Executive Summary

Summit Health’s unique approach to clinical documentation improvement (CDI) focuses on physician engagement and creating a closed-loop process to ensure accuracy and productivity throughout the clinical documentation chain. An organization focused on Lean management, Summit Health formed a symbiotic partnership with its solutions vendor, Nuance Communications, to standardize processes and eliminate variation, elevating implementation to best practice.

In this white paper, Summit Health will:

- Introduce a clinically-focused approach to CDI that leverages technology to deliver efficiencies, identify gaps in documentation accuracy, and improve both compliance and clinical integrity
- Describe physician adoption and engagement opportunities made possible by integrating technology into the physician workflow
- Illustrate how a holistic approach that combines CDI, innovative speech, computer-assisted coding (CAC) and quality software with physician education across both inpatient and outpatient settings produces significant operational, clinical and financial improvements
- Delineate and discuss five critical steps comprising best practice for clinical documentation to minimize financial and productivity losses
- Examine the importance of a symbiotic hospital/vendor partnership in:
  - Offsetting potential losses of $400,000
  - Correcting case mix over 15%
  - Improving coding productivity 35% and speed 17%
  - Implementing real-time ED report turn-around
  - Reducing radiology report turnaround time 42%
ICD-10 triple threat

For U.S. hospitals, ICD-10 poses a triple threat:

- Financially, with incorrect or insufficient coding an almost certain upshot of its fivefold-increase in codes, the hospital bottom line will suffer from reduced reimbursements. Estimates suggest the three-year incremental impact for a typical 248-bed hospital could range from $2.5 million – $7.1 million.¹
- Operationally, productivity is expected to drop. For coders, the initial slowdown could be as much as 60% initially.² For physicians, the decrease could range from 10% to 20% due to significant increases in queries.³
- Clinically, accuracy is at stake. A 6-month, 20,000-record audit of physicians’ clinical documentation practices conducted by AAPC Client Services showed that only 63% of providers’ current documentation is accurate enough to support the more rigorous ICD-10 requirements.⁴

Michele Zeigler, vice president, Information Services/CIO, and John Lucabaugh, vice president of Health Information Management, at Summit Health, chose to address these potential threats with a preemptive strike— an end-to-end clinical documentation improvement (CDI) approach that leverages technology to improve accuracy, deliver efficiencies, identify gaps in documentation accuracy, and improve both compliance and clinical data integrity. The result? Significant financial, operational and clinical improvements.

Ahead of the curve advantage

Summit Health is ranked among the top 20% of best-performing health systems in the country. It comprises 240-bed Chambersburg Hospital and 56-bed Waynesboro Hospital, as well as more than 32 employed physician practices, diagnostic services, a women’s health center, a fitness center, walk-in care and urgent care centers.

Among the few healthcare organizations in the unique position of readiness for Health and Human Services’ (HHS) original 2013 ICD-10 implementation date, Summit Health was able to take advantage of the eventual extension to implement a comprehensive, closed-loop CDI program aimed at reducing its potential for financial, operational and clinical quality loss.

A comprehensive approach to clinical data improvement

Summit Health’s unique approach to approach to CDI centers on physician engagement and creating a closed-loop process to ensure accuracy and productivity throughout the complete clinical documentation chain.

The health system’s clinically-focused best practice combines cutting edge technology to enhance user adoption and established documentation improvement and services programs that range from targeted additional training that helped physicians and coders understand and navigate the increased specificity of ICD-10, to predictive data analysis to determine potential losses from its implementation. The result: Higher quality documentation, increased productivity, and improved outcomes that accurately reflect reimbursement and patient case mix for severity of illness.

The value of partnership

Summit chose J.A. Thomas & Associates (JATA), now a part of Nuance Communications, based on 20 years of success in CDI and demonstrated results in Case Mix Index Correction. Having the right combination of technology solutions, the necessary implementation and support services, and a matching vision of how everything could fit together, Summit agreed to serve as the beta site for Nuance’s Clintegrity™ platform.

Summit Health began implementing Clintegrity™ Clinical Documentation Improvement (CDI) at both facilities in February 2012. Later, in May 2013, Summit Health implemented Clintegrity™ Computer Assisted Coding (CAC) on the inpatient side of the Chambersburg and Waynesboro facilities. In November, Summit Health went live with outpatient, same-day surgery, outpatient observation and ER visit types.

Nuance’s beta program is a rigorous process designed to provide final validation of a finished solution by using actual data in an actual setting. A process best practice is the assigning of a dedicated Nuance project manager. This manager, with access to all departments of Nuance, interacts daily with and serves as a single-point of contact and advocate for the healthcare organization.

An organization focused on Lean management, Summit Health’s symbiotic partnership with Nuance assured the healthcare

² http://blogs.hcpro.com/icd-10/2013/10/what-will-happen-to-coder-productivity/
³ Advisory Board
organization's complete support for the smoothest possible implementation, and ensured Nuance of its solutions' efficacy.

**Best practice: A five-step CDI methodology**

With Nuance’s support, Summit Health deployed the following five-step CDI methodology:

1. Implement effective information technology systems
   Summit Health implemented the following Nuance solutions:
   - Clintegrity™ Computer Assisted Coding (CAC)
   - Clintegrity™ Compliant Documentation Management Program (CDMP™)
   - Clintegrity™ Quality Measures
   - Clintegrity™ Performance Analytics
   - Clintegrity™ Compliance
   - Dragon® Medical Network Edition
   - Dragon® Medical eScription™
   - PowerScribe® 360 Reporting

   Summit’s projected system investment is $1.4 million in 2014, and $1.7 million for 2015.

2. Assess risk
   Working with Nuance, Summit Health adopted an outside-in approach, starting with an external outcomes analytics review to scrutinize charts for errors and quality measures, then validating it with a 400-chart review of its ICD-9 coding efforts. The real-time review allowed Summit Health to analyze its coding accuracy, and predict ICD-10’s potential impact on productivity.

   In reviewing the numbers, Summit Health discovered it was at risk for a $400,000 loss due to diagnosis-related group (DRG) shifts. Using this insight, the organization examined its investments to ensure adequate cash flow post-conversion, taking into account payers’ potential inability to process claims effectively.

3. Improve workflow
   With support both for ICD-9 and ICD-10, Clintegrity CAC simplifies and improves the accuracy of the coding process by putting relevant documentation and integrated reference materials at coders' fingertips. The result: fewer missed codes. Nuance Clintegrity CAC helped Summit Health inpatient coders increase productivity by as much as 35%, and improve coding speed on the inpatient side by 17%.

   To reduce report turnaround time (TAT), Summit Health implemented Nuance’s Dragon Medical eScription, an on-demand, enterprise-wide medical transcription platform. Physicians use Nuance’s Dragon Medical Network Edition to dictate patient charts directly into Summit Health’s Meditech EHR. With Dragon Medical Network Edition, ED report TAT went from 6 hours to real time. Summit Health plans to implement additional front- and back-end speech solutions.

   In 2014, Summit Health also implemented PowerScribe 360 Reporting to reduce radiology specialties’ TAT. Prior to implementation, the average time lapse between taking a diagnostic exam and having it signed was 35 hours. Speech recognition in PowerScribe 360 Reporting automates radiology report dictations, eliminating the need for transcription, and reducing TAT to approximately 17 hours—a 42% reduction.

   In addition, with Clintegrity Performance Analytics, Summit continues to monitor its performance against national clinical and financial, metrics, to identify areas for improvement and help sustain results over time.

   Clintegrity Quality Measures supports all mandated quality measure sets for accreditation and federal reimbursement. By also supporting measure sets not yet required, Summit Health is also able to proactively assess their performance on potential future requirements.

4. Support coders and clinical documentation specialists
   With support for ICD-9 and ICD-10, Clintegrity CAC simplifies and improves the accuracy of the coding process by putting relevant documentation and integrated reference tools at coders' fingertips. The result: fewer missed codes.

   Standardized coding, coupled with collaboration between health information management (HIM) and CDSs to improve compliance and clinical integrity, generated significant case mix corrections—5.6% at Waynesboro, and 9.7% at Chambersburg for a total CMI increase of 15.3% from August 2013 through July 2014.

5. Engage physicians
   Summit Health uses Nuance as its main source for ICD-10 training of all clinical and non-clinical staff. Anticipating resource shortages, Summit Health deployed Nuance’s educational platform to develop its own team of trained coders. Nuance’s tools assess individual coder's competency, pinpoint areas for improvement, and assign specific lessons to prepare him or her for the fast-approaching ICD-10 implementation deadline.

   Additionally, Summit Health relies on Nuance’s specialized physician education services to prepare medical staff in both hospitals and 32 physician practices for the new ICD-10 charting requirements.

   Continued expansion of the CDI program will take tracking and documenting clarifications to a new level.

   This will include the implementation of Nuance’s Computer Assisted CDI solution that encompasses the JATA clarification methodologies and strategies embedded into Nuance’s Clinical Language Understanding (CLU) technology, further automating the clinical documentation specialists’ (CDS) workflow and streamlining communication between physicians, CDI specialists and coding teams.
Now and next

Actual and projected results of Summit Health’s CDI implementation improvements include:

- **Financial**: Summit Health uncovered and instituted corrective measures to offset potential $400,000 losses, and achieved a 15.3% case mix correction.
- **Operational**: Coders increased productivity by as much as 35%, and improved coding speed on the inpatient side by 17%. Turnaround time decreased from 6 hours to real time, and by 42% for radiology. Continued expansion of the CDI program will include use of Nuance Clinical Language Understanding technology to further automate the CDS workflow and streamline communication between physicians, CDI specialists and coding teams.
- **Clinical**: In October 2014, Summit Health implemented Nuance’s Clintegrity CA CDI solution. With it, Summit Health was able to review and correct documentation, and monitor CMS-mandated metrics such as hospital-acquired conditions—while patients were still in the hospital, and care could be adjusted.
- **Compliance**: Clintegrity Compliance allows Summit Health CDSs to interact in a timely, proactive manner with the clinical team, reinforcing coding accuracy, improving the capture of quality data and, potentially, improving the outcomes of care.

Conclusion

Summit Health’s unique approach to clinical documentation—physician engagement in a closed-loop process—ensures accuracy and productivity throughout the complete clinical documentation chain.

Deploying cutting-edge technology solutions, and clinically-oriented user education and support in a win/win beta site arrangement, Summit Health and Nuance built a solid foundation for clinical documentation integrity, while standardizing processes and eliminating variation to elevate implementation to best practice.

Contacts

**Michele R. Zeigler**
Vice President, Information Services/CIO
Summit Health
(717) 267-7913
mzeigler@summithealth.org

**John Lucabaugh, MBA, RHIA**
Vice President of Health Information Management
Summit Health
(717) 267-6373
jlucabaugh@summithealth.org

**Kali Durgampudi**
Vice President, Innovation and Mobile Architecture
Nuance Communications
(781) 565-5170
kali.durgampudi@nuance.com

About Summit Health

Summit Health is a non-profit network of hospitals and physician practices dedicated to building a healthier community. As Franklin County’s leading healthcare provider, Summit Health offers family care, specialists, lab and imaging services, a fitness center, two walk-in care centers, and two award-winning hospitals. More information is available at www.SummitHealth.org and www.facebook.com/SummitHealth.

About Nuance Communications

Nuance Communications is the market leader in creating clinical understanding solutions that drive smart, efficient decisions across healthcare. More than 500,000 physicians and 10,000 healthcare facilities worldwide leverage Nuance’s award-winning, voice-enabled clinical documentation and analytics solutions to support the physician in any clinical workflow and on any device.

To learn more, please contact us at 877-605-5902 or visit nuance.com/healthcare.