

Swedish Medical Center

# HealthStream Implementation Proposal

Presented by: Paula Sawlidi  
HealthStream System Administrator



## Introduction

In 2000, HCA partnered with HealthStream to provide online education access for its facilities. This relationship was driven by a need to provide consolidated compliance reporting in keeping with our Corporate Integrity Agreement while addressing the need to manage quality and cost of employee education. The HealthStream Learning Center (HLC) has the ability to deliver thousands of hours of online regulatory training; maintain education assignments and records; manage enrollment, grading and waitlists; and support a completion reporting and training system with easy access to dispatched reports.

HealthStream was implemented at Swedish Medical Center (SMC) in early 2001. Although SMC has access to and pays for all features of the HLC, only 10-15% of its capabilities are in use. In 2003 and 2004, SMC generated the lowest number of average course completions per employee compared to all HealthONE facilities. Specifically, in 2004 the average completions per employee for HealthONE were 5.60 with SMC producing only 1.58 (see Table 1 for details).

At present, the primary use of the HLC at Swedish is mandatory tracking of training as required by the Corporate Integrity Agreement (CIA). This training includes Code of Conduct Refresher Training, Physician Relationship Training and Inpatient/Outpatient Coder Training.

Labor and Delivery (L&D) and the Critical Care Unit (CCU) use HealthStream's tracking features and online courses for staff education. HealthStream tracks fetal heart monitoring for employees tagged as Fetal Monitoring RNs. The Advanced Fetal Heart Monitoring course recently changed from a classroom-based course to an online course. This course has been assigned to select L&D nurses and has received outstanding reviews.

The American Association of Critical-Care Nurses has created the Essentials of Critical Care Orientation, an Internet-based program for novice nurses entering the critical care arena. CCU currently assigns new nurses this orientation package that includes modules focused on patient care with cardiovascular, pulmonary, neurologic, renal, gastrointestinal, endocrine, hematologic or multisystem disorders.

This proposal focuses on two areas, Annual Competency Days and Online Class Registration and Tracking, to demonstrate how increasing our utilization of the HealthStream Learning Center SMC will not only reduce costs and increase efficiency but will excite staff about their continuing education. Additional features, computer access, support and training are also detailed.

Facility	# of Students	Total Course Completions (online and classroom)	Average Completions Per Student
Sky Ridge Medical Center	658	10,004	15.20
Rose Medical Center	1,483	14,066	9.48
Presbyterian/St. Luke's Med Center	1,698	14,313	8.43
Medical Center of Aurora	1,462	4,129	2.82
North Suburban Medical Center	637	1,779	2.79
Spalding Rehabilitation Hospital	295	506	1.72
Swedish Medical Center	1,851	2,924	1.58

**Table 1**

## Annual Competency Days

Annual Competency Days as they are presently conducted could be eliminated. By converting many of the annual competencies into online courses SMC could save as much as \$75,000-\$100,000 per year. The savings would come from enhanced utilization of all staff involved with Competency Days (see Table 2 for details).

For discussion purposes, Annual Competency Days are broken down into these four components: lectures/posters, Competency Performance Criteria (CPC), TB/Color Blind Tests and Basic Life Support (BLS) Skill Check-off.

### **Lectures/Posters:**

HealthStream online classes will replace safety and infection control lectures and all posters. The HealthStream Regulatory Library contains courses that meet annual training requirements for JCAHO, OSHA, CMS and other regulatory agencies.

Examples of available courses:

- Emergency Preparedness
- Fire Safety
- Hazard Communication
- Standard Precautions: Bloodborne Pathogens and Other Potentially Infectious Materials
- Transmission-Based Precautions both Airborne and Contact/Droplet
- Workplace Violence

Annotations, in the form of pop-up windows, can be added to HealthStream regulatory courses to include information specific to Swedish Medical Center. Prior to facility-wide assignment, staff experts will review regulatory course storyboards to determine which courses will be used as well as appropriate annotation content and placement.

Many online courses, including all courses listed above, have pre-assessment tests allowing employees to test out of courses in which they have a strong knowledge base. If they pass the pre-assessment test the employee record will update to reflect completion of the course. Should they fail the pre-assessment test they will be required to complete the entire module and test upon completion. Pre-assessment tests may be taken only once whereas post-assessment tests can be taken as often as needed to pass the course.

An option endorsed by other facilities for English as Second Language (ESL) employees is teaching the regulatory courses in a classroom setting at periodic times throughout the year. HealthStream also offers select regulatory courses in Spanish.

Ethics and Compliance (Code of Conduct Refresher Training) must remain in lecture format. HealthStream is currently being used to assign Code of Conduct training to staff and track course completions. Online registrations for these sessions can be easily implemented.

### **Competency Performance Criteria (CPC):**

Complete of CPCs, e.g. Blood Glucose, Dipstick Urinalysis, Restraints, may be done in two ways. Either bundled into competencies currently done on the unit or via short CPC classes held periodically throughout the year. Employees would be assigned the appropriate CPCs and would then be able to register online for a class that fits their schedule.

**TB/Color Blind Tests:**

Employee Health administers TB and Color Blind tests. HealthStream can be used to assign these tests to employees and record completion.

**BLS Skills Check-off:**

BLS manual skills check-offs are currently required in the year between certification. A mailing was sent to the SMC Directors of Patient Care asking for feedback on the possibility of eliminating this requirement. General consensus is that BLS check-offs can be eliminated.

Personnel	Details	Savings
Staff - RN	Reduced completion time of 1.5 hours for an estimated 750 RNs (\$27.14/hour pay rate used)	\$30,533
Staff – All Others	Reduced completion time of 1.5 hours for an estimated 1,250 non-RN staff members (\$15/hour pay rate used)	\$30,000
Department staff	Eliminate current CPC stations, lecture staff, front desk staff and poster production (1,150 hours at \$27.14/hour)	\$31,211
BLS Instructors	Estimate 375 employees per year with Instructor fees of \$5 per employee	\$1,875
<b>Total</b>		<b>\$93,619</b>

**Table 2****Online Class Registration and Tracking**

The second implementation focus is online class registration and tracking. We believe by moving to online class registrations we will significantly reduce the workload of directors, employees and education staff. Staff members and educators who currently track staff compliance will also benefit from automatic online tracking. The following steps illustrate the registration and tracking features of the HealthStream Learning Center.

1. Course information is entered. Prior to implementation of online class registration, an SMC HealthStream administrator will enter all course information into HealthStream. This information will include instructor credentials as well as course description, objectives, locations and times.
2. A HealthStream administrator accesses employee information. All employees (students) are already in the HealthStream database. The SMC employee database was downloaded into HealthStream upon initial implementation in 2001. Since then, HealthStream receives new employee information from Human Resources and uploads the employee information within 48 hours.
3. The administrator makes the appropriate course assignment. Courses include annual regulatory courses, mandatory certification courses or unit-specific courses. Assignments can be made to employees or groups of employees based on unit, title, date of hire, or administrator-specified criteria.
4. The employee begins the online course or registers online for classroom course. After signing on, the employee will see a list of assigned classes on their "My Courses" page. As shown in Figure 1, either a person icon (indicating a classroom-based course) or a computer mouse icon (indicating an online course) precedes the course title. By clicking on the title of an online course, the employee will link directly to the lesson.

The screenshot shows the 'My Account' section of the HealthStream interface. At the top, there are navigation tabs: Find, My Account (selected), HospitalDirect, Documentation, Help, and Log Out. Below these are sub-tabs: My Courses, My Transcript, and My Profile. A 'Refresh' link is in the top right. The 'Assigned Courses' section contains a table with one course: '2004 Code of Conduct Refresher Training'. Its status is 'No classes avail.', due date is '12/31/2004', credits are '1.00', and credit type is 'N/A'. A red note states: 'Due Date in red indicates an overdue Assigned Course.' The 'Elective Courses' section contains a table with three courses: 'Atlas 2.0 User Training' (Enrolled 03/02/04, Class Started, N/A credits, N/A type), 'HealthStream System Administrator Course' (In Progress, Un-Enroll link, 2.00 credits, Not for Credit type), and 'Microsoft Project Introduction' (Enrolled 05/04/04, Un-Enroll link, 16.00 credits, CPE type).

Course Name	Status	Due Date	Credits	Credit Type
<a href="#">2004 Code of Conduct Refresher Training</a>	No classes avail.	12/31/2004	1.00	N/A

**Due Date in red indicates an overdue Assigned Course.**

Course Name	Status	Unenroll	Credits	Credit Type
<a href="#">Atlas 2.0 User Training</a>	Enrolled 03/02/04	Class Started	N/A	N/A
<a href="#">HealthStream System Administrator Course</a>	In Progress	<a href="#">Un-Enroll</a>	2.00	Not for Credit
<a href="#">Microsoft Project Introduction</a>	Enrolled 05/04/04	<a href="#">Un-Enroll</a>	16.00	CPE

**Figure 1**

By clicking on a classroom-based course, the employee will see a screen similar to Figure 2. Dates, times and general course information are listed. Once the desired class is chosen one click of the "Register" button is all that's required. HealthStream places the employee information on a roster that the course instructor can access at any time. If an employee should un-enroll from the class, the top wait-listed person is automatically enrolled and notified.

The screenshot shows the 'Selected Classes' page. It states 'You are not currently registered for any classes for this course.' Below is the 'Class Schedule' with three entries: 09/28/2004 9:00 AM in Room Hermitage, 10/21/2004 2:00 PM in Room Hermitage, and 11/10/2004 9:00 AM in Room Athena. Each entry has a 'Register' button (circled in red with a mouse cursor) and a 'Details' button. Below the schedule is 'Course Information' including ID (HCA-HRD-GEN-100-SU), Name (Writing for Clarity), Category (Human Resources Development), SubCategory (General), Delivery Method (Stand-Up Instruction), and Target Audience (Corporate Employees). Objectives are listed as: Learn how to get started, Learn ways to organize your information, Learn how to write concretely and concisely, and Learn tips for reviewing your document. A red text box on the right says: 'In this example, the facility has set up self-enrollment for students for this stand-up, instructor-led course. Students can register by finding the course in HealthStream and clicking Register.'

**Selected Classes**  
You are not currently registered for any classes for this course.

**Class Schedule**

09/28/2004	CORP OFFICE CONFERENCE CENTER - Building 2,	<a href="#">Register</a>	<a href="#">Details</a>
9:00 AM	Room Hermitage		
10/21/2004	CORP OFFICE CONFERENCE CENTER - Building 2,	<a href="#">Register</a>	<a href="#">Details</a>
2:00 PM	Room Hermitage		
11/10/2004	CORP OFFICE CONFERENCE CENTER - Building 2,	<a href="#">Register</a>	<a href="#">Details</a>
9:00 AM	Room Athena		

**Course Information**

**ID:** HCA-HRD-GEN-100-SU  
**Name:** Writing for Clarity  
**Category:** Human Resources Development  
**SubCategory:** General  
**Delivery Method:** Stand-Up Instruction  
**Target Audience:** Corporate Employees

**Objectives:**

- \* Learn how to get started
- \* Learn ways to organize your information
- \* Learn how to write concretely and concisely
- \* Learn tips for reviewing your document

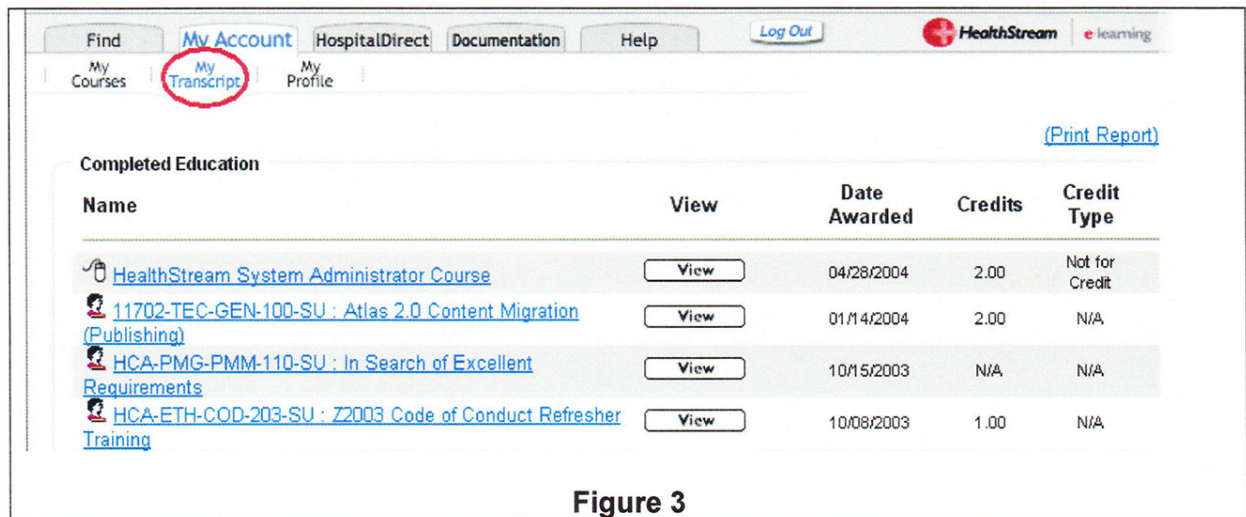
**In this example, the facility has set up self-enrollment for students for this stand-up, instructor-led course. Students can register by finding the course in HealthStream and clicking Register.**

**Figure 2**

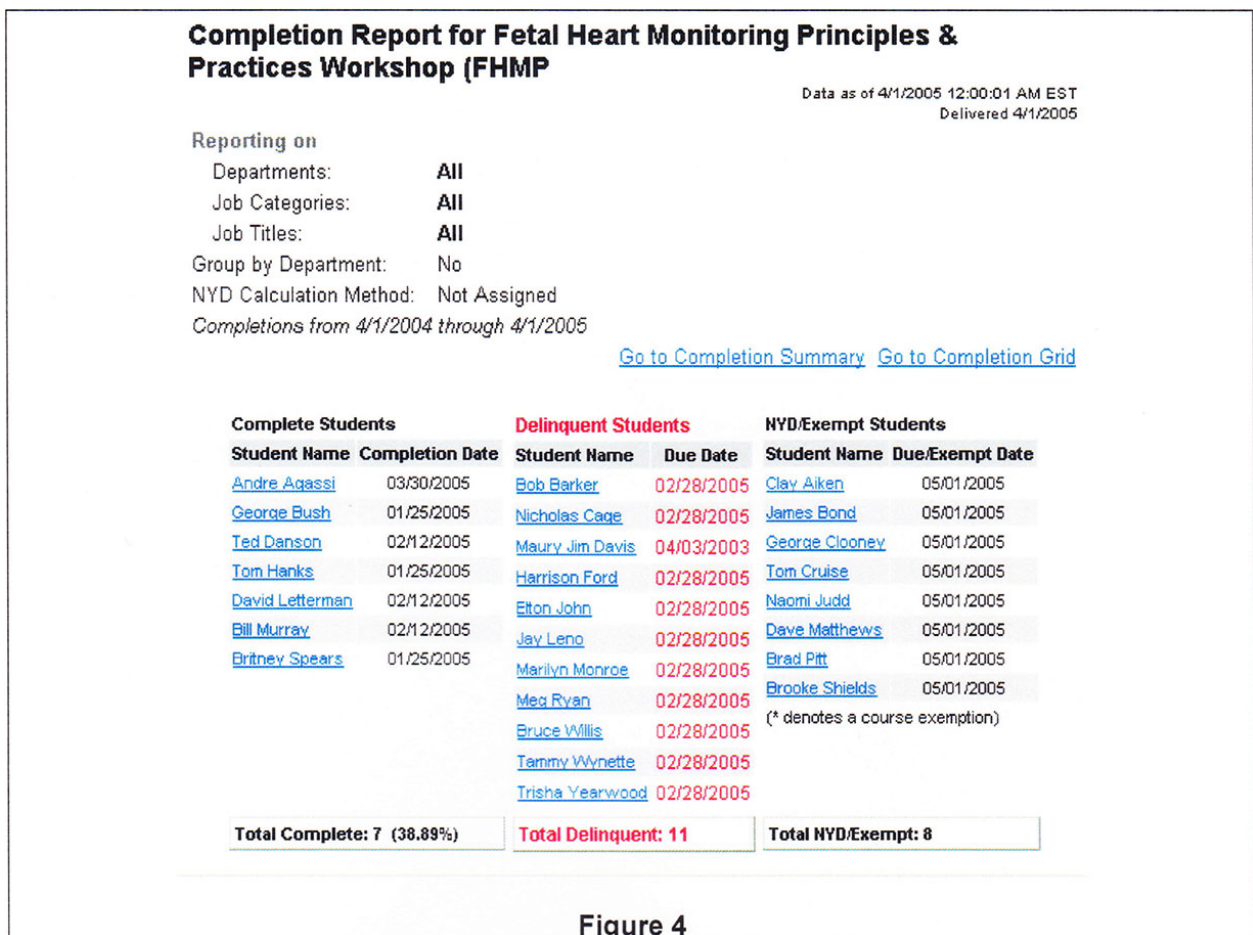
5. Employee Record reflects successful course completion. HealthStream will automatically update the employee transcript upon completion of an online course. On completion of a classroom-based course, a HealthStream administrator will update the employee record based on sign-in sheets. An employee



transcript screen is shown in Figure 3. From this screen, employees can see completion dates, number of credit hours and, by clicking the view button the employee can view and print a completion certificate.



6. **Completion Reports.** HealthStream administrators can easily print completion reports to track completions and delinquencies, see Figure 4. Outstanding assignment reports can be generated based on the individual, department, course title or other custom fields. Table 3 lists reports available in the HLC.



HealthStream Reports	
Title	Description
<b>Completion Report</b>	Shows complete, delinquent and not yet due employees
<b>Department Progress Report</b>	Lists employees who have completed course(s) in selected departments(s)
<b>Course Activity Report</b>	Lists how many employees have completed selected courses at SMC
<b>Employee Transcript Report</b>	Shows completed courses for selected employees for a specified date range

**Table 3**

## Additional Features

While online class registration and tracking is the heart of the HealthStream Learning Center there are other features we will incorporate at SMC. Two of these features are Authoring and Test Builder tools.

Although there are over 40 courses to choose from in HealthStream's Regulatory Library, by using the Authoring tool SMC can create online courses specific to our facility's needs. In addition to content, courses may contain photos, drawings, animations and video. Post-assessment test can be developed with HealthStream's Test Builder.

Through Test Builder we can create or customize assessments for regulatory, third party or self-authored courses. We can select length, question order, passing score and a host of other criteria. Test reports can be generated to analyze course effectiveness.

## Computer Access

Employees can access HealthStream using computers at home, on their unit or in the 4<sup>th</sup> floor Computer Training Room.

### **At home:**

Computer support for employees using home computers will be limited. HealthStream has a browser check utility that will determine a computer's readiness for HealthStream courses. This utility will indicate what computer requirements are not being met. Should employees not be able to resolve these issues they will be encouraged to complete the course at Swedish.

Employees taking courses at home will be compensated based on average time of course completion. HealthStream provides this average in its regulatory library. SMC will determine average completion times for facility-authored courses. Should an employee not complete the course within the average time they must finish the course on hospital grounds.

### **On the unit:**

Computers designated for HealthStream access will be available in each department. The number of computers depends on employees per unit. Human Resources provided a list of SMC departments including number of employees. Upon review of this list we estimate 90 computers will be upgraded for HealthStream access.

These computers will be clearly marked and a HealthStream Employee (Student) User Manual will be present at each station. HealthStream provides a Student User Manual that is available for copying. Unit-specific computers will be updated with the appropriate hardware and software per the minimum requirements as listed in Table 4. As

most computers have high-speed access to the Internet we believe the hardware expense will be limited to sound cards, memory and headphones. Should unauthorized Internet access become a concern, Access can be limited to required sites only.

#### 4th Floor Computer Training Room:

The training room will be available during pre-arranged times. Scheduling will be limited due to ongoing eMAR training. No upgrades will be needed on these computers.

PC Technical Specifications		
	Recommended	Minimum
<b>Bandwidth</b>	240 Kb/s (30 KP/s)	56 Kb/s (KP/s)
<b>Web Browser</b>	Internet Explorer 5.5 or higher	Same
<b>Monitor</b>	17"	15"
<b>Pixel Resolution</b>	1024 x 768 pixels	800 x 600 pixels
<b>Processor Speed</b>	500 MHz Pentium	200 MHz Pentium
<b>RAM</b>	128 MB	64 MB
<b>Speakers/Headphones</b>	Yes	Yes
<b>Mouse/Keyboard</b>	Yes	Yes
<b>Sound Card</b>	Yes	Yes

**Table 4**

## Support

Two main areas will need support: computer support and HealthStream support. To alleviate the already sizeable workload on the Information Systems department, a point person will be established. This person would be the Learning Technology Coordinator (LTC) and will be part of the Education Department. The LTC will assist in computer software setup, HealthStream setup and support, creation and maintenance of authored courses, HealthStream training for employees and sub-administrators and daily System Administrator responsibilities.

HealthStream support will also come from unit-specific super users (sub-administrators or educators), user manuals and the HealthStream Customer Care Support Line. The HealthStream Customer Care Support Line is a toll-free number and is available during normal business hours for HealthStream support only. After hours and home computer support will be limited.

## Training

In order to meet the goals for implementation by the end of the year, training must start as soon as possible. Training will begin with educators and sub-administrators. Sub-administrators, also called department administrators, will be chosen by each department and given full or read-only access. This access will be restricted to the department or group of departments for which the sub-administrator is responsible. The number of sub-administrators per unit will be determined based on unit size and educator coverage. Sub-administrator training will be approximately 60-90 minutes in length.

New hires will be given a 15-30 minute lecture on HealthStream during Hospital Orientation. Training of existing employees will be implemented over the same time period with classroom sessions, unit-based training sessions (possibly as part of staff meetings), user handbooks at the HealthStream unit computers and one-on-one instruction when needed. For those employees unfamiliar or uncomfortable with computers, classes on basic computer skills will be provided.



## Summary

By streamlining Annual Competency Days and online class registration and tracking, by making HealthStream work for us, Swedish Medical Center will decrease costs and hours dedicated to staff compliance. By incorporating e-learning into our educational offerings, Swedish Medical Center will increase effectiveness of course material and excite staff about the learning process.