OPTUM®

The case for risk adjustment workflow-based NLP

The retrospective risk adjustment workflow is shaped with opportunities for efficiency gains. Natural Language Processing (NLP) can significantly streamline and reduce the time it takes to zero in on specific, relevant clinical information. In addition, NLP and artificial intelligence are increasingly fueling prospective risk adjustment analytics that identify undiagnosed conditions and support the correct interventions, leading to enhanced quality of care.

The power of the workflow

Traditionally, NLP is treated as a separate activity, out of the normal risk adjustment workflow. But consider the impact of integrating NLP with analytics and a comprehensive suite of services to achieve a more strategic approach to improve clinical outcomes and accurate reimbursement:

Suspecting and other analytics → Record retrieval → NLP to refine targets → Manual review → Submission → Data retained for future quality and risk adjustment programs

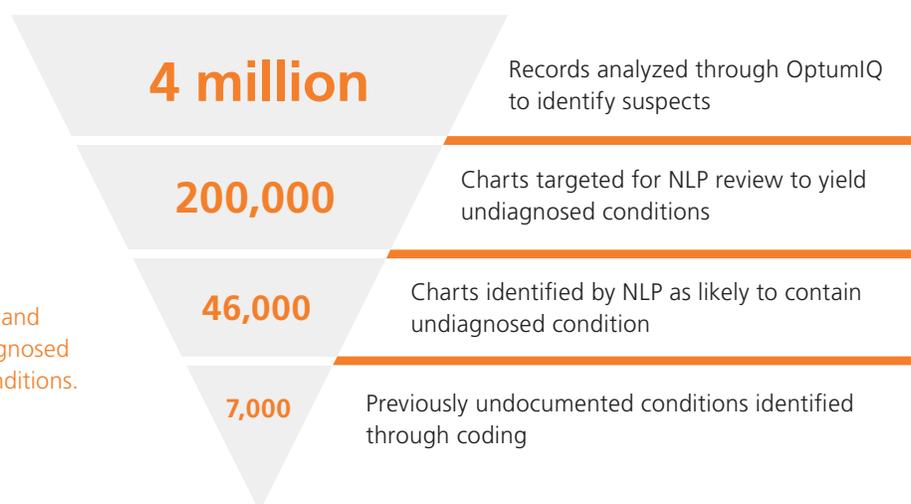### NLP is an essential component of an integrated strategy

NLP is particularly effective when it is embedded into an integrated process such as retrospective risk adjustment, so that the technology is used efficiently to identify the records most likely to have relevant clinical information.

Proof positive

Consider the results from this recent example over four weeks to illustrate the potential value of integrated NLP as part of a comprehensive risk adjustment strategy:

This integrated strategy improves the efficiency and ability to identify undiagnosed and undocumented conditions.

4 million — Records analyzed through OptumIQ to identify suspects

200,000 — Charts targeted for NLP review to yield undiagnosed conditions

46,000 — Charts identified by NLP as likely to contain undiagnosed condition

7,000 — Previously undocumented conditions identified through coding

OPTUM IQ™

NLP experience matters

Experience and maturity are key drivers in developing confidence with NLP technology to improve efficiency in quality and risk adjustment processes. Since pioneering the computer-assisted coding field in 1999, our NLP engine has processed billions of transactions. Since 2008, our NLP engine has processed over 15.5 million hospital inpatient cases, with a steady rise in number of inpatient cases processed per month to nearly 700,000.

Risk adjustment and NLP: Fast forward to the near future

Increasingly, NLP technology will play a key role in modernizing traditional Medicare Advantage hierarchical condition coding (HCC) programs. With the advancements in artificial intelligence and machine learning, these technologies will significantly improve:

- Prediction, early identification and evaluation of new disease conditions and disease progression

- Visibility of trends in clinical documentation across physician, hospital and specialist charts

- Identification of new suspect attributes, provider coding patterns and propensity in closing gaps

Over time, NLP will help shift risk adjustment programs to focus on computer-assisted coding (CAC) and developing individualized patient health records.

Delivering exponentially more value

Given the expansion of the number of codes from which to choose in the ICD-10 environment, NLP's precision is even more relevant. With more than 155,000 possible codes in ICD-10, coders are required to find codes based on highly granular elements, such as laterality, severity, acuity, and exact body part affected. The Optum NLP engine — based on exclusive-patented, mere-parsing capabilities — makes it uniquely able to differentiate these features within medical documentation, driving to the highest level of specificity in coding and reducing false positives.

Optum comprehensive risk adjustment programs start with analytics as the foundation

These analytics include:

- Provider and member segmentation

- Gap identification

- Predictive modeling around likelihood of closing and estimated impact

- Stratification of gaps into appropriate programs

NLP is an essential part of those analytics. The key is to integrate NLP insights into the overall strategy to provide the vital additional insight for providers to support member assessment and close gaps. The results: one less vendor to manage; and better member care.

Achieving increased retrieval accuracy

Approximately 60 percent of the Medicare Advantage membership nationally feeds our suspecting analytics. Those inputs and many others through OptumIQ enable precision suspecting and help to improve the accuracy of accurate projections of the financial benefit of any chart review project.

OptumIQ powers intelligence across the health care system and is embedded into our suspect and targeting analytics prior to chart retrieval. It represents our unique combination of curated data, analytics and health care expertise.

Learn how integrating NLP into your workflow helps you improve clinical outcomes and support appropriate reimbursement.

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