

Improvement in Treatment Documentation at SMDC Rehabilitation Locations in the Duluth, Minnesota, Region



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About SMDC Health System

- Serves a regional Midwest population of 460,000 at 17 locations.
- Includes four fully-owned hospitals and the Duluth Clinic, a multispecialty clinic with more than 400 physicians.
- Mission: To bring the soul and science of healing to the people we serve.
- Vision: Working together with our patients and communities, we are creating the next generation of integrated health care.



The Project Team

SMDC Health System Center for Therapy

- Manager, Outpatient Therapy Services (project leader)
- Managers, Polinsky Rehab, Transcription, and Health Information Services
- Supervisor, Duluth Clinic Therapy Center and Business Services
- EPIC analysts



The Problem

- Paper-based documentation systems existed at 5 out of 10 SMDC rehabilitation locations, resulting in inefficient interprovider communication, inconsistent processes, waste, and compliance risk. The lead time to complete the documentation from initial visit to discharge was more than 31 days. This time did not include patient-specific gaps between therapy visits.
- Initial patient evaluations were dictated and transcribed. The documentation often did not meet Medicare documentation compliance standards because the standards were not widely understood or practiced. The Medicare documentation compliance rate ranged from 50.1 to 83.3 percent in the six months prior to the project.



Project Goals

1. Eliminate paper treatment documentation at all five sites.
2. Reduce Medicare documentation compliance error rate from 33 to 10 percent.
3. Establish a centralized location for all therapy documentation to improve interprovider communication.
4. Reduce physician complaints regarding inadequate reporting from current baseline of three times per month to less than one time per month.



Root Cause Analysis

Analysis of the waste in the value stream was conducted, and root causes for the waste were determined.

- Manual documentation was not added to patients' paper medical records in a timely manner because patient files were being held in the Therapy Center. Other therapists were not able to find files in a timely manner.
- In addition, when a patient's initial visit was transcribed, it required an electronic authentication that was taking on average 133 hours to complete. There was no standard procedure for authentication.
- The Medicare compliance error rate was high because Medicare standards were not being followed.



Addressing Root Causes

Actions:

- Conversion of remaining sites to the electronic medical record (EPIC), thus eliminating significant handling, processing, and time-related waste.
- Development of documentation templates and electronic content to improve compliance with Medicare requirements.
- Standardization of physician updates to defined electronic process and location.

Addressing Root Causes

Resources:

- Project team: weekly 60-minute meetings for approximately three months (100 hours total).
- Implementation team: extensive training in the electronic medical record for a group of clinical staff who acted as resources to peers (60 hours total).
- Development of resources for clinical documentation: collaborative work with EPIC staff and clinical staff (40 hours total).
- Development of training resources and training of clinical staff (80 hours).
- Overall hours for project = $280 \times \$40/\text{hr.} = \$11,200.$



Addressing Root Causes

Obstacles:

- Limited computer skills for some staff (addressed via additional class work and typing tutorials).
- Adaptation of clinical workflows from paper to electronic record (addressed through collaborative work of staff, management, and implementation team).

Return on Investment

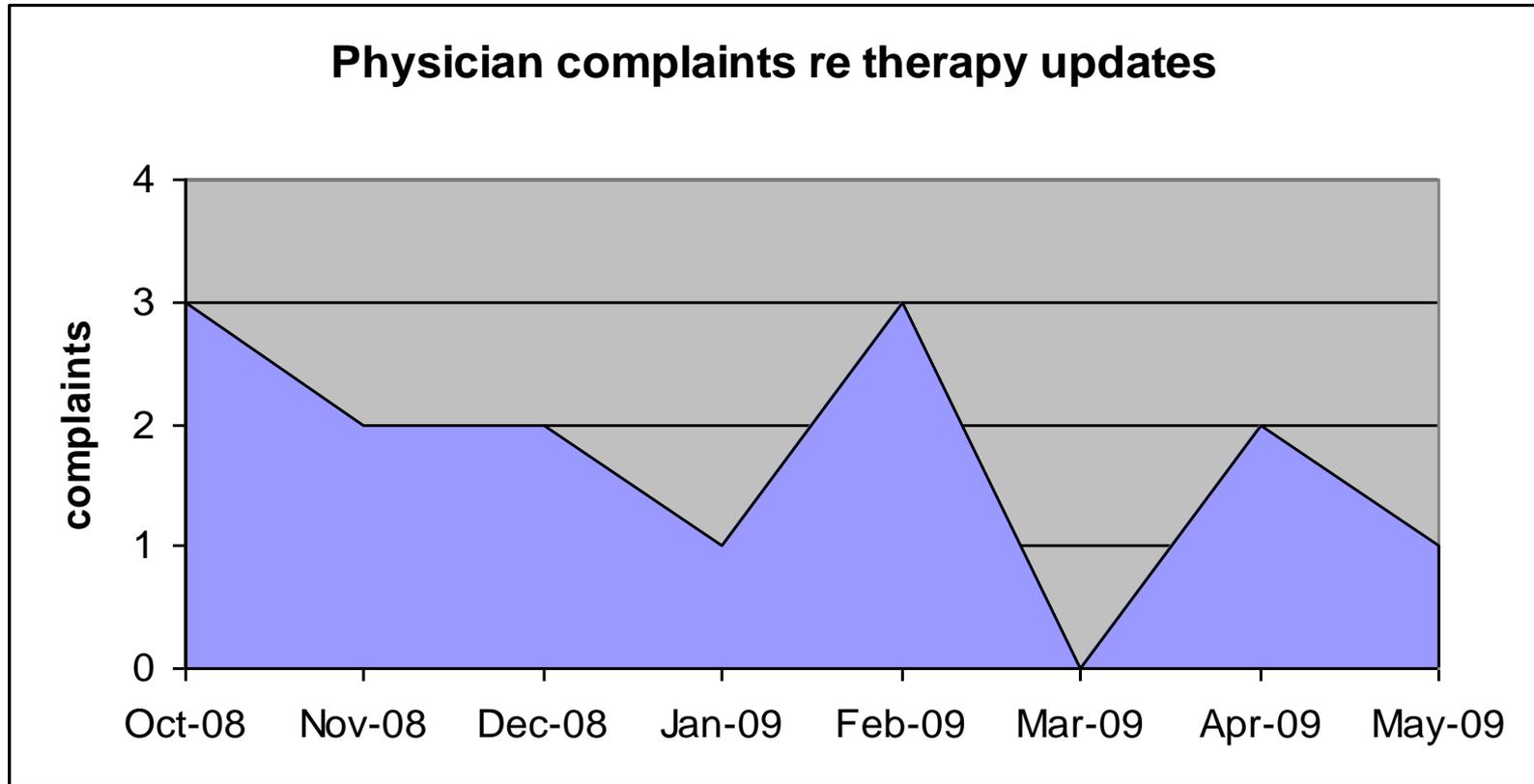
- Paper cost eliminated: **\$15,669 annual savings.**
- FTE reallocation: **0.74 FTE** of records clerk position reallocated to other duties.
- Total lead time: Decreased from 750 to 96 hours, **an improvement of 87 percent.**
- **Quality:** Initial review and internal audit of charts demonstrate improvement in content and quality of therapists' documentation relative to Medicare requirements. Compliance error rate reduced to five percent for first set of charts reviewed after changes.
- **Legibility:** Prior concerns regarding inability to read handwritten notes eliminated.
- **Accessibility:** Immediate availability of documentation for:
 - Billing needs in Business Services
 - Release of information
 - Physician and interprovider communication



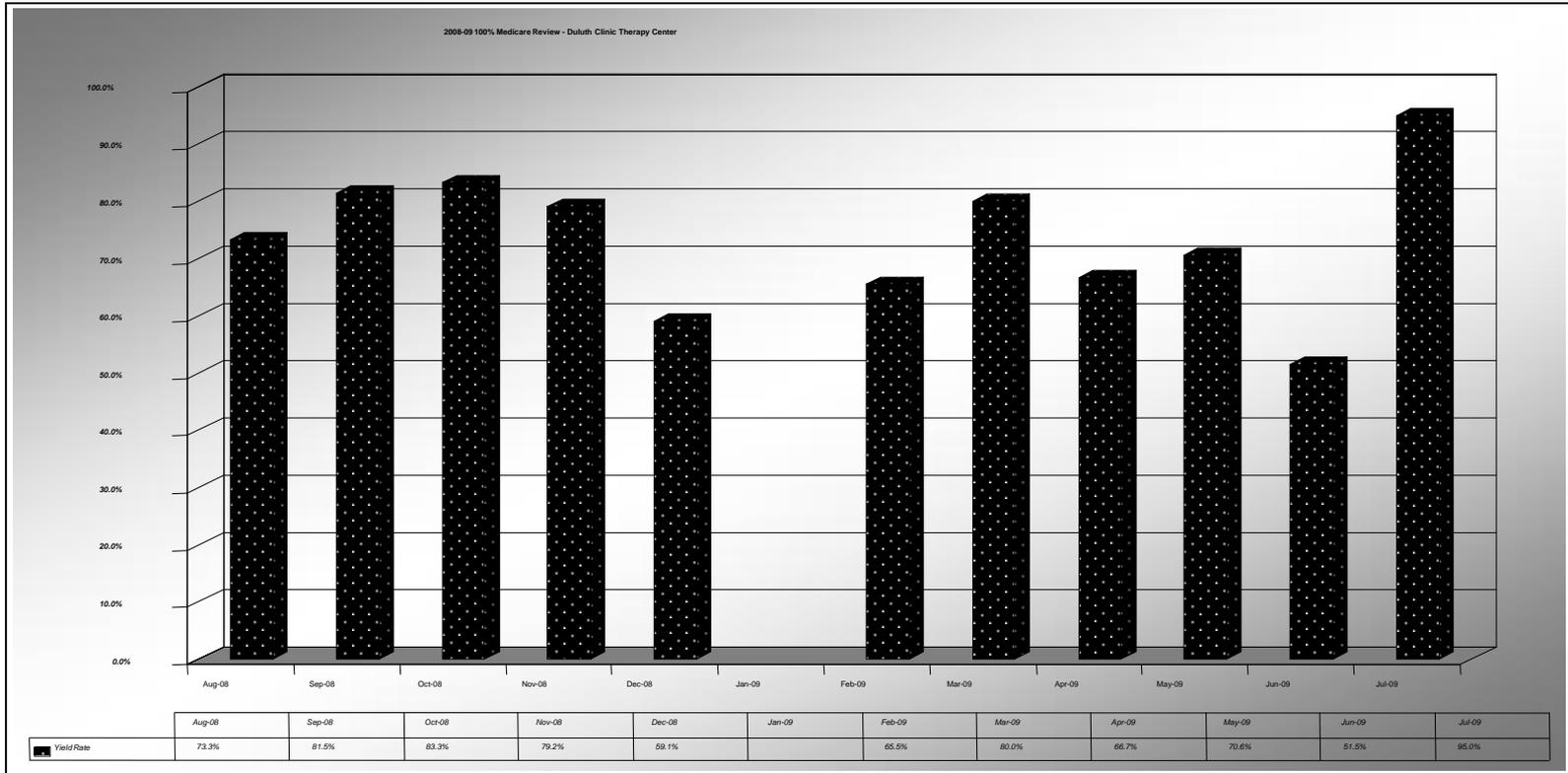
Monitoring and Evaluating Over Time

- Control plan includes a monthly audit of all active Medicare charts to determine compliance rate.
- Results will be posted as a quality measure on organizational quality scorecard.
- Countermeasures will focus on individuals who demonstrate negative compliance trends. Documentation tools will be continuously enhanced to facilitate further compliance.

Physician Complaints



2008-2009 100% Medicare Review



New Value Stream

New Value Stream



96.4 hours=total lead time
41.61 min=.69 hrs=processing time

New Value Quotient=.01

Old Value Stream



750.62 hours = total lead time
55.11 min= .92 hrs= processing time

Old Value Quotient = .001

Mmnts in blue indicate significant improvements
Mmnts in red indicate time removed from the total lead time

Processing time improved from 55.11 minutes to 41.61 minutes
Total lead time improved from 750.62 hours to 96.4 hours



For More Information

- Learn more about SMDC Health System:
www.smdc.org.
- More case study presentations are available from the ASQ Healthcare Division:
www.asq.org/health/quality-information/library.
- Read healthcare case study articles from ASQ:
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