

Capital Spending & Strategic Priorities

Moving from a Game of Chance To Calculated Risk

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Phoenix, AZ

Healthcare Reform

Patient Protection and Affordable Care Act



Track 1

Cuts to Existing FFS System

- Market basket reductions
- DSH cuts
- P4P & Nonpayment for anything preventable or unnecessary

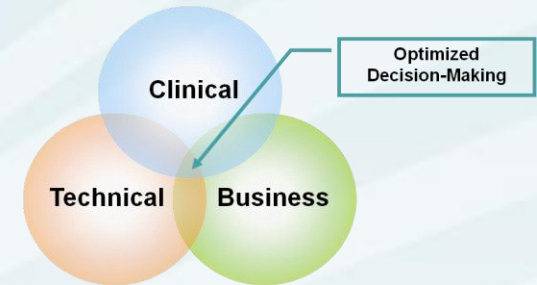
Track 2

Disrupt Existing System

- Bundled Payments
- Innovation Center/ demonstrations
- ACOs

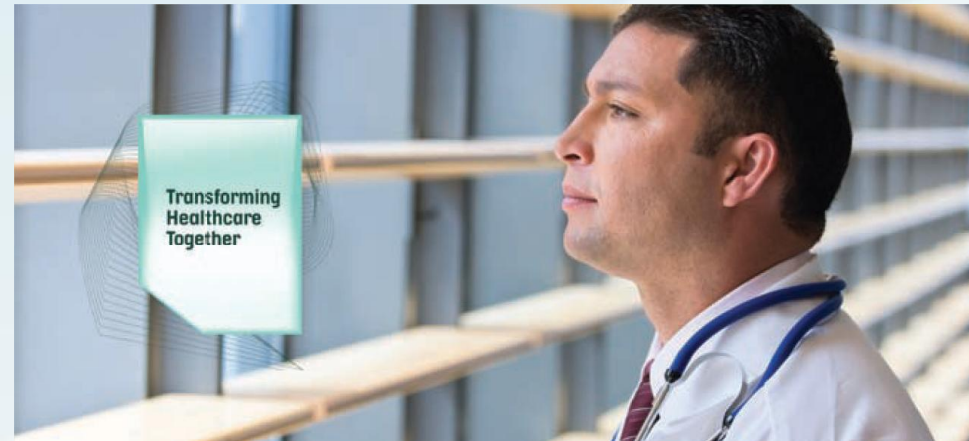
The importance of a clinical capital strategy

- The medical equipment decisions made across the continuum have multiple effects on a health care organization. The overarching goal is to improve the overall cost of care within a sustainable environment.
- A critical competitive edge in today's evolving healthcare environment is the ability to view services and technologies comprehensively, including the interrelationships of clinical, technical, and administrative decisions.
- The manner in which a healthcare organization evaluates, selects, and supports clinical capital equipment is integral to the multi-year replacement strategy. Applying effective tools, techniques, and practices in these areas directly impacts the successful implementation of the plan.



Back to basics ...

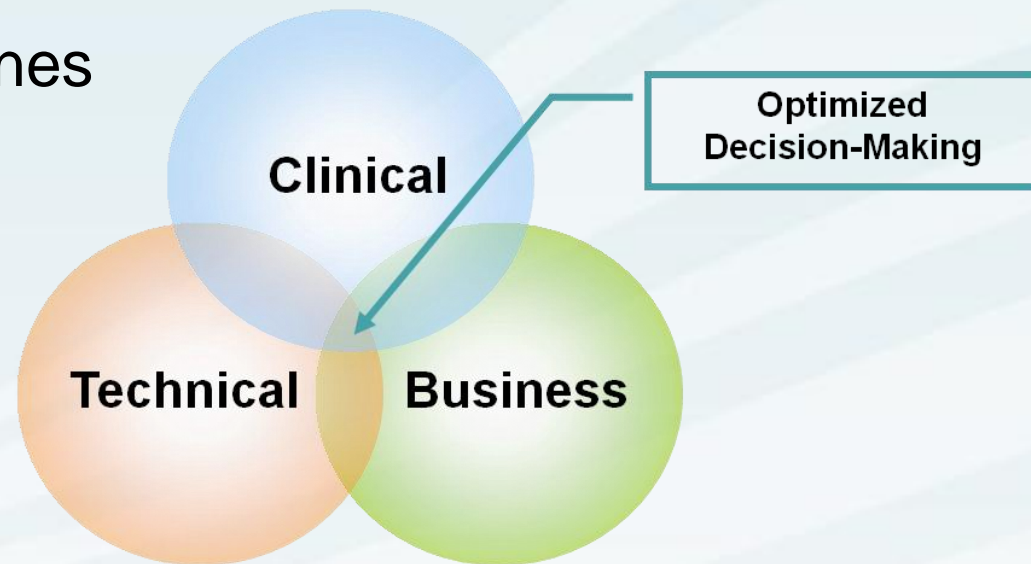
- Manage finite resources
- Audit existing technologies
- Plan for replacement
- Assess new technologies
- Set priorities
- Develop a process



... strategic technology planning

Who are your stakeholders?

- C-suite
- Supply Chain Mgmt
- IT Services
- Clinical Depts / Service Lines
- Risk Mgmt / Safety
- Clinical Engineering



Subjectivity vs Objectivity

- Quantifiable
- Specific
- Reproducible
- Designed / Engineered



Strategic Clinical Technology Planning

- **Assessment methodology**
 - *Technologies of Interest*
 - *Defined criteria*
- **Risk Mitigation & Patient safety**
 - *End-of-Life status*
 - *Technology management strategies*
 - *Clinical deployment*
- **Technology plan**
 - *Executive Summary*
 - *Financial*
 - *Clinical*
 - *Technical*



Probable need to replace within next 1-2 yrs

Probable need to replace within next 3-5 yrs

Low probability of replacement within 5 yrs

Scoring & Prioritizing

Technology

- 1 = New / Cutting Edge*
- 2 = Mainstream*
- 3 = Obsolete*

Utilization

- 1 = Low*
- 2 = Average / Routine*
- 3 = High*

Service

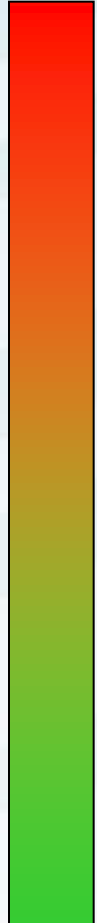
- 1 = Low Cost*
- 2 = Average / Expected Cost*
- 3 = High Cost*



Example #1

Electrosurgical Generators

Technology?
Utilization?
Serviceability



Images provided by Covidien.

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Imaging Technology

- **Technology**
 - State of the Art?
 - Demand vs Use
 - Analog, Digital or Specialty
- **Utilization**
 - Functionality & Capacity
 - Volumes
 - Appropriateness
 - Location & User
- **Serviceability**
 - Cost



Example #2

16-slice Computed Tomography

Technology?
Utilization?
Serviceability



Images provided by Toshiba America Medical Systems, Inc., Philips Medical Systems, and GE Healthcare.

Electronic Health Record Incentive Program

CMS/HHS final rule – July 28, 2010



Implementation of electronic medical records (EMR) and electronic health records (EHR)

EMR = The electronic record of health-related information on an individual that is created, gathered, managed, and consulted by licensed clinicians and staff from **a single organization** who are involved in the individual's health and care.

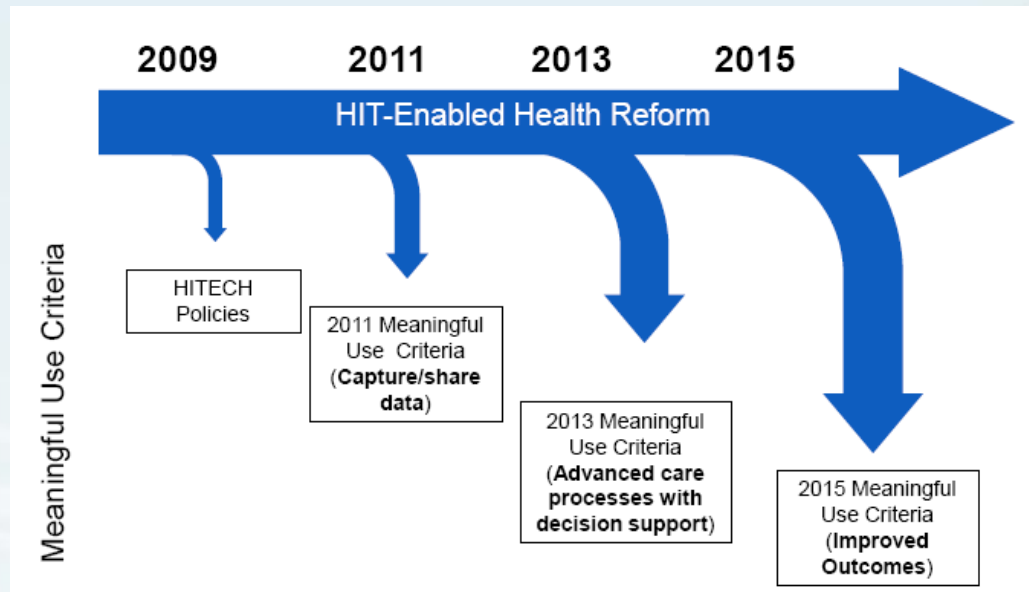
EHR = The aggregated electronic record of health-related information on an individual that is created and gathered cumulatively **across more than one health care organization** and is managed and consulted by licensed clinicians and staff involved in the individual's health and care.

National Health Alliance for Health Information Technology (NAHIT) – Organization disbanded in August 2009, stating “mission accomplished” as HIT had moved to the forefront to reinvent and reinvigorate the US health system.

Electronic Health Record Incentive Program

CMS/HHS final rule – July 28, 2010

- **STAGE 1– Data Capture & Sharing, effective 2011**
- STAGE 2 – Advanced Clinical Processes, to be published in 2013
- STAGE 3 – Improved Outcomes, to be published in 2015



CMS / HHS Electronic Health Record Incentive Program – Final Rule *Federal Register* / Vol 75, No 144 / Wednesday, July 28, 2010 / Rules and Regulations

Interoperability:

A popular buzz word with many interpretations

- A good definition for interoperability is... **“the ability of a system or a product to work with other systems or products without special effort on the part of the customer.”**
-- Bridget Moorman, CCE (Bmoorman Consulting, LLC)
- Successful implementation of interoperability requires defined objectives and measurable goals as well as a complete and well maintained physical inventory of the applicable equipment items to include networking, device driver and infrastructure environment characteristics for each device.

FACILITY:

Facility	Excellent	Good	Avg	Poor	None
A		0.00%	100.00%	0.00%	0.00%
B		100.00%	0.00%	0.00%	0.00%
C		0.00%	12.86%	57.14%	30.00%
D		13.43%	28.89%	15.64%	42.04%
Grand Total System		12.22%	26.06%	14.80%	46.92%

DEVICE CATEGORY:

Device	Excellent	Good	Avg	Poor	None
AED		0.00%	37.35%	46.99%	15.66%
ALARM/CENTRL/PATIENT		4.00%	12.00%	84.00%	0.00%
ALARM/REMOTE/PATIENT		1.46%	94.89%	2.55%	1.09%
ANALYZER/BLOOD		0.00%	1.64%	10.66%	87.70%
ANALYZER/BREATH		0.00%	0.00%	100.00%	0.00%
ANALYZER/GAS/ANESTH		0.00%	0.00%	0.00%	100.00%
ANESTHESIA		98.15%	0.00%	0.00%	1.85%

Interoperability

The Great Unknown

- **Inventory Screening by Device**

- Network interface
- Data interface
- Protocol Interface
- Transport Interface
- Standards used at the interfaces
- Is device part of another system/network



Device	Network capability: Yes-No	Wired - Wireless	Wired Physical: DB9, DB22, RJ45	Wireless: BlueTooth, ZigBee, 802.11Z, IrDA, other	Transport: RS232, TCP/IP, Serial	Data: Proprietary, 11073-10101/10201, 11073-104ZZ	Messaging: HL7 2.5/2.6, HL7 CCD, IHE XDR	Other: Continua Certified, IHE-PCD conformance to specific profile, part of medical network (monitor connected to central station), ICE compliant (ASTM F29.21)
Pulse Oximeter	Yes	Both	RJ45	Bluetooth	TCP/IP	11073-20601/10404	N/A	Continua V 1.0
Patient Monitor	Yes	Wired	RJ45	N/A	TCP/IP	11073-10101/10201	HL7 2.5	Connected to Patient Monitoring Central Station, IHE-PCD-01
Ventilator	Yes	Wired	DB9	N/A	RS232-Serial	Proprietary	N/A	None
Infusion Pump	Yes	Wireless	N/A	ZigBee	TCP/IP	Proprietary	N/A	Connected to Smart Pump Central Station

The Plan

Technical, Clinical & Financial

Microsoft Excel - Sample STP Report 3.xls

File Edit View Insert Format Tools Data Window STP Report Help

Type a question for help

A8 Hospital 1

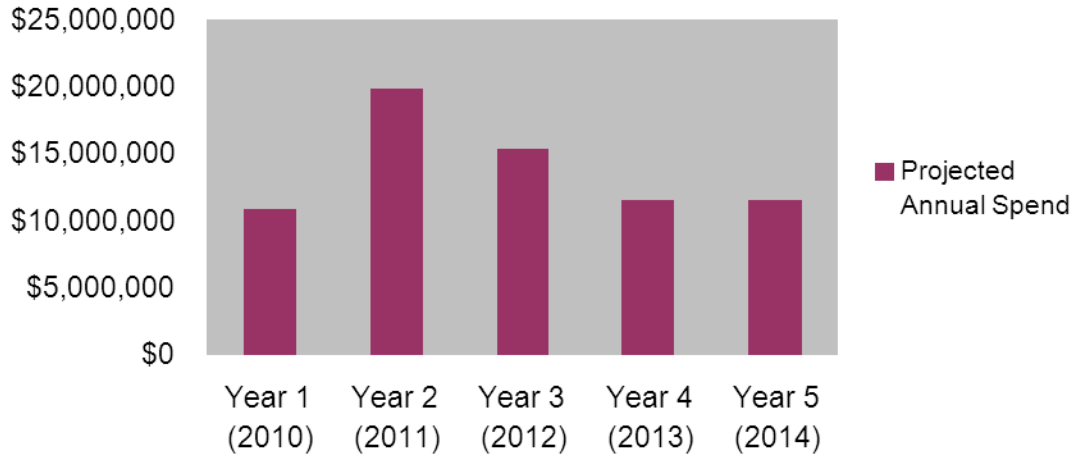
Device Scoring

Entity Code	Clinical Area	Clinical Equipment Category	Clinical Equipment Sub	Product	QTY	Ass	YO	Unit	Sw	Cr	Scm	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Comments
7	Medical	Central Sterile	Automated Endocase Processor	Starr System 1	2	2	2	3	3	+	11						The Starr System 1 units are at least 1 year old.
8	Medical	Special Services	Automated Endocase Processor	Medtronic Model 99-2	1	5	3	3	+	+	11						The Medtronic 99-2 unit of production and has been replaced by the CER-2 counterpoint semi-automated endocase processor.
9	Medical	Special Services	Automated Endocase Processor	Starr System 1	2	2	2	3	3	+	11						The Starr System 1 units are at least 1 year old.
10	Medical	Obstetrical/Neonatal Services	Birthing Bed	Hill-Rom Affinity 2	1	5	5	3	3	+	11						The Hill-Rom Affinity 2 unit of production. Replacement not required within the next 5 years.
11	Medical	Obstetrical/Neonatal Services	Birthing Bed	Hill-Rom Affinity Birthing Bed	1	7	5	3	3	+	11						Based upon the purchase date, it is assumed that this unit is approximately 10 years old. Therefore, it is assumed that there is insufficient information to determine the end-of-life date. Based upon the age of these beds, it is assumed they are Hill-Rom Affinity Birthing Beds.
12	Medical	Obstetrical/Neonatal Services	Birthing Bed	Hill-Rom Affinity Birthing Bed	2	4	2	3	3	+	11						
13	Medical	Medical Imaging	Beam Diagnostic	DEFA System	1	1	1	3	3	+	11						CMO unit
14	Medical	Medical Imaging	Beam Diagnostic	Hologic Lead 19-9	1	5	2	2	3	+	11						4 channels of Series 2000 tray add'l
15	Medical	Medical Imaging	Beam Diagnostic	Hologic Lead 19-9	1	5	2	2	3	+	11						of Series 2000 tray add'l
16	Medical	Medical Imaging	Beam Diagnostic	Hologic Lead 19-9	1	5	2	2	3	+	11						
17	Medical	Medical Imaging	Beam Diagnostic	Hologic Lead 19-9	1	5	2	2	3	+	11						
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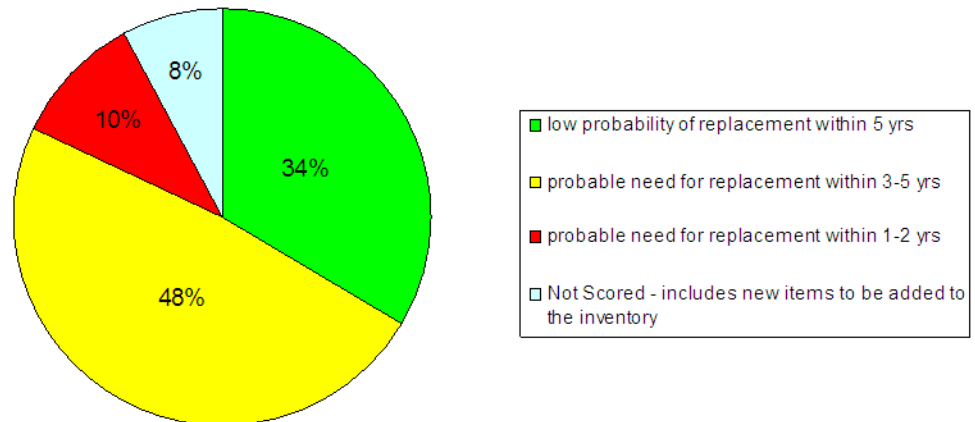
The Plan

Executive Summaries

Projected Annual Clinical Capital Spending



Urgency to Replace (CY 2009)



Operationalizing the Plan

- **Designate an “administrator” for master document control**
 - *For example, your clinical engineering data coordinator*
- **Define a “super user” group**
 - *For example, the Service Line Directors*
- **Apply to the annual clinical capital budgeting process**
 - *Distribute facility and/or dept specific reports*
 - *Update as actions are taken*
- **Use as a resource**
 - *Clinical service line planning*
 - *Facility master planning*
- **Aggregate clinical capital purchases**
 - *Leverage GPO pricing & aggregate purchases*

Premier healthcare alliance

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