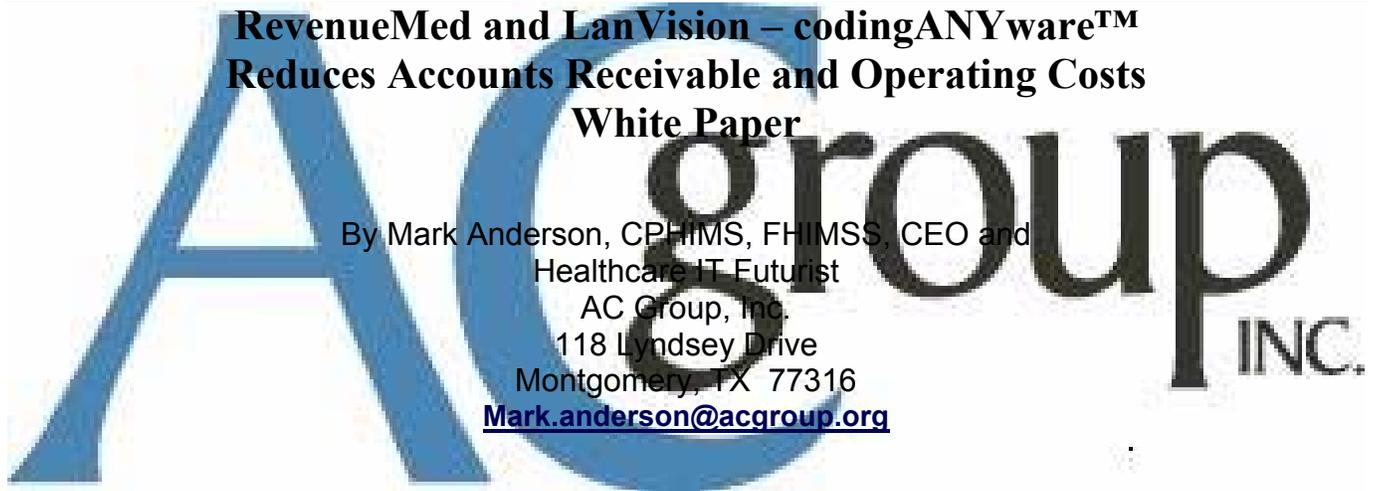


NE Georgia Health System Case Study

Remote Coding Workflow Solutions

**RevenueMed and LanVision – codingANYware™
Reduces Accounts Receivable and Operating Costs
White Paper**

By Mark Anderson, CPHIMS, FHIMSS, CEO and
Healthcare IT Futurist
AC Group, Inc.
118 Lyndsey Drive
Montgomery, TX 77316
Mark.anderson@acgroup.org



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Executive Summary

For any given hospital or private medical Healthcare Organization, information technologies offer tremendous promise – improved access to patient documentation, improved coding and reimbursement, operational cost savings, systematic management of HIPAA compliance requirements, and clinical outcome/disease management capabilities. Despite the manifest benefits of automation, the adoption of full-scale electronic medical record (EMR) technologies has been slow. One barrier to adoption can be found in longstanding staff preferences – e.g., comfort level with existing systems and reluctance to interrupt the daily workload for additional data capture purposes. High costs and integration and operational issues also help explain the hesitance to abandon paper-based systems.

Research indicates that, by 2005, health-care organizations who have not reached an advanced level of technological maturity will begin losing market share due to high operating costs and an inability to clearly document clinical outcomes.¹ By 2010, it is believed that 25 percent of health-care organizations will cease to exist as independent entities due to outdated technologies².

Enhanced Coding via Document Image Management (DIM) solutions

One such technology option is the implementation of a comprehensive Document/digital image management (DIM) solution designed to improve the efficiency of claims and diagnostic medical coding. This paper briefly explores the rationale behind incremental technology adoption in healthcare organizations, outlines the sequential approach, and summarizes the business value afforded by document management software that can enhance hospital coding from any location. This paper described and discusses one of the market's newer and more innovative DIM packages, LanVision's codingANYware™ software application along with the services offered by RevenueMed.³ The analysis concludes with a case study of NE Georgia Health System (NGHS). Through an agreement with Atlanta-based, RevenueMed and Cincinnati-based Lanvision, NGHS was able to reduce revenue backlog from uncoded Endoscopy accounts by >75%, reduce unbilled backlog of Observation and Short Stay Surgery cases by over \$4 million, and decrease turn-around time for charts to be coded from 4 days to 2 days for most chart types. In fact, over 50% of cases are being coded overnight.

The Next I.T. Stage: Document/Digital Image Management

By making data traditionally found in the medical record available in an electronic, “virtual” form, DIM technology makes patient information management easier and more efficient than was previously possible. With DIM, all information kept in the traditional folder is still present, only in a more organized and easily accessible fashion. Instead of sifting through layers of paperwork for the needed document, medical office personnel can quickly click through DIM's highly organized electronic filing system. Multiple people can access the information at the same

¹ Mark Anderson, CPHIMS, FHIMSS, CEO and Healthcare IT Futurist

² AC Group Presentation at TEPR Conference, May, 2004

³ Developed by LanVision, a provider of advanced health Information Access Systems

time – on-site or remotely, like in the case of RevenueMed, via a secure web connection. This feature will become more critical as web technologies become more widely adopted and information more easily shared.

Hospitals who have deployed DIM applications have found that speed and document availability are perhaps the finest features. DIMs dramatically reduce the staff time needed to retrieve and manage information. For the administrative staff, improved workflows and efficiencies on this scale result in lower labor costs and increased productivity. For the coding department, access to the right information and the right time by the right person means a reduction in incomplete charts and lower days in accounts receivable

DIM applications are designed to allow the user to include a wide range of materials in any electronic chart, including all paperwork related to the patient's care, clinical images, insurance cards, EOBs and related journal or periodical articles and research. Not only is this information securely archived in DIM technology, it is also accessible to all appropriate personnel in a secure, password-protected environment. DIM applications are uniquely compatible with most other systems and allow a healthcare organization to:

- Instantaneously locate documents, reducing or eliminating the need to search for charts
- Eliminate courier costs, chart supply expenses, save office space and storage costs
- Enable access to a single patient chart by multiple staff in multiple locations
- Improve staff efficiency and morale
- Enable hospital required coding for any location and anytime

Integration, functionality and HIPAA tracking

Word processing, spreadsheet and other documents can automatically be saved in their proper place in the patient's record. Finally, one of the most important features of document/digital image management technology may be its ability to track and document efforts at HIPAA compliance.

In summary, digital/document image management systems allow healthcare organizations to advance methodically toward electronic digital access to all information by using technologies that are cost-effective, practical, flexible and secure. Operational efficiencies can be gained immediately. Synergies with existing hospital management systems and with care delivery give DIM systems an essential place in the incremental technology adoption hierarchy.

Case Study: *Northeast Georgia Health System (NGHS)*

Background

Northeast Georgia Health System (NGHS) is a not-for-profit corporation dedicated to improving the health and quality of life for the people of northeast Georgia. The corporation is seen as a progressive facility in the greater Atlanta healthcare community. At the hub of NGHS is Northeast Georgia Medical Center with a main campus at 743 Spring Street and another, Lanier Park campus, on White Sculpture Road. Together, these facilities make up a 418-bed inpatient, 285-bed skilled nursing system staffed by physicians trained in a variety of medical specialties.



The Problem:

The community surrounding NGHS is growing briskly. Resulting rising patient populations have brought continuous management challenges to stay abreast of growing volumes of medical records and coding requirements. To help ease this problem, NGHS contracted with a company based in Atlanta called RevenueMed. At the time that RevenueMed and NGHS began discussions, NGHS had one FTE coder position vacant and was facing the requirement to hire at least two further coders due to planned staff departures. Uncoded claim backlog stood at approximately 233 Endoscopy cases and 400 Revolving Account cases, representing unbilled revenue which exceeded \$500,000. There were a further 700 uncoded Observation and Short-Stay Surgery cases, representing unbilled revenue of over \$6 million.

The Operational Mandate

Like many healthcare providers, NGHS sees itself as a lean organization. In considering ways to address its unmet coding requirements, the corporation was committed that it should seek to achieve four objectives:

- Attempt to identify long-term staffing solutions that would allow coding workload to be processed in a predictable fashion.
- Ensure that local guidelines could be met in a reliable way, ensuring that the corporation would maintain strict levels of compliance with regulatory requirements.
- Seek to improve revenue performance through more accurate coding, a reduced number of rejected claims and faster turn-around of codes and bills.
- Ideally, achieve all of the above at modest levels of cost.
- Preferred the adoption of technologies to help solve this problem

As all executives know, days in accounts receivables adversely affects an organization's bottom-line. The higher the days in A/R, the higher the percentage of write-offs that are required. If a healthcare organization can reduce A/R days by a minimum of 5%, a typical 300-bed hospital can improve cash flow by as much as \$500,000. However to reduce days in A/R, management must attack the problem from two fronts: the ability of the business office to collect billable charges; and the ability of the Health Information Management (HIM) department to complete the necessary coding and abstracting of each patient's medical record in a minimal amount of time.

Studies conducted by AC Group, based outside of Houston, TX have shown that the use of a comprehensive DIM application, with the appropriate workflow in the coding department, can help reduce A/R days by as much as 10%. In the case of NE Georgia Health System, the executive team decided to tackle A/R days by adopting a comprehensive out-sourced coding solution from RevenueMed, Inc. RevenueMed combines LanVision's codingANYware™ DIM solution, plus a comprehensive suite of coding, inventory control and quality assurance services, to ensure timely coding and abstracting of patient medical records from any location at any time.

According to JCAHO, the hospital accreditation organization, patient charts must be completed and signed off by every clinician involved in the case before a claim for payment can be submitted. Additionally, JCAHO has established a threshold that states that a maximum of 50% of an organization's patient charts must be completed within 30 days of discharge from the hospital. Every day the patient's record is not complete, the hospital cannot bill for the services, and thus, adds days in A/R. Based on a study of 3,421 hospitals during the summer of 2003, 42% of the hospitals experienced over 5 days in A/R relating to the non-completion of patient records while only 18% of the hospitals have less than 3 days in A/R.

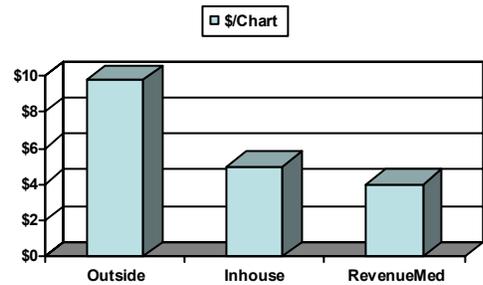
Collaboration with RevenueMed and Lanvision

When RevenueMed first met with NGHS management, the parties agreed that any long-term solution for NGHS' coding needs would need to be conceived in an analytical and holistic manner. Specifically, NGHS acknowledged that its occasional coding backlog was, in part, related to documentation workflow inefficiencies. Any new service model would need to propose automated digital workflow improvements, while also coexisting with the facility's core operational processes.

NGHS agreed that RevenueMed's back-office services, which use technologies from Lanvision, offered the potential to bring meaningful improvements to the hospital's coding performance. Specifically, the organizations focused on two initial areas that had historically been somewhat problematic for the hospital: Endoscopy charts had a fairly high backlog of unbilled cases. Revolving charts (those for patients that visit the hospital on a recurring basis for on-going treatment) were troublesome because of their volume and the fact that they frequently arrive from treatment areas in large, lumpy batches.

Developing a Business Case

NGHS and RevenueMed reviewed all key performance objectives and determined that the accuracy of RevenueMed's coding services was equal to (and, in some cases, superior to) in-house coding results. Additionally, when compared with current in-house costs, RevenueMed's charges were at least 10% below in-house costs. In fact, these costs were roughly 40% below the typical costs of other out-sourcing vendors.



NGHS issued a contract in mid-December 2002 to commence live operations. By early January, the results of these live operations had demonstrated significant benefits: backlog reduction of over 85%, improved turn-around and lower management effort.

Summary of Results

The relationship between RevenueMed, Lanvision, and Northeast Georgia Health System has clearly been a win-win for all parties. The following summarizes many of the salient attributes and results of the relationship thus far.

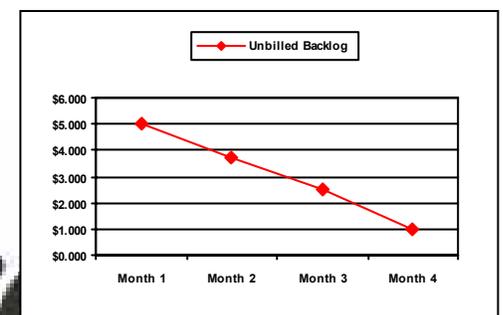
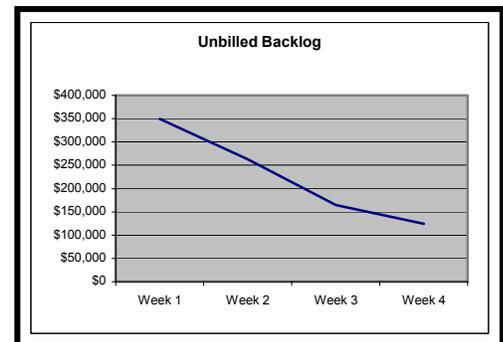
Service Attributes

- Services started by covering Endoscopy, Diabetes Education, Wound Care, PT/OT and Occupational Rehab, launched in December 2002. After achieving positive, auditable results, the hospital added Short Stay Surgery and Observations coding to the contract in March 2003. Emergency Department coding was added in August 2003.
- From the completion of the service trial and agreement of contracts, live services were activated in only one week. After each successive contractual extension, average launch times were two to three weeks after contract signing.
- Allows coding professionals to work **efficiently** from remote locations.
- Reduced reimbursement delays due to record contention: Patient medical record images are online; therefore, LanVision's codingANYware encourages movement away from the traditional serial processing environment to a more parallel processing system which allows coding to continue regardless of all the other whom else the paper needs chart.

- Provides HIPAA compliant security. All codingANYware connections are encrypted and HIPAA compliant. codingANYware provided Parkview with the beginnings of a totally HIPAA compliant patient information repository.

Benefits to Date

- Within the first three weeks of live operations, revenue backlog (primarily resulting from uncoded Endoscopy accounts) was reduced by >75%.
- Subsequent expansion of the relationship to include Observation and Short Stay Surgery cases reduced unbilled backlog by over \$4 million.
- Turn-around time for charts to be coded has been reduced from 4 days to 2 days for most chart types. In fact, over 50% of cases are being coded overnight.
- RevenueMed has implemented an objective, self-reported audit process to help NGHS monitor coded accuracy against rigorous metrics. Base on accuracy reviews conducted by NGHS and RevenueMed staff thus far, accuracy compares favorably with in-house coded output. Perhaps more importantly, NGHS did not previously have the internal resources to implement a sustained audit program for various Outpatient chart types. The audit service provided by RevenueMed – at no additional charge – is expected to offer NGHS higher levels of documentation and compliance in the future.
- Whereas NGHS had suffered frequent loss of coding staff through attrition and other reasons, RevenueMed now guarantees, via contract, to provide continuous availability of adequate manpower to meet NGHS's coding needs.



Given the above positive results, NGHS has expanded the scope of its service relationship three times over the first sixteen months of collaboration. RevenueMed operates as an extended part of the NGHS coding management team, seeking to deliver holistic value across all aspects of the coding lifecycle – but at a cost that is no more than employing in-house coding staff.

RevenueMed and NGHS, with LanVision's active involvement and support, continue to work together to identify areas where RevenueMed's services can deliver high quality, affordable service to meet NGHS's coding, documentation and revenue cycle needs.

Conclusion:

Given the complexity of medical billing and increased regulatory scrutiny, healthcare organizations must establish a comprehensive system for insuring “correct and timely coding” that enables an organization to maximize reimbursement based on the actual care provided. The emergence of solutions, like those delivered by LanVision, allows a healthcare organization the opportunity to support their billing and coding compliance initiatives in ways that were not possible in the past. Providing access to patient medical records, coding and abstracting data from any secured location has enabled NGHS to enhance their revenue cycle by making more timely and accurate coding decisions resulting in improved coding compliance, cash flow, and at the same time has enabled HGHS to reduced operating costs. For NGHS, the decision to contract with RevenueMed’s coding service, through the implementation of LanVision’s digital codingANYware solutions, proved to be invaluable, saving them time and resources, while improving reimbursement. Overall, NGHS expects to reduce their accounts receivable by more than \$4.8M, thus cost justifying their system in months, not years.

Development of a comprehensive remote coding system via the adoption of a document image management solution is no longer an optional, it is a requirement. However, to effectively monitor and track coding compliance and revenue cycle management, healthcare organizations must provide automated tools at the right place at the right time to the right person. Adoption of technologies like those offered by LanVision provides the technical and clinical knowledge to insure ongoing compliance while improving the collection of billable charges. For those healthcare organizations with coding backlogs, executives should consider the services of companies like RevenueMed, whom through the use of advanced technologies, can help reduce backlogs, reduce days in accounts receivables, and more importantly, improve cash flow.

More about RevenueMed

RevenueMed was established in 2002 to provide a comprehensive array of back-office administrative and revenue cycle services to healthcare providers. The firm uses best of breed technology and management process, together with a global skilled workforce, to deliver services that are higher quality and more economical than providers can typically achieve from any other means. The firm is based in Atlanta, Georgia and can be contacted at any of the following:

- Email: sales@RevenueMed.com
- Telephone: +1.770.246-9797
- URL: <http://www.RevenueMed.com>



More about LanVision's DIM Solutions

LanVision is a leading supplier of workflow and document imaging-based tools, applications and services assisting strategic business partners, healthcare organizations and customers to create and improve operational efficiencies through business process re-engineering and automating labor intensive and demanding paper environments. The company's workflow-based services offer solutions to specific healthcare business processes within the revenue cycle, such as remote coding, abstracting and chart completion, remote physician order processing, pre-admission registration scanning, insurance verification, secondary billing services, explanation of benefits processing and release of information processing. All solutions are available for purchase or via an application service provider (ASP) model to match customers' capital or operating budget needs.

LanVision's products and services create an integrated repository of historical health information that is complementary and can be seamlessly "bolted on" to existing clinical, financial and management information systems, providing convenient electronic access to all forms of patient information from any location, including web-browser based access via the Intranet/Internet. These integrated systems allow providers and administrators to dramatically improve the availability of patient information while decreasing direct costs associated with document retrieval, work-in-process, chart completion, document retention and archiving.

For additional information on LanVision, please visit our website at www.lanvision.com.

More about the Author:

Mr. Mark R. Anderson is one of the nation's premier IT research futurists dedicated to health care. He is one of the leading national speakers on healthcare and has spoken at > 300 conferences and meetings since 2000. He has spent the last 30+ years focusing on Healthcare – not just technology questions, but strategic, policy, and organizational considerations. He tracks industry trends, conducts member surveys and case studies, assesses best practices, and performs benchmarking studies. He also assists vendors in their Business Strategies, Market and Customer Strategies, Competitive Analysis, and Product Profiling.

Mr. Anderson is a highly accomplished healthcare executive with an impressive track record of success in managerial positions of progressive responsibility and bottom-line impact over the past thirty plus years. He is a widely-versed individual whose line and consulting responsibilities in more than 200 hospitals and 50 healthcare payer organizations has resulted in a firm foundation from which to make difficult decisions and the ability to perform complex analyses. The health care institutions varied in size from 50 to 2,600 beds while corporate wide revenues exceeded one billion dollars per year. Mr. Anderson has extensive experience in health care redesign and organizational restructuring along with a comprehensive background in start-up and replacement of multi-facility health information platforms, including financial, clinical, managed care and decision support systems.

Prior to joining AC Group, Inc. in February of 2000, Mr. Anderson was the worldwide head and VP of healthcare for META Group, Inc., the Chief Information Officer (CIO) with West Tennessee Healthcare, the Corporate CIO for the Sisters of Charity of Nazareth Health System, the Corporate Internal Consultant with the Sisters of Providence (SOP) Hospitals, and the Executive Director for Management Services for Denver Health and Hospitals and Harris County Hospital District. His experience includes 17 years with multi-facility Health Care organizations, 15 years Administrative Executive Team experience, 6 years as a member of the Corporate Executive Team, and 9 years in healthcare turnaround consulting. Mr. Anderson received his BS in Business, is completing his MBA in Health Care Administration, and is a Fellow with HIMSS. Additionally, Mr. Anderson serves on numerous healthcare advisory positions.

For more information, contact Mr. Anderson at <http://www.acgroup.org>