Reducing “Patient Leakage and Keepage”

Improve patient retention, care quality, and financial performance in a post-pandemic era using Natural Language Processing (NLP) and sentiment analysis.

Why are patients switching providers?

Even prior to the COVID-19 pandemic, the U.S. health systems observed that roughly 50% of their patients would seek care out of network or from third party clinics. The primary drivers? According to a longitudinal survey of patients that began in 2017 by the AHA (American Hospital Association) the main reasons are:

- Access to care
- Appointment availability
- Convenience
- Connection

Patients, especially those with urgent or long-term conditions, cannot tolerate longer delays and are more likely to look for immediate care outside of their network. Additionally, complex health systems that are financially integrated do not necessarily guarantee better quality of care.

Switching providers can negatively affect a health system’s financial performance, market position, reputation, and patient outcomes. The COVID-19 pandemic has exacerbated the problem by exposing the gaps in care delivery, access, and quality across different levels of care. The problem is not isolated to complex, financially integrated systems. Smaller, regional providers face competition from third party clinics and even full digital care solutions. ACOs (Accountable Care Organizations) participating in the Medicare Shared Savings Program (MSSP) also share a vested interest in reducing third party specialty visits.

Reduce patient leakage and improve patient retention with NLP

A recent survey of health systems showed that reducing patient leakage is a priority for 94% of respondents but only 10% of them have high confidence in their ability to adequately address the associated drivers.

One strategy is to leverage technology like NLP, an arm of AI, to surface additional patient context using the unstructured text in patient records. Using sentiment analysis, NLP can also help providers identify and address the factors that cause patients to seek care elsewhere in claims, social media data, and call center transcripts. By harnessing NLP to extract patient level insights across these data sources, health systems care management teams can identify which patients struggle with access to care, and ultimately drive improvements to quality and the patient experience.

Enhancing Patient Retention with clinical NLP

Social media

"Goodhealth is so hard to get to by bus that I don't know why they bother trying to send me there"

Call centre

"The nurse were all so kind and attentive, but it just took too long to get seen"

Physician liaison

"There are not enough specialist cardiologists within the network"

Medical records

"In light of his symptoms, I have referred him to outpatient cardiology

LLM, Gen AI, Linguistics, Sentiment, Ontologies, Rules

Solution

- Automated sentiment analysis to gauge patient satisfaction and areas for improvement
- Real-time alerts on negative feedback for swift action and reputation management
- Gain competitive intelligence on out of network providers

Solution

- NLP-driven analysis of call transcripts to uncover common concerns, questions, and patient experiences
- Strategic insights into call patterns and topics, guiding resource allocation and service enhancements

Solution

- Deep analysis of physician liaison notes to identify reasons for out of network referrals
- Uncover documented social determinants of health that are impacting referral routes
- Identify patient preferences for referrals

Solution

- Deep analysis of clinical notes to identify trends in patient care and referrals
- Identify uncoded SDOH that will impact patient decision making
- Increase identification of chronic conditions by 50% with NLP applied to existing medical records

Why IQVIA?

IQVIA's NLP solutions deliver critical information that enable health systems to make rapid and informed decisions. By tapping into these different data sources, operational and clinical leaders can unlock the unrealized value hidden in unstructured text and use these insights to figure out what drives' patients out of network. Analyzing social media data can yield factors like social determinants of health that otherwise might not show up in a standardized screening form, or shed light on why patients lose trust in a particular provider. Physician liaison notes and medical records in the EHR could surface trends that result in a new service line, resulting in a more aligned experience with patient expectations.

For over 20 years, health systems of all sizes and types have relied on IQVIA's NLP solutions. Our award-winning AI is trusted, accurate, scalable, and secure. Our solutions are easy to implement, integrate, and use, and are backed by a team of experts who are committed to their clients' success.

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