



Intuition and Value Proposition

- Value based care (VBC) and Pay for Performance (P4P) contracts pay based on outcomes, not on activity.
- It is very challenging to manage outcomes & cost of care for your patients without timely knowledge of their care activity.
- Many patients seek care outside of the traditional health system silo. In these cases, those taking risk on their outcomes do not see any information until they receive the insurance claim 60-90 days later.





Fundamental Concept #1: Rosters

- Rosters are a list of the patients our customers have care relationships with.
- Two types, Static & Dynamic:
 - Static: Sent to us as a file on a regular cadence. Contains PII and other metadata such as PCP & phone number.
 - Dynamic: Created by HL7 feeds from customers who do not send us static rosters, typically PACs because they do not have longitudinal care relationships. Typically last 90 days post discharge.
- Rosters typically are broken into subsets called <u>PROGRAMS</u>, usually by disease cohort (e.g. COPD),
 payer (e.g. Anthem), or payer + contract (e.g. Medicare Next Gen ACO)





Fundamental Concept #2: ADT Feeds

- Hospitals and other sites such as PACs send us Admit, Discharge, Transfer feeds from their EMR in HL7 format.
- These data are much more timely than claims but less detailed.
- As the name suggests, these feeds contain information about patient movement through care episodes.
- The base unit of an ADT feed is the event, such as an ED presentation.
- We built a network of these feeds such that we have a full, real time picture of health care events in many markets.





Fundamental Concept #3: Patient Matching

- To deliver on the value proposition, we need to know when a distinct human seeks care at multiple sites.
- We also need to know whether a patient in a given ADT message is on a customer roster.
- To do this, we compare incoming ADT messages both with previously matched patients and customer rosters.
- Matching is deterministic when possible when SSN is present.
- Otherwise matching is probabilistic based on FN, LN, DOB, Address, and ZIP
- Patient matching consumes information about "patients" and outputs information about "people".





Fundamental Concept #4: Encounters

- We aggregate HL7 events into Encounters, or episodes of care.
- Encounters are important for care history purposes, data permissions, and analytics.
- For example, an Inpatient encounter might start with an ED presentation, move to an observation stay, then move to Inpatient admission, before concluding with a discharge.





Fundamental Concept #5: Groups

- Groups represent a node on our network, including physical facilities where care happens as well as provider organizations who manage populations.
- Encounters happen at groups and are managed by users associated with groups.
- Data visibility is governed by a user's permission to see data about a certain group.
- There are many group types such as HOS, SNF, OWNING_ORG, PRACTICE, PROGRAM, etc.
- This is a relatively complicated hierarchy for example a PROGRAM with group_id 6789 might belong to an OWNING_ORG with group_id 1234
- Groups roll up into Teams and Organizations.
- Organization is roughly analogous to "Customer", with some exceptions.



