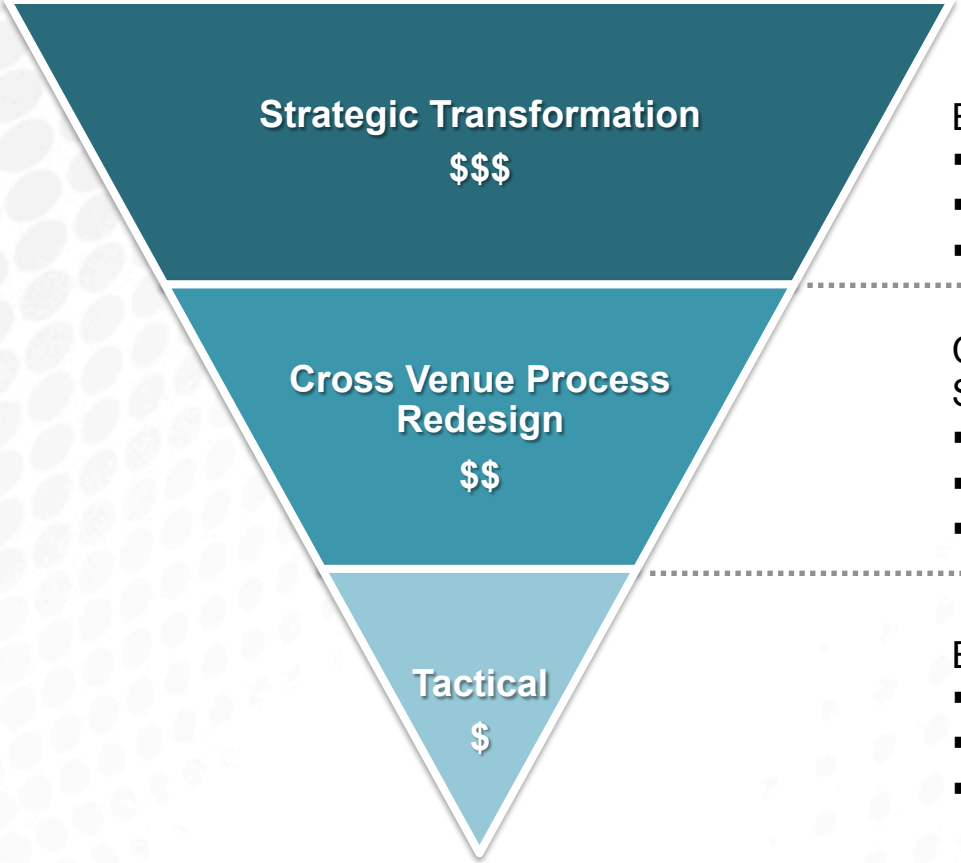
3 Levels of Value Realization



Business Model Redesign/Innovation (e.g., PCMH)

- Systemic, Holistic, Breakthrough Change
- New Care Delivery Models
- New Reimbursement Methods

Continuum Based Lean Value Mapping (e.g., Service Lines, Orders Management)

- Standardization
- Analytics
- Data Exchange

Benefits through Automation:

- Optimization of the EHR
- Silo based Quality Initiatives
- Incremental Performance Improvement

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Without A Structured Value Management Process

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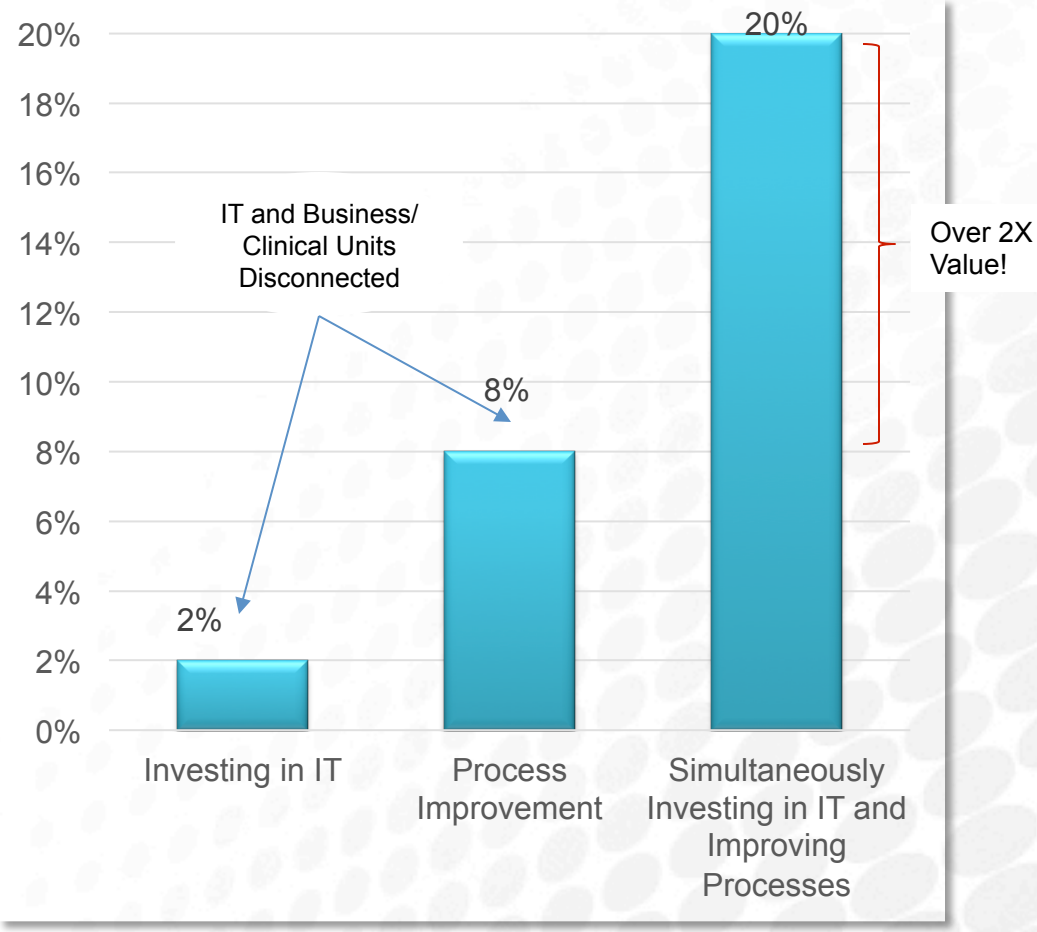
….three things happen

- The technology becomes the focus which leads to limited impact on value
- Aspiration does not translate into performance
- Broken processes, organization models, decision making structures and culture can derail even the most sophisticated software solutions



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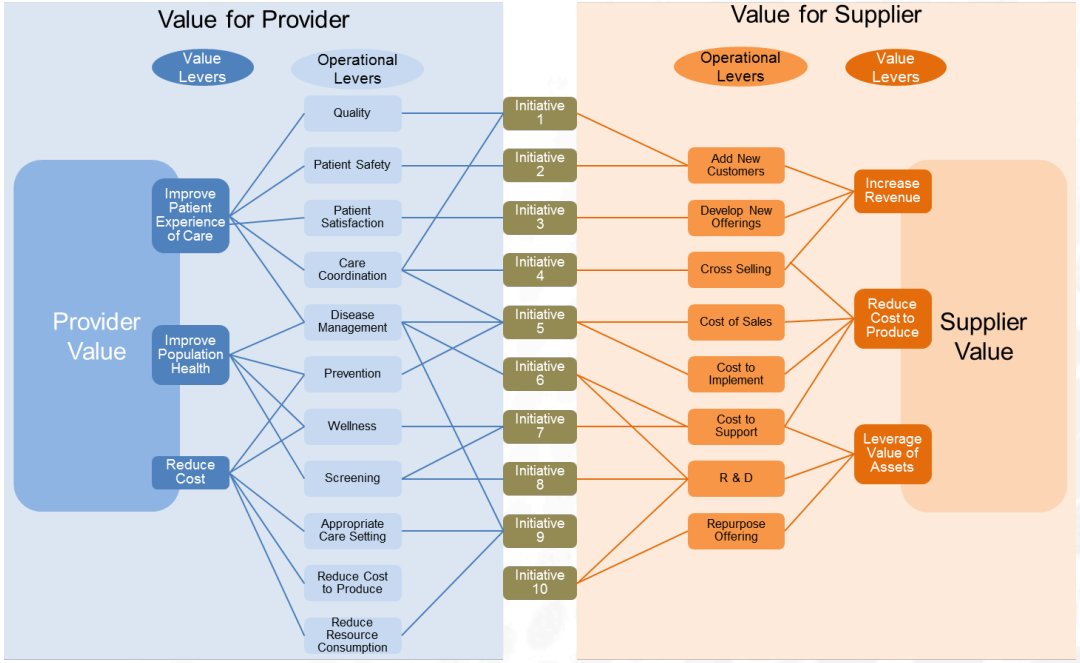
What We Have Learned….

- Value must be managed into reality
- Technology is a means to an end, not the ultimate goal
- Strategic prioritization is essential
- Value should be patient centered
- Clinicians and healthcare business leaders must be accountable for value realization
- New governance, decision making and leadership structures are needed to drive value realization

Value Management Strategy



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Consistent Themes

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- Value is about change
- Value must be managed into reality
- Technology is a means to an end, not the ultimate goal
- Value should be patient centered
- Clinicians and healthcare business leaders must be accountable for value realization
- New governance structures and leadership skills are needed to drive transformation
- Value realization requires measurement

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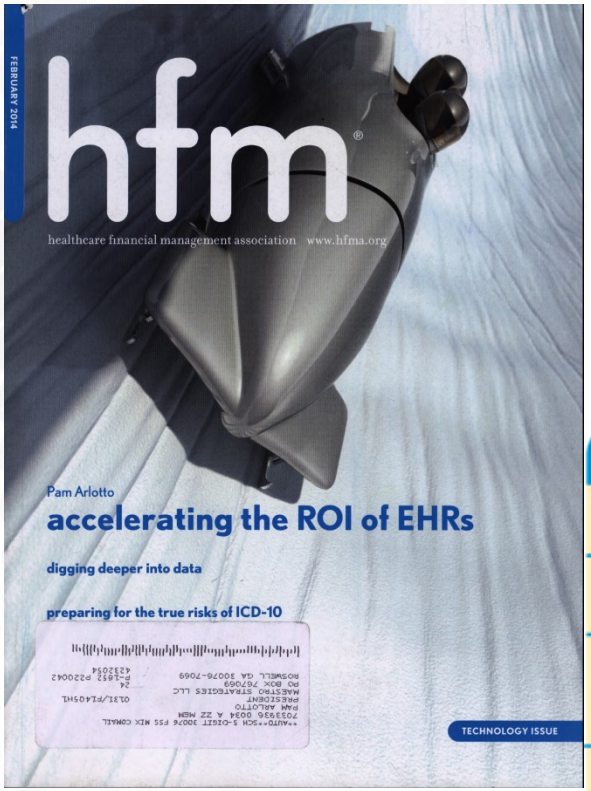
ROI:
Letting Go Of Our Beliefs

Next Generation Value Realization



ACHIEVING ROI FROM EHRs: THE VALUE OF VARIOUS APPROACHES

Modest ROI	Next-Generation Value Realization
Organizations implement the electronic health records (EHRs), then optimize.	Organizations seek to optimize business and clinical results through value realization.
The chief medical information officer (CMIO) is charged with making the EHR work.	Physician leaders, such as the chief medical officer and the chief transformation officer, work with the CMIO to be accountable for value.
Success is measured by whether the project is "on-time" and "on-budget."	"On-value" and "speed to value" will be critical measures of success.
Lean Six Sigma is the silver bullet.	Lean will be combined with other methodologies to drive breakthrough innovation, performance improvement, and change.
ROI is difficult to calculate and too time-consuming to determine.	Financial, clinical, business strategy, and IT leaders will work together to create an organizational value management strategy and approach.

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Belief #1: Implement the HIT System, then Optimize

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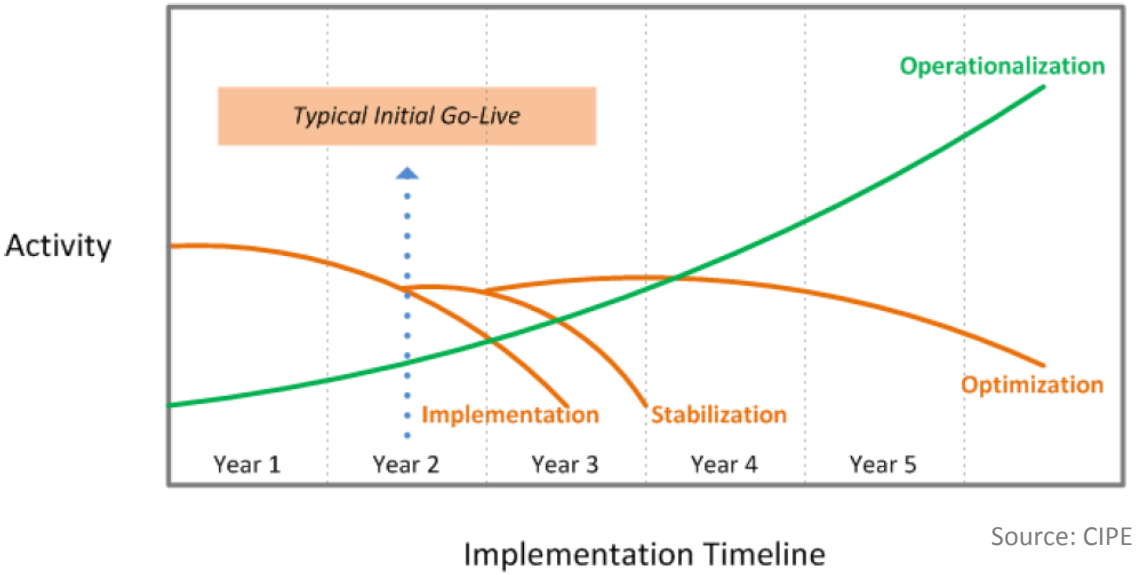
Multi-Year Implementation Timeline



Source: CIPE Consulting, Derek Garrison

- Optimizing technology does not guarantee business or clinical results
- Focuses on important activities: deploying un/under used technology, customizing workflows, expanding reporting, etc.
- Often does not include the strategy integration; care delivery and process redesign; information integrity; cultural and organizational change management; cost reduction….work needed for Value Realization

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Belief #2: IT is Responsible for Making the HIT System work

In the case of the EHR….

- CMIO 1.0 was cheerleader, doctor "police", IT analyst, workflow designer, one-on-one support….tactical
- CMIO 2.0 is responsible for "harvesting the value from information, analytics and communications technologies….process
- CMIO 3.0 will be the organizational leader around change management and enterprise transformation from volume to value… strategic

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Belief #2: IT is Responsible for Making the HIT System work

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In the case of Revenue Cycle Management....

Traditional RCM	Next Generation RCM
Back end processing	Front end processing
Static Worklists	Exception Driven, Online Worklists
Management of AR—billing, collecting, and denials management	Denial Avoidance and Appropriate Utilization
Historic Data Reporting	Real time, Embedded Analytics
Multiple Bolt On Systems and Applications	Integrated Revenue Management Solutions
Business Office Based	Point of Service, Role and Context Based
Interfaces	Integration
Incremental Revenue with CDI focused on revenue management	CDI focused on managing quality and high risk patients

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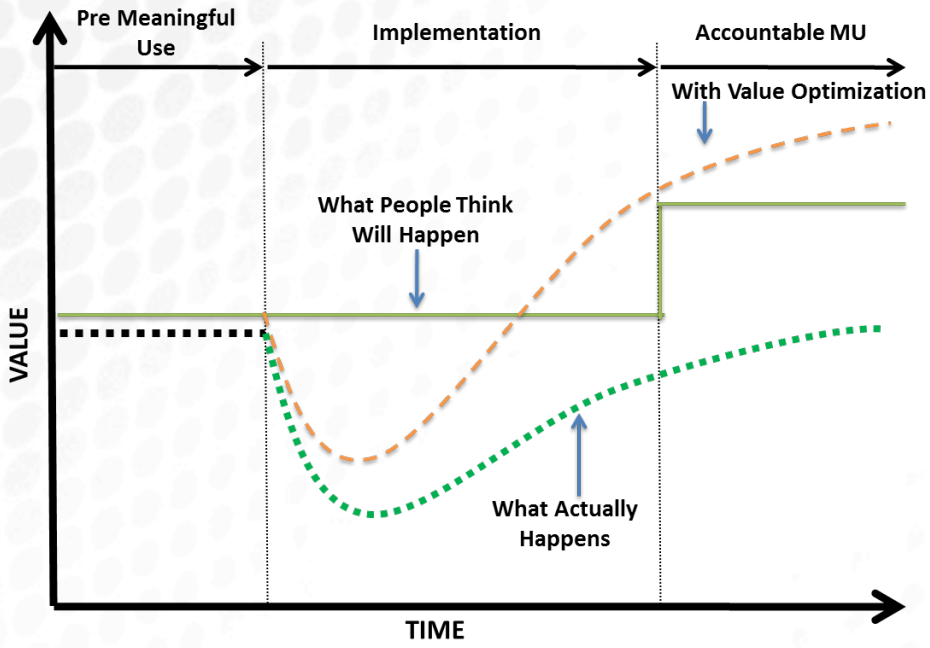
Belief #3: Success is Measured By "On Time-On Budget"



- Success has been focused on an "event" – "go-live"
- Vendors focus on enabling feature & functionality, not outcomes or cost reduction
- Financial, clinical and business leaders have little input regarding ultimate measures of success

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Belief #4: Lean Six Sigma is the Silver Bullet

Readmission Reduction – *"No silver bullet"*

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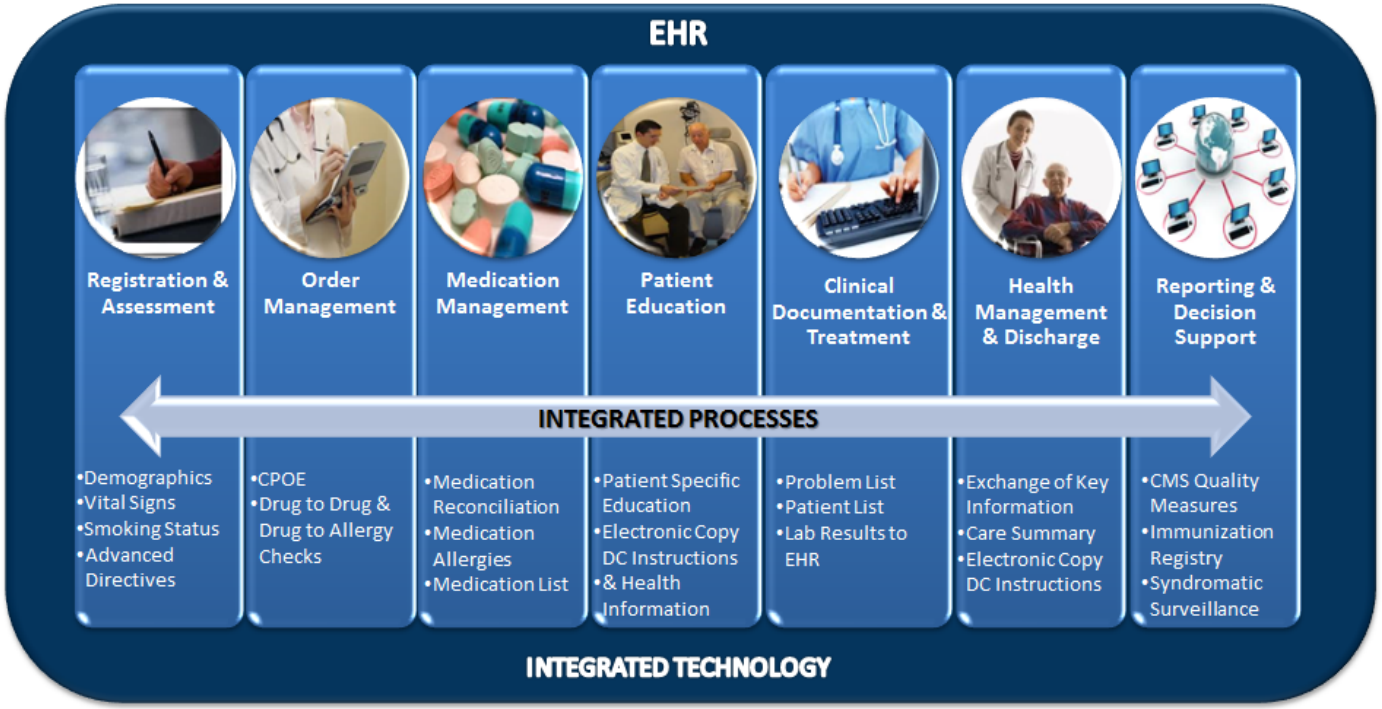
Belief #4: Lean Six Sigma is the Silver Bullet



- Lean Six Sigma focuses on eliminating waste – prevention of medical errors, reducing LOS, improving quality
- Encourages incremental improvement
- Limited integration with technology deployment
- Will not address significant transformation, innovation or care model redesign

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Belief #5: ROI is Difficult to Calculate & Too Time Consuming to Determine

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	Total Studies	Cost Reductions	Fewer ED Visits	Fewer Inpatient Admissions	Fewer Readmissions	Improvement in Population Health	Improved Access	Increase in Preventive Services	Improvement in Satisfaction
PEER-REVIEW/ACADEMIA									
Reported outcomes	(n=13)	61% (n=8)	61% (n=8)	31% (n=4)	13% (n=1)	31% (n=4)	31% (n=4)	31% (n=4)	23% (n=3)
INDUSTRY REPORTS									
Reported outcomes	(n=7)	57% (n=4)	57% (n=4)	57% (n=4)	29% (n=2)	29% (n=2)	14% (n=1)	29% (n=2)	14% (n=1)

Source: Patient Center Primary Care Collaborative, Annual Evidence Update, January 2014

"Provider organizations understand that, without a change in their model of doing business, they can only hope to be the last iceberg to melt. Facing lower payment rates and potential loss of market share if they charge higher prices, they have no choice but to improve value and be able to "prove it."

Source: "The Strategy That Will Fix Health Care" by Michael E. Porter and Thomas H. Lee . HBR, Oct 2013

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Value Realized?

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Organization	Savings Category	Savings Realized/ Projected
Kaiser	• Reduction in operating costs • Increased Revenue • Reduction in capital expenditure	$2 Billion over 10 Years
Sentara	• Reduced LOS • Reduced Adverse drug events • Shift to outpatient	$48.5 million in 2010
VA	• Reduced workload • Increase in available space • Utilization reduction	$287 million annual net value

Source: Institute of Medicine "Return on Information: A Standard Model for Assessing Institutional Return on Electronic Health Records" January 2014

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Affected Stakeholders

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Stakeholder	Benefits
Provider	• Improvements in operational efficiency and quality that reduce direct and indirect costs of patient care delivery and other administrative operations • Organizational receipt of bonus payments related to the direct implementation of the EHR • Facilitation of quality measurement, reporting, and improvement so as to receive bonus payments (e.g., value-based purchasing) or avoid penalties (e.g., readmissions) • More accurately capture charges • Facilitate risk adjustment • Improvement of patient satisfaction, with expected outcome of positive volume impact on high-performing organizations
Patients & Their Families	• Decreased cost sharing • Improved health outcomes • Improved patient safety • Improved patient satisfaction through increased patient engagement • Improved productivity at work as a result of improved outcomes or increased efficiency of the delivery system • Reduced time coordinating care
Employers	• Reduced workload • Increase in available space • Utilization reduction • Reduced time of employees away from work
Physicians/ Care Providers	• Allows them to be more efficient (e.g., reduces documentation time) • Expedites results reporting • Eliminates redundant testing • Helps identify and eliminate non-value-added care processes • Facilitates care coordination
Purchasers	• Improved aggregate efficiencies (better throughput) • Direct reduction in the cost of patient care, through improved quality

Source: Institute of Medicine "Return on Information: A Standard Model for Assessing Institutional Return on Electronic Health Records" January 2014

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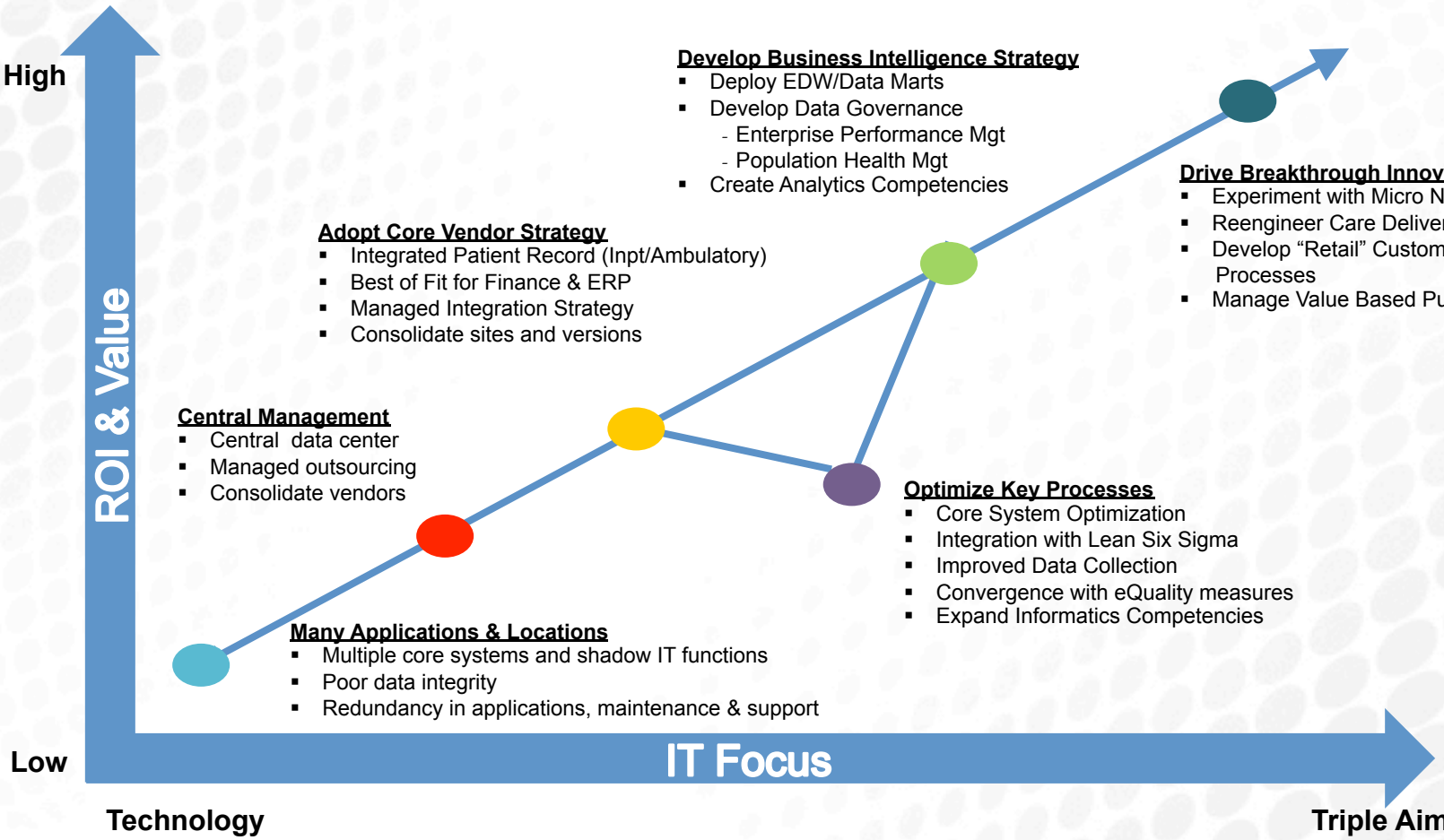
PRACTICAL Take-Aways
NEXT EXIT

Take Away: Plan for Value Creation & Realization



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Take-Away: Develop A Value Realization Framework

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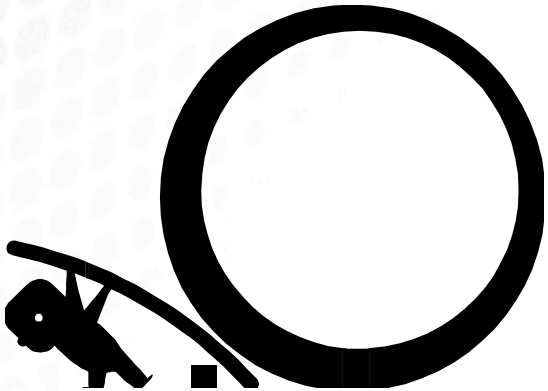
Phase One: Understanding Value Opportunities

Phase Two: Value Planning

Phase Three: Value Realization



Identify Value Levers

- What is the desired outcome?
- What actions will be required to achieve this outcome?
  - Culture
  - Process
  - Change management
  - Role of technology

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Take-Away: Leverage Data as a Strategic Asset!

- Look across the enterprise to integrate information from all sources
- Work collaboratively with informatics, analytics, quality and process improvement
- Plan for and execute data governance structures and processes to ensure data validity, accuracy and completeness

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Take-Away: Identify New Leadership Models

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Chief Innovation Officer

CMIO

Vice President Clinical Transformation

CNIO

Clinical Champions

Dyad – CEO/MD

Chief Quality Officer

CIO/CMO

Enterprise Program Management

Change Management
Process Redesign
Project Management
Reporting
Problem Tracking
Best Practice Repository
Evidence Library
Standards
Localization Methods

"As we look at doing more with less, the solution is to ask how we do things differently. That's where chief innovation or transformation officers come in. They look at things with different eyes"

Joanne Conroy MD, AAMC

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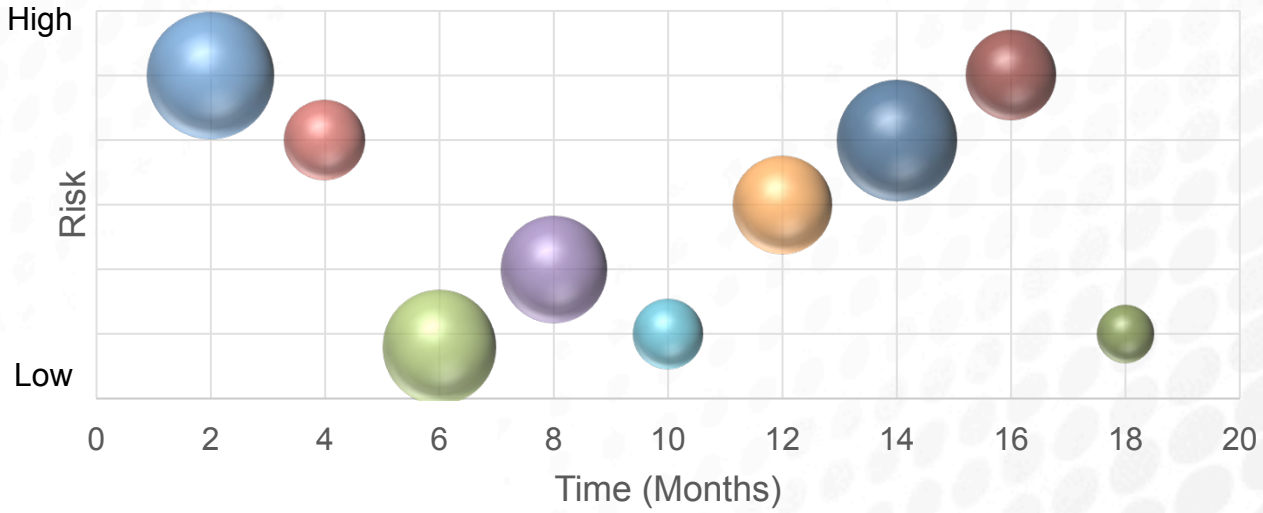
Take-Away: Prioritize Change

MAESTRO STRATEGIES

Cross Venue Process (6 months – 18 months) $$$

Return on Investment /Value Realization Opportunities

- Access Management
- Care Planning
- Order Management
- Scheduling
- Medication Management
- Diagnostics, Testing & Medical Interventions
- Clinical Documentation
- Patient and Family Engagement
- Clinical Communications
- Transitions Management
- Demand Management
- Throughput Management
- Care Protocol Development
- Outcomes Management
- Revenue Management
- Clinician Satisfaction
- Patient/Member Satisfaction
- Risk Management
- Patient Safety
- Regulatory Compliance



Use existing solutions in new ways & introduce brand-new business models

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Take-Away:
IT Must Provide Multiple Forms of Value

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Impact	IT Capabilities	Explanation
Automation	**Transaction Systems**	The focus of most ROI and value realization discussions. Goal is to reduce human labor from a process. Most often seen in "closed loop systems" such as medication management
Informational	**Clinical Decision Support**	Systems that seek to improve point of care decision making around diagnosis, treatment, prevention and disease management.
Stratification	**Registries**	Applications that identify patients with specific conditions and track disease status
Geographic	**Access Mgt. & Telehealth**	Coordinate administrative and care processes across distances
Coordination	**Health Information Exchange**	Integrate data across multiple processes and functions
Communications	**Team Care & Transitions of Care Mgt.**	Tools that allow providers to record, share and track care plans and medical interventions across venues of care
Analytical	**EDW, Visualization, Performance Mgt., Population Health Mgt.**	Ability to determine performance across spectrum of care for individual patients and populations. Includes clinical and cost of care measures.

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Key Take-Aways: IT Must be Part of the Redesign of the Care Delivery Model

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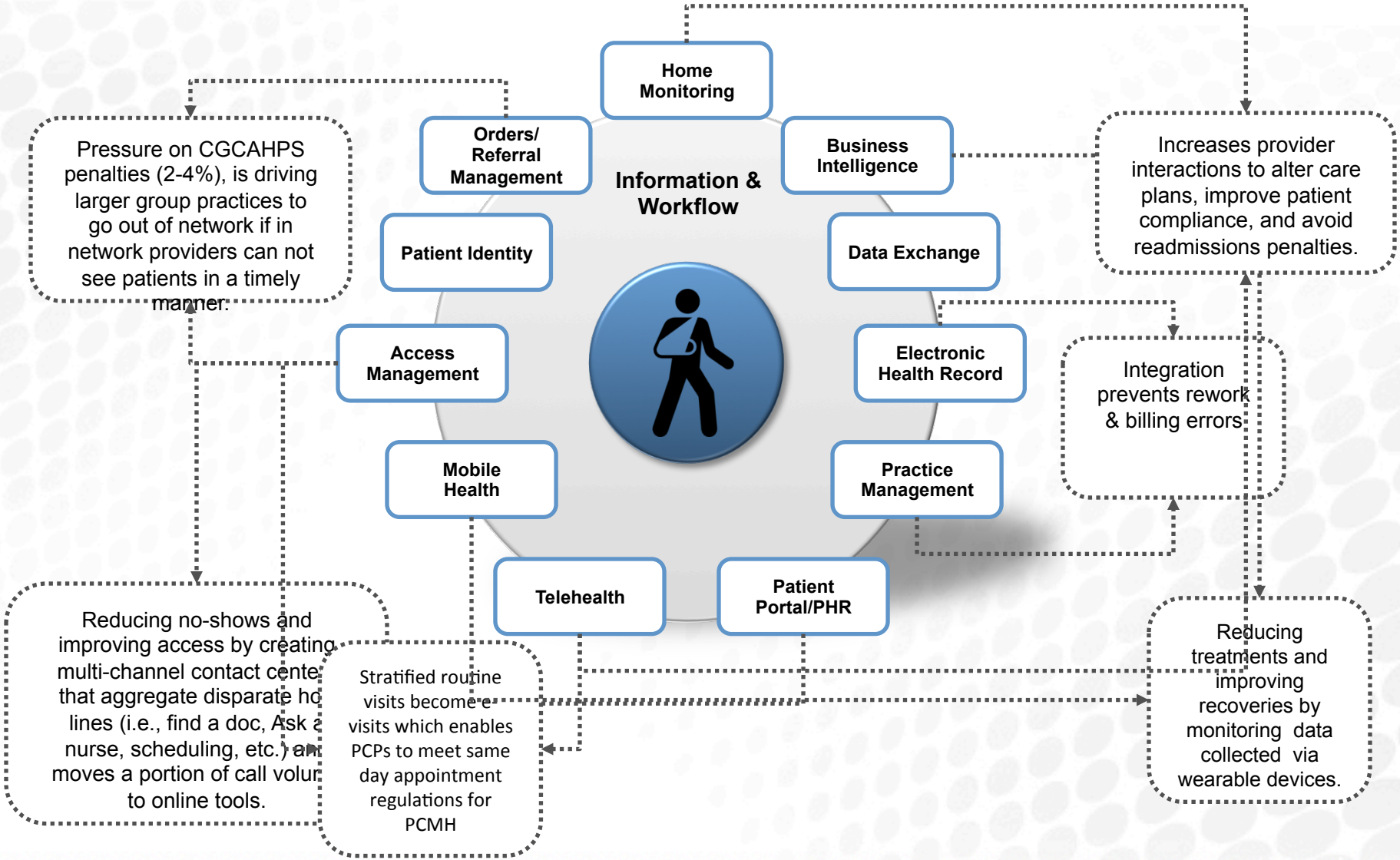

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Questions or Comments:

Susan Irby
sirby@maestrostrategies.com
770-587-3309x203

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