

ADVANCING  
HEALTH PLAN DATA  
INSIGHTS

**ONE MEDICAL RECORD**  
AT A TIME  
**THROUGH AN ENTERPRISE-WIDE**  
PUBLISHING SYSTEM





Clickable on any page to bring you back to this page



CLICK TO GO TO ANY SECTION

2

3

4



**PERSPECTIVE**

**NLP PUBLISHING**

**STRATEGY**



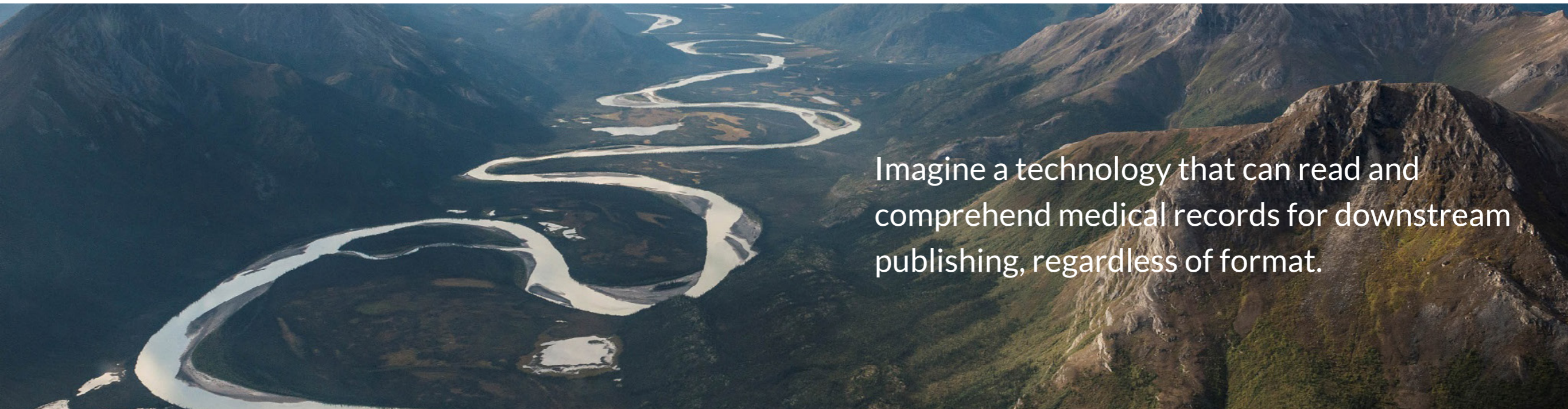
**SYTRUE**  
Data Driven Healthcare



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# UNLEASHING Medical Record Insights



Imagine a technology that can read and comprehend medical records for downstream publishing, regardless of format.

The vision was to dissect each medical record processed to publish insights for downstream use allowing health plans and health systems to publish and distribute their insights.

The technology foundation has been built leveraging Optical Character Recognition (OCR), proprietary rule sets boosted by Artificial Intelligence (AI) and understanding through Natural Language Processing (NLP).

Imagine processing a single medical record to publish insights across your enterprise for multiple purposes. One processing event bringing insights for multiple use cases.

**One medical record holds thousands of insights for multiple perspectives. Our clients are experiencing medical record insight publication and distribution, enterprise-wide, [TODAY](#).**



## A Completely Different Approach To Clinical Documentation

At SyTrue we have the perspective that a medical record should only be read once; identifying all the insights contained to be published downstream for healthcare experts review. The amount of time and productivity wasted distributing the same medical record to multiple healthcare experts, in multiple areas and systems to gain their perspective, is a cost that should be a thing of the past.



### OCR

We understand medical records have no common format. We also understand **MEDICAL RECORDS** are typically **FAXED** or **SCANNED** creating a .pdf file format. Very rarely are medical records in a text format. This is why our technology platform leverages Optical Character Recognition (OCR) to convert images to text allowing for our proprietary Natural Language Processing Operating System (NLP OS) to parse, read and comprehend what's in the medical record, similar to the way a healthcare expert would.



### NLP OS™

NLP OS parses sentences similar to the way you diagrammed sentences when you were in middle school. Understanding the context of the medical record allows our technology to **READ** and **COMPREHEND** the medical record, similar to the way a healthcare expert would. **NLP OS**, breaks down the medical record to identify allergies, problems, medications, procedure, diagnosis, family history, etc. and does so in less than a second highlighting within the medical record where the **INSIGHTS** were found.



### AI

SyTrue utilizes Artificial Intelligence (AI) to dig deep into medical records. Our technology platform leverages a host of clinical and medical based rules allowing our AI to carry out specific tasks to address specific actions that our clients want taken around their data to **IDENTIFY** what actually took place during the patients encounter. This allows them to publish data **INSIGHTS** to specific or multiple **HEALTHCARE EXPERTS**. Read once, publish and distribute enterprise-wide.



### LANGUAGE

There are close to 1 million licensed physicians in the United States today. Each one of those physicians spells and speaks differently. To overcome the wide variance in the ways physicians document within the medical record, SyTrue applies our proprietary **SyWhat™** solution to **NORMALIZE** the **DATA**. SyWhat can normalize data across an enterprise, single facility or even a single physician allowing for a single truth of data that can be leveraged for a common understanding.



# We've taken a much different approach to Natural Language Processing.

Cascading insights across a health plans enterprise to reduce medical record redundancy by publicizing the insights abstracted to all necessary stakeholders downstream.

## Audit

Modernizes the manner in which Auditors go about their daily routine of validating medical records in support of proper payment.

## Review

Streamlines the manner in which Reviewers go about their daily routine of identifying key areas within the medical record that supports regulatory reporting.

## Pop Health

Abstracts key areas of interest from the medical record for population health analytics allowing health plans to dive into specific cohorts or across the entire member population.

## Terminology

Unlocks data making it actionable and usable to streamline operational use and enable interoperability within a department or across an entire health plan.



**REFERRING PHYSICIAN:** DOCTOR JANE  
**REASON FOR ADMISSION:** Weakness, hip pain.  
**REASON FOR CONSULTATION:** Evaluation of cardiac status, positive troponin.

**HISTORY OF PRESENT ILLNESS:** This is an 84-year-old Caucasian female with history of atrial fibrillation and hypertension, congestive heart failure, diverticular disease and a bowel tumor who struggles with hip pain beginning on the right which has been present for many months. She has been to rehabilitation. She returned home. She got up and the pain returned and she came back to the hospital and was subsequently admitted. She has a history of complex atherosclerotic heart disease. She has a history of atrial fibrillation status post third degree heart block status post permanent pacemaker placement performed in MM/DD/YYYY. She has a history of congestive heart failure and dilated cardiomyopathy with an ejection fraction in the range of 30-40%. She has a history of colon resection secondary to colon cancer followed by DOCTOR JOHN.

**PAST MEDICAL HISTORY:**

1. Dilated cardiomyopathy.
2. History of permanent pacemaker placement.
3. History colon resection.
4. History of herniorrhaphy.
5. History of Port-A-Cath injection.
6. History of chronic venous stasis.

**SOCIAL HISTORY:** Lives independently. She does not use alcohol or tobacco.

**FAMILY HISTORY:** Noncontributory.

**ALLERGIES:**

1. Zithromax.
2. Codeine.
3. Penicillin.
4. Epinephrine.

# Chart Audits

**01** SyAudit identifies upfront if an audit contains all the necessary charts (or not) for an audit to begin (or not).

**02** SyAudit reads & abstracts insights from a single document in less than a second.

**03** SyAudit utilizes rules, consistently, to standardize findings eliminating variance in a medical record audit.

▲ 20% of Chart Audits should never begin the audit process due to a lack of complete documentation.

▲ The average person takes 3 and a half minutes to read 200 words. A single medical record can contain over 500 words.

▲ Chart Audit results vary greatly by Auditor due to their individual interpretation of the medical record.



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# Chart Reviews

- 01** SyReview identifies regulatory reporting requirements in only the charts that need to be reviewed streamlining workflow.
- 02** SyReview automates Chart Review by highlighting the insights within the medical record for quick validation.
- 03** SyReview increases overall findings within a Chart Review enabling a health plan to properly report regulatory requirements.

- ▲ 15% of chart reviews are lost or do not contain the appropriate information for a review to begin.
- ▲ Increases productivity by 45% by highlighting areas of interest for the reviewer to validate.
- ▲ Identifies 20% more findings than a manual review through NLP rules and processing.



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# Pop Health

- 01** SyHealth leverages medical record documentation to glean insights from a patients encounter versus claim data.
  - Identifies conditions and diseases for better coordination of care reducing unnecessary procedures.
- 02** SyHealth answers current and new questions as to why the patient is being seen, through the eyes of a clinician.
  - Reduces costs by improving patient disease management while increasing patient wellness.
- 03** SyHealth interrogates enterprise-wide medical records allowing new insights to be revealed regardless of formats.
  - Exposes new insights outside of claims data allowing new questions to be asked and new answers to be given.





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# Terminology

- 01 SyWhat normalizes unstructured data enterprise-wide bringing consistency and interoperability to abstracted insights.**
  - Eliminates ambiguity addressing terms, concepts and which data types, regardless of format, enterprise-wide.
- 02 SyWhat improves data governance maximizing the content locked within all your health plans or health systems medical records.**
  - Standardizes terminologies at the parent, child or individual physician level bringing consistency to your data.
- 03 SyWhat delivers services and functions to map, mediate and to manipulate terminologies across your enterprise.**
  - Standardizes locally created content to standard vocabularies saving time and resources.



# An Enterprise Medical Record Abstraction Strategy for Downstream Publishing & Distribution



Drive Medical Record Data Governance



Publish Medical Record Insights Enterprise-wide



Establish Content Enabled Workflows



Standardize Terminologies For Interoperability



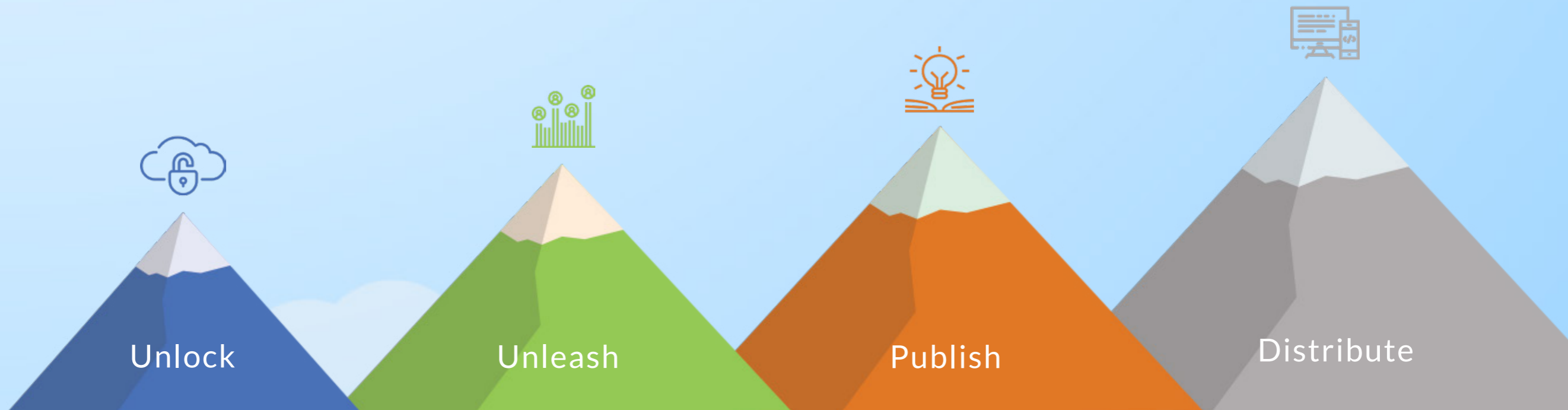
Distribute Insights For Proper Action





# SyTrue is the Answer

Medical records hold valuable data that should be unlocked unleashing actions by publishing their insights through mass distribution across a health plans or health system enterprise.



Unlock

Unleash

Publish

Distribute

## Data

## Insights

## Knowledge

## Modernize

Unlock the data that lives in your medical records, regardless of format.

Unleash the insights that bring understanding to the members encounter.

Publish medical knowledge from medical record findings versus claims data.

Modernize how insights are distributed through a modernized data flow.

**WHAT'S NEXT?**

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**CONTACT US TODAY AND FIND OUT...**

**WHAT'S IN YOUR  
MEDICAL RECORDS?**

[www.sytrue.com](http://www.sytrue.com)

**530 897 0220**

