



BETTER DATA

BETTER PATIENT CARE

BETTER OUTCOMES



**Better Data** is realized when our team of Healthcare IT experts and clinicians work with your team.

**Better Patient Care** is achieved when clinical data is complete and accurate.

**Better Outcomes** result when Clinical Decision Support systems use reliable and standardized data.

# **We provide Healthcare IT services for:**

- **Data Quality Improvement and Analysis**
- **Interoperability Planning**
- **Clinical Document Improvement, CDAs**
- **Standardized Clinical Terminologies**
- **Clinical Terminology Mapping**
- **Partner Onboarding**
- **HL7 Standards Development**
- **HL7 FHIR® Queries**
- **Data Modeling and Data Architecture**
- **Health IT Program Management**

# Why is data quality so important today?

1. **Data quality is increasingly important as the need for Interoperability is increasing. The Trusted Exchange Framework is built on a foundation of data quality assumptions.**
2. **The Qualified Health Information Networks, QHINs, will have to meet certain qualifications under ONC's TEFCA.**
3. **USCDI, US Core Data for Interoperability has standardized code sets and a standards harmonization process.**
4. **Interoperability creates a more complete and accurate patient record which can lead to better care coordination, better costs savings (avoids test duplication), improved patient safety, and improved population health reporting.**
5. **Data collection and data analytics are improved as data quality is improved**
6. **Drowning in data? Effectively condense data into executive summaries.**
7. **Change free form text to annotated text for computable codings. Strain out key data items from text like vital signs.**

# How we improve data quality:

1. We obtain statistically significant sample data.
2. We identify the source of challenges to data quality.
3. We provide recommendations for troubleshooting so problems can be traced.
4. We provide clients a list of tools to use and likely problem sources, such as a clinical workflow issue, a configuration problem, or a vendor app problem.
5. We provide interactive trouble shooting sessions with de-identified data.
6. We examine the fields in CDAs to see if the data contents match the data fields.
7. We verify that CDA contents are compliant with HL7 standards with automated tooling.
8. We verify terminologies are correctly used.
9. We identify and add new standard terminologies.



## **Our Experience in Automated Tooling**

- 1. We have extensive experience using Model Driven Health Tools, (MDHT), for CCD analytic review and creation of an interactive clinical spreadsheet.**
- 2. MDHT has been upgraded to review extensive domain level documents. We can load and review over 3000 patient XML documents at one time in a single session.**
- 3. There is the potential for further development of MDHT using schematron scoring functionality.**

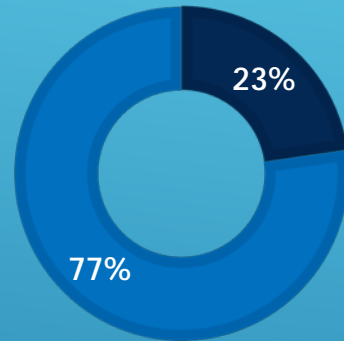
# **Our Experience in Data Quality**

- 1. Data Quality improvement starts with an evaluation of your current system. We evaluate data, create a scorecard for various domains, and make recommendations for improvements.**
- 2. Once improvements are made, we rescore the data and provide a second report.**
- 3. We evaluate incoming external partner data.**
- 4. We create a scorecard for their various domains and make recommendations for improvements. Once improvements are made, we rescore their data and provide a second report.**

# EHR PARTNER – DOCUMENT SUMMARIES

## Document Mix

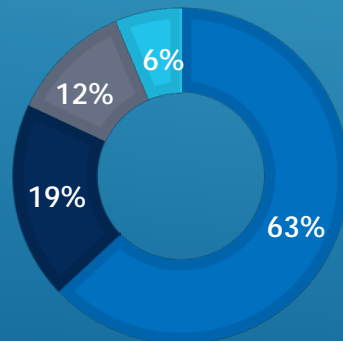
- Summarization of Episode Note
- Subsequent Evaluation Note



- **Document Mix:** The percentage of each document type submitted by the EHR.
- **Recurring Patients:** The percentage breakdown of documents per patient.
  - For example, 63% of documents have either 1 or 2 documents per patient, and 6% of the documents are represented by patients with more than 10 documents per patient.

## Recurring Patients

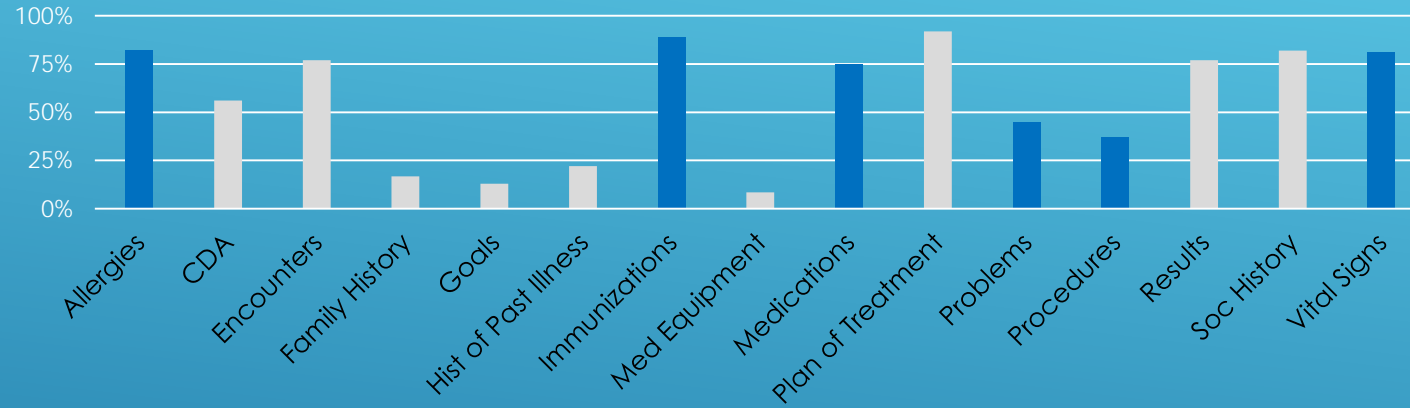
- 1 to 2
- 3 to 5
- 6 to 10
- 11+





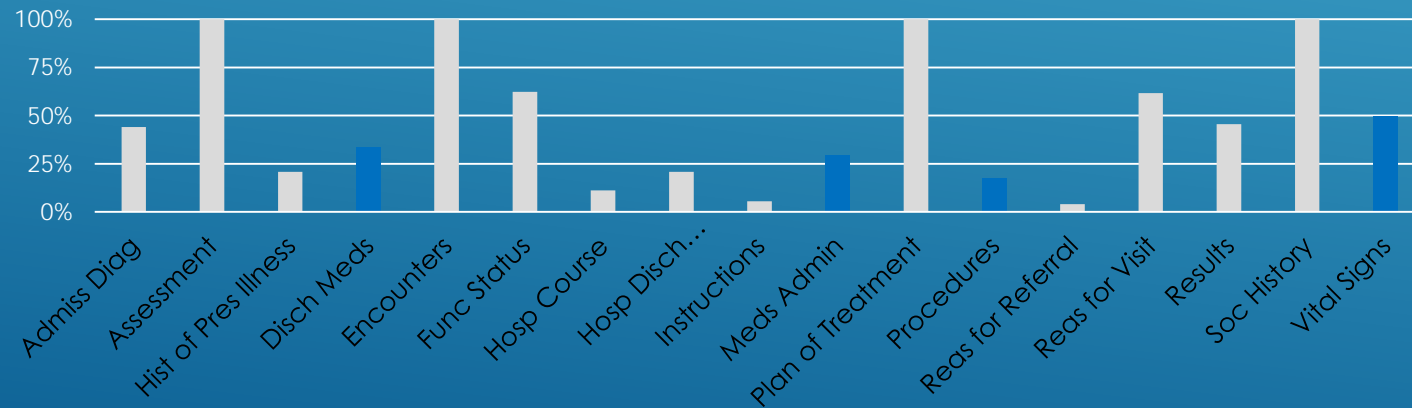
# EHR PARTNER – DOCUMENT SUMMARIES

## Clinical Summaries: Domain Content % (Completeness)



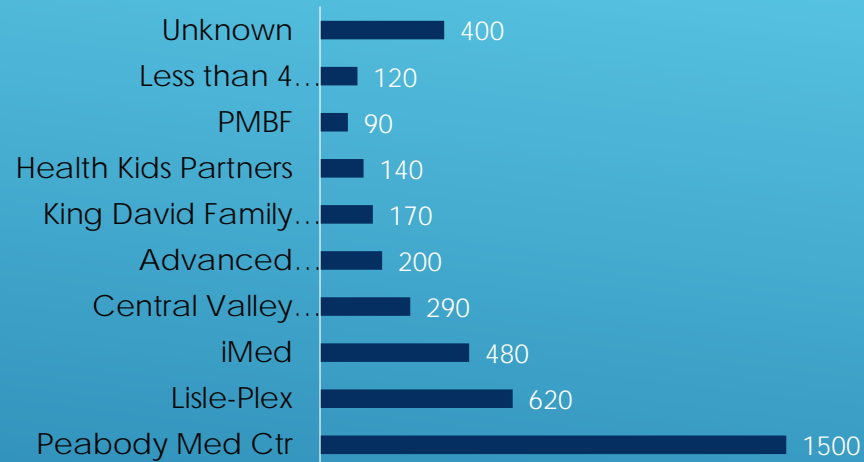
**Domain Content %:** The percentage of documents which have content in specific sections.

## Progress Notes: Domain Content % (Completeness)



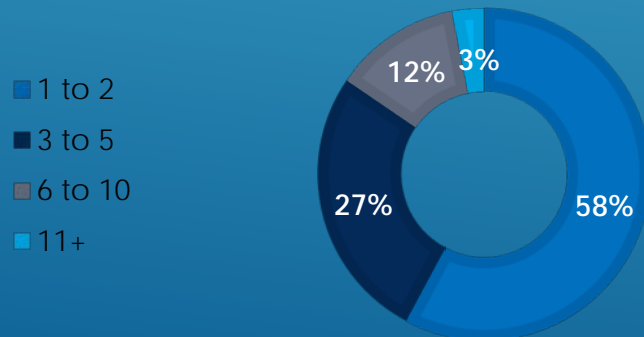
# HIE PARTNER – DOCUMENT SUMMARIES

## Participating Stakeholders (Organizations)

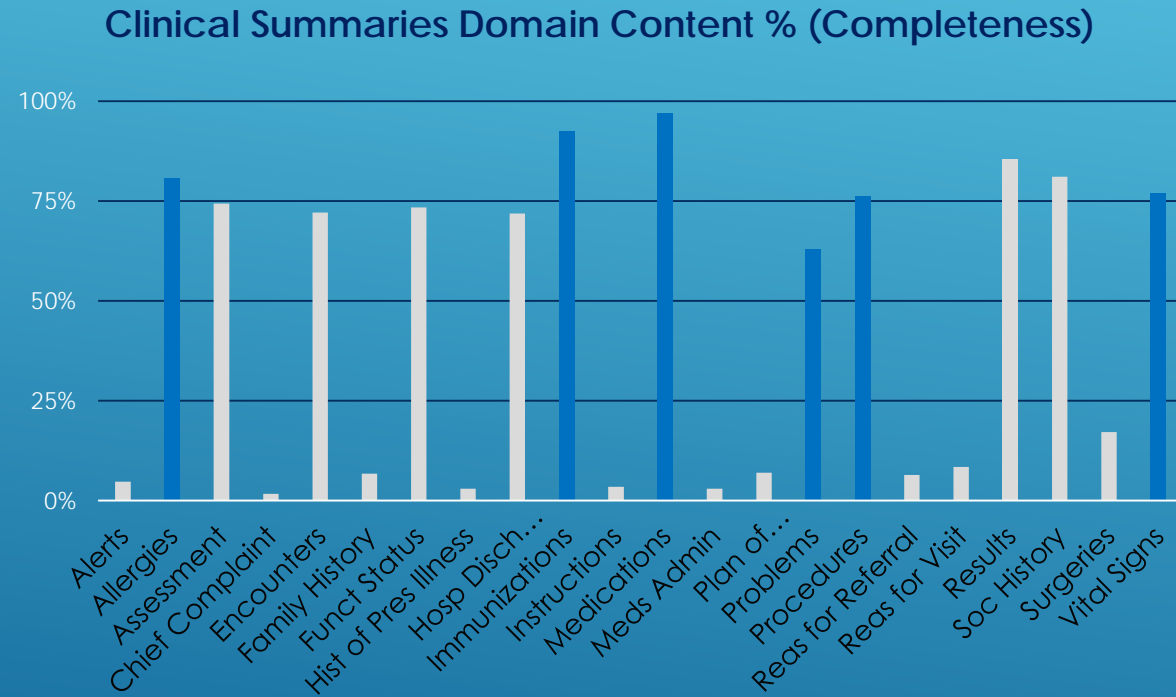


- **Participating Stakeholders:** Number of submitted documents by each of the HIE's participating stakeholders.
- **Recurring Patients:** The percentage breakdown of documents per patient.
  - For example, 58% of documents have either 1 or 2 documents per patient, and 3% of the documents are represented by patients with more than 10 documents per patient.

## Recurring Patients



# HIE PARTNER – DOCUMENT SUMMARIES



- **Domain Content %:** The percentage of documents which have content in specific Sections.

## **Standardized Clinical Terminologies:**

Creation and maintenance of clinical reference terminologies.

**Clinical Terminology Mapping:** Match local terms to international clinical data standards to enable data exchanges with precise meanings.

“Individual talents get magnified many times over through the collective lens of an effective team.”

*Dalal Haldeman*



**HL7 FHIR® Information Exchange:** FHIR® has its own standardized vocabulary for information exchange. We can map your vocabulary to FHIR®'s vocabulary.

## **Improved Patient Safety:**

Better data results in improved care coordination between providers and decreased readmissions.

**HL7 Standards Development:** We can establish a new international standard for you or improve an existing one. We voice our clients' needs through the HL7 ballot process.

**Successful Data Quality improvement efforts require both technical and clinical subject matter experts. Make sure you have both.**

**Since 1983, we are your best choice for the complexities of data analysis.**

**We analyze clinical data exchanges to improve quality, and enables more reliable Clinical Decision Support.**

**J P Systems, Inc.**  
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