

Demystifying Data to Support Your Business Goals:

The Foundations of Healthcare Data



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Eric draws upon a diversity of roles from both the client and provider side ranging leading strategy and insights teams at PatientPoint and Univision Communications to years of healthcare data and analytics consulting from the likes of AdvantageMS (Veeva), Verispan and IMS Health (IQVIA).

Eric has been a frequent speaker and presenter at various events and conferences, including Google's Hispanic Marketing Forum; Multicultural Health National, Pharmaceutical Management Science Association Annual Meeting, and DTC National.

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Eric Talbot, Chief Strategy Officer at





Data Gathering vs. Sourcing the BEST Data



83%

of businesses rely on data as an integral part of creating a business strategy.*



By 2025, the amount of data produced will be 10x the amount produced in 2017.*



We may get distracted with metrics which don't match our end goals.

Focusing on the wrong data creates misinformed decisions, negatively impacting business.



Applying the Process of Principle Reasoning



FIRST

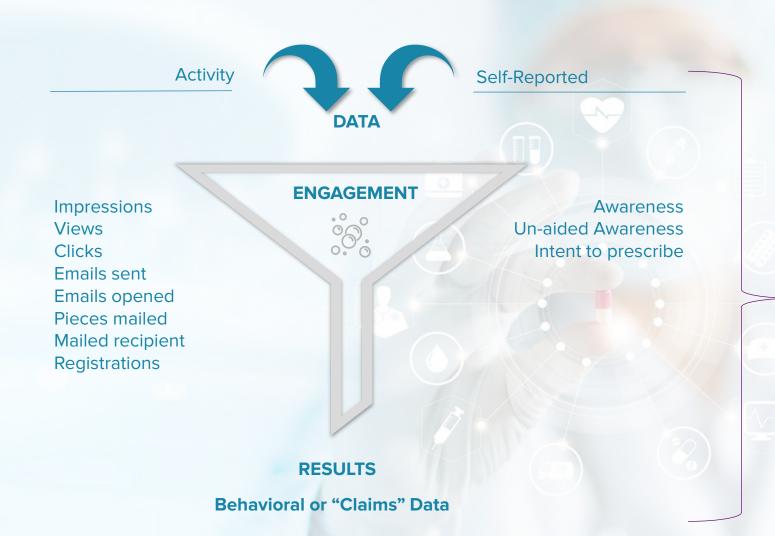
We break down a complex problem Identify its basic elements Reassemble from scratch.

THEN

We can identify precise metrics Align to our KPIs Focus on those goals.



Applying Data Appropriately to Meet Your Goals



Y How to Apply Funnel Metrics:

- ✓ **Determine** what data and metrics exists and where to source them
- Understand what insights the data and metrics can support and cannot support
- ✓ Know the source of the metrics and their strengths and weaknesses/basis





Before We Start, Know Your Terminology



National Provider Identifier (NPI) The NPI is a unique identification number for covered health care providers from HIPAA



Claim: Refers to an invoicing for a service or product

- Claim Count: A count of claim IDs. Every claim has a patient, but patients can have multiple claims.
- Patient Count: Is the count of patient IDs. It is important to know if these are distinct patient counts or total patient count



ICD10: World Health Organization (WHO) International Classification of Diseases



CPT code: Current Procedural Terminology (CPT) codes, identify medical procedures that identifies what type of care was provided.



USC: U.S. classification of drug based on their mechanism of action and therapy area



NDC: The National Drug Code (NDC) is the number which identifies a drug



J Code: Codes are used by Medicare and other managed care organizations to identify injectable drugs that ordinarily cannot be self-administered



HCPCS (Healthcare Common Procedure Coding System):

Standardized codes that represent medical procedures, supplies, products and services. The codes are used to process health insurance claims by Medicare and other insurers.



There are Three Primary Healthcare Data Types





Direct Distribution Data (DDD)*

Tracks movement of products from manufacturer/wholesaler to pharmacy, hospital, practice or system.



Claims Data or Anonymized Patient Level Data (APLD)

Collected at a granular level by using the adjudication process in the **medical** and **pharmacy** payment chain to strip Personal Health Information (PHI) from pharmacy or medical claims.



Electronic Health Records (EHR)*

Anonymous patient chart information which provides a variety of insights such as disease stage, disease progression and recommended treatments from prescriptions to lifestyle recommendations.



^{*}DDD is also referred to as "Sell-In Data"

^{*}EHR is also referred to as Electronic Medical Records or EMR

Claims Data is Most Common for Commercial Analytics

Claims Data is sourced from two main categories

- Open-source data: Collected from source below the payer.
 - Includes claims from variety of payers and plans, contributing to set representation.
 - Patient data capture is fluid, moving in and out of data set.
- Closed-source data: Collected from the payer.
 - Patient data capture is set, trackable.
 Single data set, providing complete portrait of patient journey through system.
 - Representation of total market can be skewed by formulary and contracting.



HEALTH INSURANCE CLAIM FORM

There are Four Main Types of Claims Data

PHARMACY (Rx)

MEDICAL (Mx)

HOSPITAL (Hx)

LABORATORY (Lx)





The two most commonly-used claims data sources are **PHARMACY** and **MEDICAL**



Choosing the RIGHT Metric Depends on the Question



Basic metrics commonly used to analyze brands are:

Prescription metrics are often presented in two ways:

- NRxs new prescriptions
- TRxs total prescriptions

Common Patient Metrics are:

- NBRx new patients
- CRx continuing patients

Example of more advance metrics to provide deeper insights are:

- Rx volume by indication
- Percent treated / diagnosed population



Understanding the difference between the above metrics is critical because they provide different information.





A Closer Look at Prescription (Rx) Metrics





NRX is a new prescription given to a patient or sent to a pharmacy.

NRx often have refills or **RRX** associated with them.

New prescriptions and refills make up the total prescriptions or TRX.



Prescriptions are further segmented to determine the type of patient using the medication.



Three Types of Patients



There are $\bf 3$ main patient cohort segments.





NAÏVE

- ✓ New to therapy
- Patients starting treatment for the first time*





- New to the brand of interest
- Treating or been treated with another drug in same market





CONTINUING PATIENT

- ✓ Patients who have already been treated with the drug of interest*
- ✓ Listed as CRx

Both cohorts are considered **New to Brand (NBRx)**



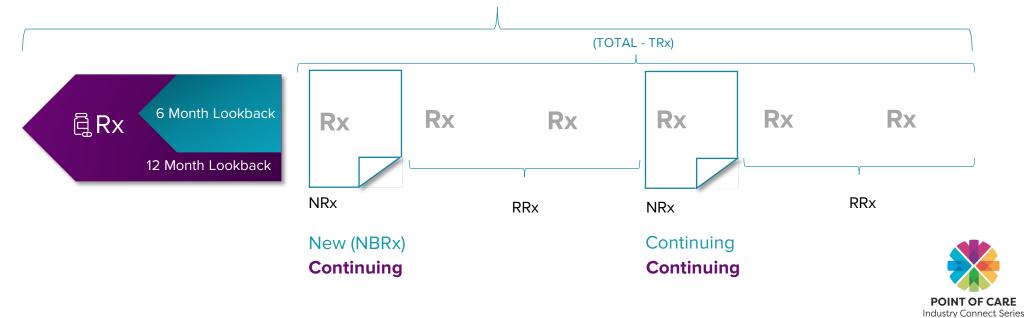




- Amazingly powerful BUT sensitive to business rules
- ✓ Lookback periods are commonly set at six or 12 months
- ✓ Lookback periods determine whether a patient is NBRx or CRx
- Changing lookback periods and/or market basket will change NBRx and/or CRx value

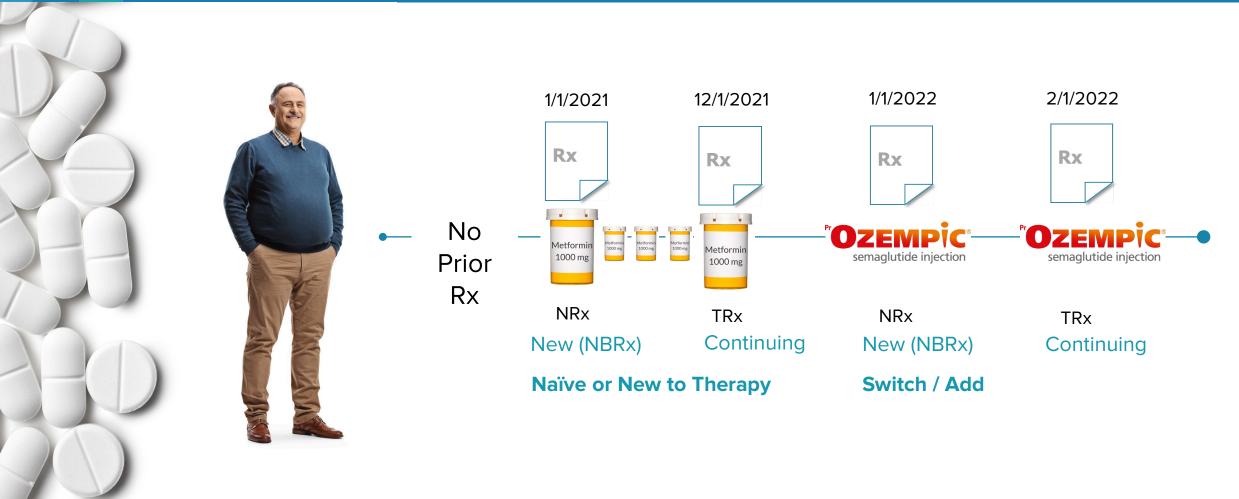
The "Lookback" period is a timeframe used to determine whether a patient has had a prescription from the drug of interest or one from the market basket of competitive products.







Our Fictional Patient: "John Doe"





Medical Claims Provide Insights into HCP Office Activity

Medical Claims Data includes:

- Medical Office data
- Long-term care data
- Hospital inpatient and outpatient data*
- The **source** of medical claims data is the billing process of the practice seeking reimbursement for services provided.
- Medical data begins with medical billing and coding specialists and then goes to a claims analyst who may approve or reject payment.





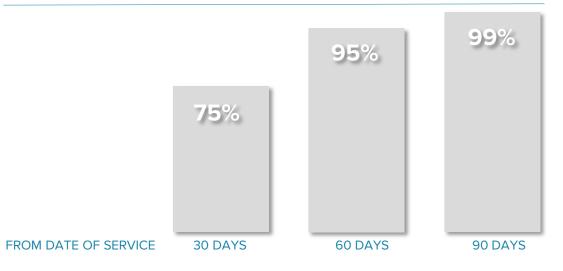
A Closer Look at Medical Claims Data



One of the key issues with Medical Claims data is **DATA LAG**.

If a claim is rejected, the bill may be returned to the billing specialist, adjusted and resubmitted.









There is a Parallel Between Rx and Medical Claims Data

A medical claim is for a service provided such as:

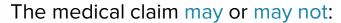
- Medical exam
- Medical procedure
- ✓ Pharma procedure such as vaccine or infusion
 ☆

Buy & Bill is when an HCP buys the drug and bills the payer for the drug and administration.

Brown Bagging is when the drug is ordered via a pharmacy for HCP administration.



If a medical claim is for a "pharma procedure", the physician is billing for the cost of the therapy AND the administration.



- ✓ Include brand administered
- ✓ Include J-Code or NDC11 for specific infuse product



It is critically important to work with partners who deeply understand your healthcare data and how to best extract valuable and accurate insights.



Data Without Insights Has No Value



START

with the insights you need.

THEN

identify the data that will help you uncover those insights.

Remember:

An informed understanding of data AND metrics enables you to select the most appropriate KPIs for your strategies which influences the methods by which data is measured.



