

2022 SUMMER CPE SYMPOSIUM: WHAT'S HOT IN HEALTHCARE

The Total Cost of IT

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Introductions



Barry Mathis bmathis@pyapc.com



Agenda



- 1. Before you begin: Things to consider
- 2. TCO vs TCD
- 3. CapEx
- 4. OpEx
- 5. Benching IT Costs
- 6. Best Approach Strategy



Before you begin:

Three reasons for calculating an Information Technology Total Cost of Ownership (TCO)

- 1. Part of an existing culture to manage and align costs with business strategy and growth
- 2. Part of mitigation efforts to optimize spending
- 3. Considering replacing existing EMR

Although cost alignment and containment are traditionally associated with TCOs, we will introduce Total Cost of Decisions (TCD) for those that may be considering an EMR replacement or major enhancement.



Before you begin:

- It is not just the Electronic Medical Record (EMR)
 - There are thousands of factors that can change over the lifetime of a hospital's information systems footprint.
 - Often, CFOs and CIOs are quoted only the license fee of the EMR as an answer to "What is the Cost?"
 - Example: Consider that the license fee of a total EMR replacement may only be 25% to 35% of the CapEx in many cases.
- Cost of Ownership is just an estimate
 - Some systems have an average of 200+ systems and contracts that change over the lifetime of the HIS.
 - Monthly and quarterly variance tracking is absolutely mandatory.

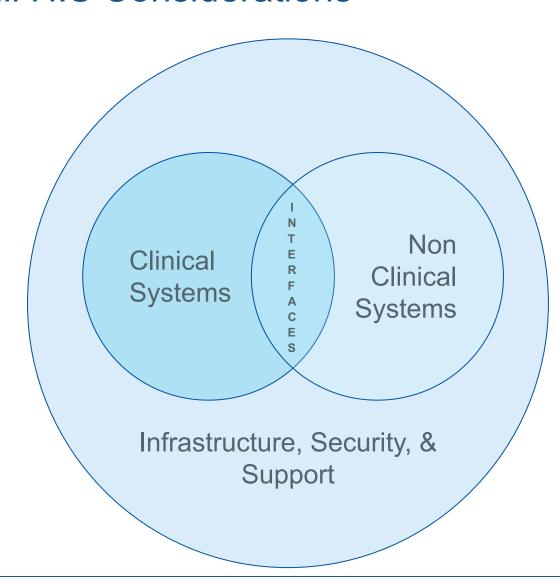


Before you begin:

- Your HIS impacts nearly every business function of your practice or health system.
 - Imagine replacing your body's nervous system while you are trying to run a marathon.
 - Cost containment is as much about reaction as is it is planning.
- You likely have more contracts associated with your HIS than you realize.
 - Not all HIS vendors are immediately compatible with all EMRs
 - Contracts rarely align across the system (some may terminate in the middle of your project)
 - It is EXTREMELY important to get ahead of these contracts before you go public with your project.
 - Once you announce your project, your leverage will rapidly decline.

Full HIS Considerations





- Clinical Systems (EMR, LIS, RIS, PACS, etc.)
- Non-Clinical Systems (ERP, rev cycle, general accounting, etc.)
- Infrastructure, Security, & Support (helpdesk, security, analysts, etc.)

TCO vs TCD



EMR Total Cost of Ownership (TCO)

The **TCO** estimates the expenses associated with purchasing, deploying, using, and eventually retiring your EMR. These costs will include required fees and purchases related to integrated systems throughout your HIS.

- Development (which includes team management, product ownership, quality assurance, DevSecOps)
- Licensing & tooling
- Running infrastructure
- Support & maintenance
- Incidents management
- Security breaches (in loss of reputation and recovery costs)
- Business continuity and disaster recovery
- Regulatory compliance

- Audits
- Training (+ continually onboarding new users)
- Governance
- Decommissioning

TCO vs TCD



EMR Total Cost of Decision (TCD)

The TCD includes the TCO, but also goes beyond to include other elements that will likely impact both CapEx and OpEx.

- ACO attrition (plus or minus)
- Contract payouts or additional contracted vendors required for backfill, runout, etc.
- Interoperability replacements or additions
- Technical Debt Technology stack mismatch (inadequate solution choice or incompatibility)
- Forced application replacements based on incompatibility
- Unique factors related to individual circumstances



POLLING QUESTION #1

CapEx



Different models for different vendors



- Front loaded
 - Typically broken down into:
 - Hardware
 - Software
 - Implementation
- Amortized (SaaS)
 - Most of the CapEx is built into the monthly OpEx fees









- Revenue Share
 - Vendor CapEx and OpEx fees are based on a % of collections/revenue

OpEx



- Dynamic Growth Costs
 - Be careful of contracts that allow charges based on development. Upgrades and regulator costs should be captured statically in the OpEx maintenance fees (keep in mind there could be additional CapEx related to these changes).
- Standard Maintenance Costs
 - Break Fix, Service Support, Upgrades, Enhancements
- Standard Operational Costs
 - Staffing, Subscriptions, Training, etc.
- Other Support Costs
 - New interoperability fees
 - Consulting/Legal fees for mitigation or issue resolution



POLLING QUESTION #2





• IT Expenses as a percentage of revenue can be an indication of your adoption and usage of technology. This is often used by CIOs and CTOs to measure how the organization stacks up against peers or against existing

strategic planning.

IT Spending Ratios Between 25th and 75th Percentiles, by Industry

IT Spend	Discrete	Fin'l	High	Retail	Health
as	Mfg	Services	Tech		care
Percentage	1.4%-	4.4%-	2.6%-	1.2%-	3.0%-
of Revenue	3.2%	11.4%	4.7%	3.0%	5.9%
Per User	\$3,733-	\$13,772-	\$6,191 -	\$3,913-	\$3,157-
	\$9,864	\$26,667	\$11,653	14,685	\$6,143
Per Desktop/ Laptop	\$4,658- \$9,395	\$12,171 - \$23,882	\$5,452- \$9,218	\$4,806- \$13,533	\$3,280- \$7,273

Source: Computer Economics, 2019

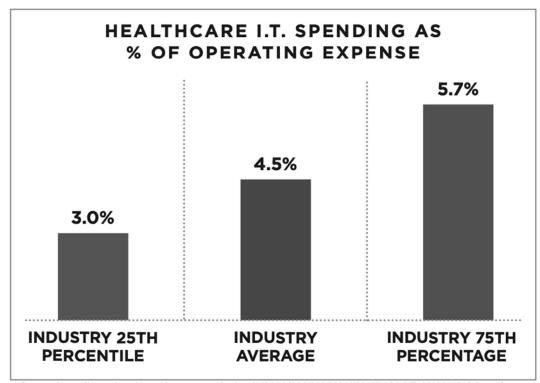
Figure 1



Benching Metrics

 A better benchmark for CFOs is likely the total IT expenses related to total hospital expenses. Typically, organizations with a greater level of IT investment relative to operating expense view IT as a strategic enabler, and this can improve business performance and productivity levels.

> Outliers are likely large Epic and Cerner implementations which can run 2 to 3 percent higher.



Source https://www.jmark.com/wp-content/uploads/2019/09/JMARK-HEALTHCARE-ANALYSIS-lo.pdf

Best Approach Strategy



- Existing TCO calculation
 - Start with Accounts Payable and identify costs to all fees that support total HIS
 - Look for hidden and shadow costs related to maintenance, staffing and support
 - Ancillaries
 - o Public Health Initiatives, ACO growth, Acquisitions, Mergers, Joint Ventures
 - Non-technology Infrastructure
 - New TCD calculation
 - TCO + organizational domain impact
 - o Identify hidden costs related to contracts, decommissioning, third parties and dispute resolution
 - Build true staffing model based on EMR and support applications
 - Plan for interoperability
 - Plan for sunset (get this clear in the contract)



Best Approach Strategy

Organization Number	17401	48556	68584
Section 2. IT Information			
a. IT Operating Expense (include fringe benefit costs for direct IT labor, consulting costs and operating expense portion of IT capital projects)	174,560,000	3,629,689	402,604,465
b. IT Capital (include IT capital from other departments)	34,509,000	1,266,595	128,270,283
c. IT Depreciation	38,642,000	0	94,953,243
d. Number of employed IT FTEs in IT budget	1,012.50	16	1,568.9
e. Number of outsourced IT FTEs in IT budget	3	0	0.0
f. Number of contract IT FTEs in IT budget	5	0	44.8
g. Other IT-focused staff (FTEs) outside IT but not included in 2a above ("Shadow" IT people in other departments who primarily have IT-related duties or titles and who's salary, benefits, etc., are charged to their home departments.	0	4	257.0
h. Expense for Other IT-Focused FTEs outside IT identified in 2g above (include fringe benefits)	0	289,570	24,519,555.6
i. Any other IT expense that is included in other department's budget.	0	0	0
j. Corporate IT Expense Allocation to your IT budget, if applicable (This and the following two questions refer to any allocation to your organization by a corporate parent and may not apply to you.)	No Corporate Parent	0	4,068,778
k. Corporate IT Capital Allocation to your IT budget, if applicable	No Corporate Parent	0	0
I. Corporate IT FTEs Allocated to your IT budget, if applicable	No Corporate Parent	0	4.0
m. Total number of employees supported by IT	38,400	1,010	81,634
n. Total number of users supported by IT	38,400	1,581	190,000

- Do your own work as every healthcare system can have unique circumstances that drive costs.
- There really is no shortcut if you want a true TCO/TCD
- Plan on at least 90 days to analyze and validate data.
- Once you have an accurate TCO/TCD, future analysis can be achieved with a lot less costs and effort.

Source: HIMSS A Unique Approach to Business Analytics:



POLLING QUESTION #3



How Can We HELP?





A national healthcare advisory services firm PYA Providing consulting, audit, and tax services