



# Hawaii Health Systems Corporation

**HOW HAWAII HEALTH SYSTEMS  
CORPORATION PREPARED FOR THE  
TRANSITION TO ICD-10**



**CASE STUDY**

## CASE STUDY

# Hawaii Health Systems Corporation

Hawaii Health Systems Corporation (HHSC) is the fourth largest public health system in the country and the largest provider of healthcare in the Islands, other than on Oahu.

## CLIENT PROFILE/BACKGROUND

HHSC is the only acute care provider on the islands of Maui and Lanai. HHSC is the "Safety Net" for Neighbor Island Acute Care and the "Safety Net" for Long-Term Care (LTC) in the state of Hawaii. The system operates 1,275 licensed beds in 14 facilities located on five different islands. A total of 1,253 licensed acute and long-term care beds are operated in 13 facilities within the HHSC regions.

There are more than 4,000 employees including 1,000+ physicians affiliated with HHSC facilities making this health system Hawaii's fifth largest employer. The mission of HHSC is to provide and enhance accessible, comprehensive healthcare services that are quality-driven, customer-focused, and cost-effective. The vision of HHSC is to be the provider of choice for the communities it serves, employer of choice for its staff, and system of choice for its physicians.

## INTRODUCTION

As a result of the CMS mandate, ICD-10 is positioned to change the U.S. healthcare industry in unprecedented ways. Unlike other countries' implementation of ICD-10, if a provider in the United States is unsuccessful in implementing ICD-10, revenues and cash flow are significantly jeopardized.

The management team at HHSC recognized the need to have an outside firm assist with the preparation for and ultimately transition to ICD-10. They wanted a company to provide a broad assessment report of the processes, procedures, and workflows impacted by the implementation of ICD-10. HHSC selected Leidos Health (formerly maxIT Healthcare) to assist it in this endeavor.

## WHY IS ICD-10 SUCH A BIG DEAL?

There are a number of reasons why this is a big deal. One important measure is the cost. Federal data sources, including the National Health Expenditure Accounts, estimate that the cost of ICD-10 for hospitals is 0.03 of revenue. The cost for office-based physicians is estimated at 0.04% of revenue.

As the following table shows, the transition to ICD-10 has far reaching impacts across a healthcare organization. This initiative requires the



- ▶ Maui Memorial Medical Center
- ▶ Kula Hospital
- ▶ Lanai Community Hospital
- ▶ Hilo Medical Center
- ▶ Yukio Okutsu State Veterans Home
- ▶ Hale Ho'ola Hamakua
- ▶ Ka'u Hospital
- ▶ Kauai Veteran Memorial Hospital
- ▶ Samuel Mahelona Medical Hospital
- ▶ Kona Community Hospital
- ▶ Kohala Hospital
- ▶ Leahi Hospital
- ▶ Maluhia
- ▶ Kahuku Medical Center



support of a number of critical stakeholders in the organization including the CIO, CFO, HIM directors, and physicians. CFOs worry about the impact of ICD-10 on revenue and the increase in claims denials, HIM directors and physicians have concerns about

the amount of education required to learn the coding changes and the potential productivity loss involved with the increased volume of diagnosis and procedure codes, and CIOs have a long list of considerations regarding system changes required for ICD-10.

### ICD-10 Stakeholder Impacts

CFO	CIO	HIM DIRECTOR	PHYSICIAN
<ul style="list-style-type: none"> <li>▶ How will the reimbursement be impacted?</li> <li>▶ How can I ensure AR/ DNFB days won't climb?</li> <li>▶ What are the system, implementation and training costs to our organization?</li> </ul>	<ul style="list-style-type: none"> <li>▶ What is IT's involvement in the ICD-10 initiative?</li> <li>▶ What systems and interfaces will be impacted by ICD-10?</li> <li>▶ How can we get all software updated, interfaced, tested, ready, and rolled out by October 1, 2014?</li> </ul>	<ul style="list-style-type: none"> <li>▶ What is the learning curve for coders?</li> <li>▶ How can we not lose productivity and ensure DNFB days don't skyrocket?</li> <li>▶ What ICD-10 training tools are available?</li> </ul>	<ul style="list-style-type: none"> <li>▶ How long will it take to educate physicians on the new codes?</li> <li>▶ How do I keep the physicians from not revolting with the transition?</li> <li>▶ What is the impact to providing patient care?</li> </ul>

Leidos Health helped HHSC understand the impacts across people, processes, and technology and suggested approaches to mitigate risks throughout the project.

### Impacts of ICD-10 Across Multiple Levels

PEOPLE	PROCESSES	TECHNOLOGY
<ul style="list-style-type: none"> <li>▶ Coders must relearn coding.</li> <li>▶ Clinicians must become very specific when writing clinical documentation.</li> <li>▶ Business office personnel must understand new codes/denial reasons.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Coding processes will change.</li> <li>▶ Scheduling, admitting, and registration processes will change.</li> <li>▶ Clinical documentation processes, claims processing, adjudication, and reimbursement will change.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Almost every system will require an upgrade. All interfaces will likely need to be rewritten.</li> <li>▶ Need to support dual systems (ICD-9 and ICD-10). New or modified automation required in key areas.</li> <li>▶ There is a narrow window of time to complete testing and certification.</li> </ul>
HUGE LEARNING CURVE	WORKFLOW IMPACT	RESOURCES AND COSTS

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### HHSC—CURRENT STATE

HHSC proudly claims to provide the highest quality and most compassionate care for the residents of the state of Hawaii through its network of physicians, healthcare professionals, business staff, and volunteers. As a healthcare provider, HHSC was about to undertake an important regulatory mandate to transition to the ICD-10 diagnosis, disease classification, and procedure code set.

This regulatory initiative was expansive and touched almost every electronic record system in use by HHSC as well as clinical, financial, and coding workflow processes. ICD-10 had the potential to impact HHSC's financial health due to significant changes in physician documentation and coder productivity as well as billing and claim processes. This regulatory mandate had an aggressive timeline not only in order to meet CMS mandates but also to work in collaboration with other competing HHSC projects including supporting its legacy system and implementing a new system-wide EHR system. In order to effectively transition to ICD-10 within the required timeline, HHSC contracted with Leidos Health to complete the following services:

- ▶ **Perform an organizational impact assessment** of the ICD-10 implementation
- ▶ **Prepare a budget** for the ICD-10 implementation, based upon assessment results
- ▶ **Provide an overall ICD-10 strategy** for the organization
- ▶ **Provide an implementation plan** to effectively transition the organization to ICD-10

“The Leidos Health consultants had an exceptional understanding of the operational impacts of the project to the organization.”

— **LANCE SEGAWA,**  
Corporate Director of Operations  
Hawaii Health Systems Corporation

### ICD-10 IMPACT TO HHSC

The transition from ICD-9 to ICD-10 had significant clinical, operational, and financial impacts throughout HHSC. The project affected multiple departments across the organization:

- ▶ Administration
- ▶ Physician Clinical Care
- ▶ Lab, Radiology, and other ancillaries
- ▶ Case Management
- ▶ Transcription
- ▶ Performance Management
- ▶ HIM Coding
- ▶ Accounting/Billing

Additionally, the ICD-10 project impacted multiple operational workflow processes including:

- ▶ Reimbursement
- ▶ Software
- ▶ Payer contracts
- ▶ Reports and forms
- ▶ Cash flow
- ▶ Quality reporting
- ▶ Clinical documentation
- ▶ Trading partners
- ▶ Project objectives

Based on the information provided by HHSC's "ICD-10 Scope of Services," Leidos Health assisted in completing the following objectives as part of the engagement:

- ▶ Reviewed and evaluated HHSC's current state environment including processes, methodologies, workflows, and operational parameters with gap analysis reporting
- ▶ Provided recommendations to improve policies and procedures and propose new workflows that leveraged deployed clinical documentation, HIM, and revenue cycle software solutions
- ▶ Outlined impacts to coding and billing productivity, cash flow, and working capital and provided suggested risk mitigation strategies
- ▶ Evaluated workforce ICD-10 awareness and readiness, including clinical documentation processes and dictation software templates as well as training requirements
- ▶ Provided a suggested resource and staffing plan to achieve ICD-10 compliance and prepared an ICD-10 implementation plan to transition the organization to ICD-10

# HHSC Opportunities and Challenges

Prior to embarking on the Planning and Assessment Project, HHSC and Leidos Health developed a strong, effective communication process. Part of the process included HHSC providing an overview of its organization, as well as sharing some of the opportunities and challenges it faced as it prepared for the transition to ICD-10. This information provided Leidos Health the necessary background and perspective to help with the assessment process and recommendations. Some of the opportunities and critical challenges discussed were specific to HHSC, although there were also common themes that affect healthcare organizations analogous to HHSC including:

## 1. Change management for ICD-10 and its current EHR systems

There are significant impacts migrating from manual to automated processes while implementing ICD-10. The ICD-10 transition project created an opportunity for HHSC to reengineer and improve processes across its facilities to a more granular level.

The importance of managing change with limited resources while weathering a downturn in cash collections is paramount to the scope of the project.

## 2. Resources

HHSC's Siemens EHR and MEDITECH upgrades consume valuable, necessary IT resources, some of whom need to wear multiple "project hats."

ICD-10 current "Program" leadership is impacted. The project management of the ICD-10 project transitions across the organization, and leadership in many areas is required to support the project.

There is a recognized shortage of qualified HIM coding staff at HHSC as well as a national shortage of available resources, particularly in Hawaii.

## 3. Clinical documentation

HHSC leadership recognized that there are improvements required to the current clinical documentation, as there are previously identified issues and concerns with content and quality that, for a number of reasons, have been on the back burner to resolve. ICD-10 opens the door for the organization to change the priority to address and

standardize clinical documentation throughout its facilities, in many respects.

Physicians are concerned about transitioning to ICD-10, and rightfully so. They need more communication, education, and opportunities for buy-in and collaboration which this project helps facilitate.

## 4. Multiple concurrent initiatives underway

HHSC has several competing clinical and financial IT projects including the critical implementation of a new EHR system.

The transition plan identifies the need for a comprehensive backup plan to support potential changes with its EHR implementation (and other electronic system implementations) schedule.

## 5. ICD-10 financial implications

HHSC expects coder productivity losses of 10 percent to 30 percent, based on industry guidelines. The transition plan identified strategies to mitigate expected productivity losses.

The organization anticipates a potential increase in claims creation and denials, which could result in cash flow disruption. The transition plan identifies risk mitigation strategies.

With the organization's transparency to share its opportunities and challenges, Leidos Health was empowered to research and suggest recommendations to HHSC's leadership that were specific to their needs.

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**PROJECT LEADERSHIP**

The ICD-10 project was a strategic operational initiative undertaken by HHSC. Lance Segawa, HHSC’s corporate director of operations, was designated by executive leadership to assume the position of project sponsor. HHSC wanted to ensure that there was accountability from the top levels in the organization to have a successful project. The organization created a project governance committee that involved timely and effective teamwork between its corporate and regional leadership and Leidos Health leadership. The committee had high visibility and reported to the HHSC senior leadership board comprised of the CEO, CIO, and CFO. They were all actively aware of and supportive of the project throughout the engagement and communicated regularly with the organization’s leadership and staff. The day-to-day management of the project was the responsibility of the PMO. HHSC also provided additional subject matter experts (SMEs) and departmental leadership to assist in meeting the deliverables. Leidos Health took an enterprise view of

the organization and shared this concept with HHSC’s project governance team. All players understood that the ICD-10 planning and readiness assessment project was an enterprise-wide initiative and supported the project accordingly. In many ways, Leidos Health was a catalyst for HHSC to improve the organization’s operations at a critical time. Unlike other consulting firms, Leidos Health had proven expertise with many vendor systems, product suites, and methodologies and shared that objective expertise with HHSC to help ensure the project’s success.

**PROJECT APPROACH AND PLAN**

Working in close collaboration with HHSC, Leidos Health consultants performed a series of pre-work activities (e.g., surveys, data gathering) as well as onsite interviews and process shadowing (i.e., direct observation) to identify workflows and financial and operational impacts of the transition. Key areas of focus included a review of existing assumptions (system, software application, and interface), implementation

**ICD-10 Preparedness and Strategic Planning Engagement Timeline**

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
PHASE 1: Planning				
PHASE 2: Analysis				
PHASE 3: Business Case				
PHASE 4: Roadmap				

**Key Activities Leidos Health Undertakes in the Strategy and Roadmap Phases**

<b>PHASE 1: Planning</b>	<ul style="list-style-type: none"> <li>▶ Scope definition and problem identification</li> <li>▶ Stakeholder identification</li> </ul>	<ul style="list-style-type: none"> <li>▶ Agenda and work plan</li> <li>▶ Survey distribution</li> </ul>
<b>PHASE 2: Analysis</b>	<ul style="list-style-type: none"> <li>▶ Data collection</li> <li>▶ Reimbursement and denials review</li> <li>▶ Workflow analysis</li> </ul>	<ul style="list-style-type: none"> <li>▶ Applications and interfaces review</li> <li>▶ Vendor inventory and analysis</li> </ul>
<b>PHASE 3: Business Case</b>	<ul style="list-style-type: none"> <li>▶ Gap analysis (current state vs. future state)</li> <li>▶ Training and education recommendations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Vendor options</li> <li>▶ Operational recommendations</li> </ul>
<b>PHASE 4: Analysis</b>	<ul style="list-style-type: none"> <li>▶ Implementation strategy</li> <li>▶ Proposed project costs</li> </ul>	<ul style="list-style-type: none"> <li>▶ Adoption timeline/tasks/milestones</li> </ul>

“The honesty and integrity of the Leidos Health project members were of high value to our project team, our board, and executive leadership.”

— **LANCE SEGAWA**, Corporate Director of Operations  
Hawaii Health Systems Corporation

plan, remediation assumptions, and training and communication processes. Leidos Health also evaluated business processes impacted by ICD-10 including revenue cycle functions (from patient access areas through billing) as well as coding, abstracting, and physician querying and documenting processes. A review of ICD-10 relevant staff skills (e.g., clinical documentation processes) and knowledge was also performed. Leidos Health’s approach included mechanisms to ensure HHSC’s expectations were understood, enabling Leidos Health to consistently meet HHSC’s expectations.

The following elements were included in the assessment and evaluation:

- ▶ Current and planned future applications
- ▶ Implementation timing
- ▶ Discovery of critical, internal departmental reporting mechanisms (and systems)
- ▶ Identification of potential issues

### **FIVE WEEK TIMELINE AND KEY ACTIVITIES**

Leidos Health and HHSC agreed on an aggressive, yet realistic, timeline to complete the engagement as defined in the figure to the left.

### **CONTRIBUTORS TO SUCCESS**

The strong collaboration and cooperation among HHSC, Leidos Health, and the EHR and legacy system vendors was an extraordinary effort. For this particular engagement, Leidos Health assisted HHSC as they prepared to transition to ICD-10 in a number of fundamental ways including:

- ▶ Leidos Health maintained effective and timely communication throughout the project, avoiding any “gotchas” at the completion of the project. Leidos Health walked HHSC’s project team through every step of the engagement. By the time the final report was written, HHSC’s leadership team knew what to expect. The client was promptly informed about Leidos Health’s findings and they were able to begin contingency planning in a timely manner.

- ▶ Our consultants followed standard, proven Project Management Institute (PMI) project methodologies, including project monitoring, controlling, and reporting processes to ensure the successful execution of the project. Additionally, timely status reports and productive meetings were held with the project sponsor throughout the project.
- ▶ Leidos Health worked collaboratively with HHSC’s leadership and project teams as well as with their EHR and legacy system vendors. There was no “finger pointing” nor were the teams critical of one another. All parties demonstrated agreement with the project’s goals and objectives. Additionally, Leidos Health integrated HHSC’s implementation concerns within the body of the findings and recommendations document. The organization heard from both their EHR vendor and Leidos Health “what” was going to happen, “when,” and “how” so that there were no surprises or missed expectations.
- ▶ Our team defined operational processes and governance, established cross-departmental coordination, and prepared roadmaps to achieve HHSC’s goals.
- ▶ Leidos Health highlighted areas of revenue at risk as well as procedural vulnerability through analysis of HHSC’s systems, applications, interfaces, reports, business processes, and operational workflows.
- ▶ We helped HHSC prioritize and operationalize its ICD-10 work plan to minimize business and revenue disruption.

HHSC ensured that Leidos Health had routine exposure to the Board of Directors and executive leadership of HHSC which helped tremendously to maintain the importance of the project with other team members.

### **Key Deliverables Accomplished**

As a result of Leidos Health’s ICD-10 services, a number of key deliverables were met including:

- ▶ The overall assessment approach (roadmap document) was completed.

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- ▶ The expected cost for the implementation was outlined.
- ▶ The ICD-10 program was transitioned to client stakeholders to enable the organization to take the findings and recommendations from Leidos Health and incorporate and implement them on its own.

The key performance indicators for measuring the project's success were defined early in the planning process and evaluated at the end of the project.

- ▶ The project was completed on time and within budget.
- ▶ Leidos Health and HHSC communicated throughout the project to ensure that the budget and scope established for the project were maintained.
- ▶ Industry expectations of the ICD-10 revenue metrics were reviewed and applied to several examples to demonstrate to HHSC what the impact would be if there was a slowdown or stoppage in productivity.

Leidos Health works to tailor our approaches and methodologies to each client in order to provide outstanding service unique to each client's requirements. For HHSC, this included:

- ▶ Flexibility in our negotiations with HHSC to meet its timeframes, budget, and state contractual requirements
- ▶ Understanding the challenges the organization had in supporting the needs of multiple facilities in many locations
- ▶ Bringing in consultants with subject matter expertise in specific vendor systems (MEDITECH and Siemens) along with integration and implementation processes and methodologies
- ▶ Learning and gaining perspective on cultural differences between the two organizations and bringing in resources who understood the Hawaiian mindset and cultural opportunities and challenges

## FUTURE BENEFITS

HHSC is ready to leverage the roadmap developed in the assessment phase to position the organization for successful and timely ICD-10 remediation. HHSC is poised to continue the mitigation of major risks identified in the ICD-10 Assessments presentation with the findings and suggested recommendations presented by Leidos Health to HHSC's board and executive team.

## ABOUT LEIDOS

With expertise in National Security, Health, and Engineering, Leidos will continue SAIC's proud legacy of securing the future of our families, our communities, and our world. Our diverse knowledge base and involvement in multiple disciplines and industries make us unique. We use our insights in new ways and expand our capabilities to evolve the industries we serve.

For more information, visit [leidoshealth.com](https://leidoshealth.com).

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