

# Quick-Hitting Survey IT Structures & Benchmarking

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## Executive Summary

### Methodology

In March 2020, The Health Management Academy conducted a quick-hitting survey of Leading Health Systems (LHS) to better understand health systems information technology (IT) structure, spend, and benchmarking practices. The seven responding IT executives include Chief Information Officers (CIOs), Chief Information Security Officers (CISOs) and Vice Presidents of IT and represent health systems with an average Total Revenue of \$3.14 billion that own or operate 51 hospitals and have approximately 622 thousand admissions per annum.

### Key Findings

- Health system information security teams are comprised of an average of 38 employees, inclusive of cybersecurity, identity and access management, and governance, risk management, and compliance staff.
- Most IT functions are provided primarily internally, with functions such as training and awareness, and core security infrastructure governance provided exclusively through internal resources.
- Health systems track a number of organizational metrics to assess IT effectiveness, most commonly IT spend as a percentage of revenue (71%).

## Results

### Organizational Structure & Staffing

LHS have large information technology (IT) teams, with responding health systems reporting an average of 524 full time employees (FTEs) as part of IT (Table 1). These IT function supports the entire health system, comprised of 23,600 employees and 154 total entities on average.

Within the IT function, LHS information security (IS) teams – inclusive of cybersecurity, identity and access management (IAM), and governance, risk management, and compliance (GRC) – have an average of 25 full time employees (FTEs) excluding managed services, and 38 FTEs including managed services. LHS employ an average of 22 cybersecurity FTEs, 9 IAM FTEs, and 5 GRC FTEs. Most health systems structure IAM as part of IS, however one CIO noted a split structure in which IAM primarily resides within the provisioning team, with some IAM FTEs sitting within IS to focus on automation.

Table 1. Number of IT Staff at LHS

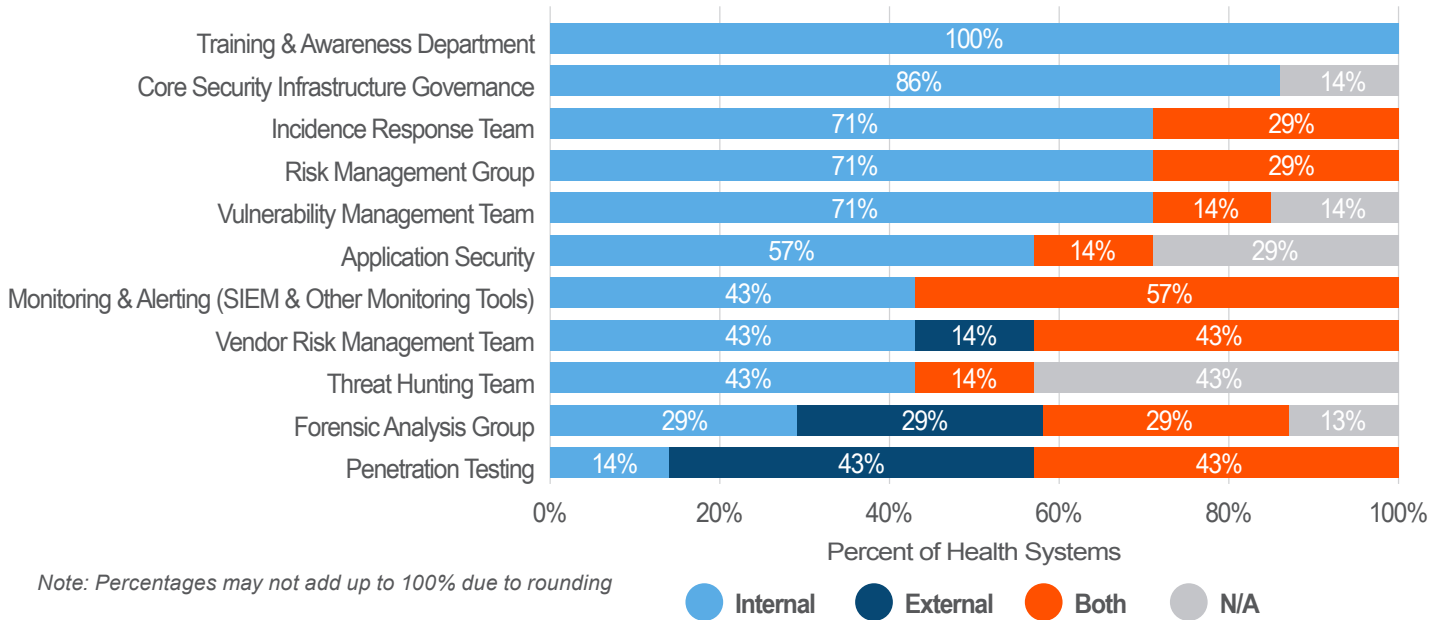
	Average FTEs	FTE Range
Total IT	524	80 – 850
Total IS (including managed services)	38	6 – 70
Cybersecurity	22	1 – 65
IAM	9	0 – 21
GRC	5	2 – 17

Average salaries for IS FTEs vary by role, with security architects making the highest salary on average (\$106,000) followed by security engineers (\$90,000), GRC staff (\$79,000), and security analysts (\$71,000).

## IT Services & Spending

LHS provide most of their IT services and capabilities internally, with many health systems supplementing internal efforts with an external resource (Figure 1). In particular, functions such as training and awareness, and core security infrastructure governance are provided exclusively internally. Few health systems completely outsource IT functions, with penetration testing (43%) and forensic analysis (29%) the only areas in which a notable proportion of health systems utilize only an external resource to provide the service.

Figure 1. Please select the services/capabilities provided and whether they are internal or externally provided.



To support these services, health systems' IT budgets are primarily focused on operating expenses rather than capital expenses. Of LHS' IT spend, 89% goes toward operating expenses (average: \$117.8 million) and 11% goes toward capital expenses (average: \$14.7 million). On average, IS represents 10% of health systems' total IT spend, and only 0.12% of health systems' total revenue. Within IS, 41% of spend is on employees, while 59% of spend is allocated for products and/or services. In total, health systems' average IS spend per organizational employee is \$232.

## IT Benchmarking

LHS track a number of organizational metrics to measure the effectiveness of the IT function, most commonly IT spend as a percent of revenue (71%), IT spend as a percent of operating expense (43%), and total IT FTEs (43%) (Figure 2). Fewer health systems track metrics such as IT spend per employee (29%), enterprise FTEs (29%), or revenue (14%).

LHS primarily leverage Gartner (86%) and The Academy (57%) to benchmark their organization against other health systems. Some health systems also leverage CHIME (29%) and/or Scottsdale Institute for benchmarking.

Figure 2. What metrics does your organization track to measure the effectiveness of your IT function?

