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Gain insights into how big data can improve health outcomes.

Understanding each patient’s unique story is paramount for informed research and decisioning. Every population is made up of individuals, their unique circumstances, and their dynamic lives. The more clearly agencies understand each person, the better equipped they will be to provide key services at critical moments and improve their health outcomes. This understanding requires data — but in healthcare, the data you need is too often scattered in different systems, or silos, locked away due to privacy laws, or inaccurately linked. New life and health events that could be identified early often go missed, impacting members’ long-term stability and care.

Without data, communities and agencies suffer. The challenges they face vary from poor community health to unmanaged disease spread, from inaccurate population tracking to ineffective outreach and uncoordinated care efforts, among many others. These all feed into the need for agencies to rethink and reframe how they leverage big data to improve health outcomes.

**Agency challenges:**

**Data management.** Populations are hard to manage between the constant ebb and flow of individuals into programs and their dynamic lives and health situations. Agencies struggle to maintain a consistent view of these ever-changing identities within their systems. This problem becomes exponentially compounded when reviewing these identities across different agencies within a state, let alone nationally. Population data often becomes fragmented and disparate, hard to resolve, and even more challenging to link to other systems with accuracy and confidence. Effective data management starts with a real-world, whole person view. Once that is established, agencies can begin to enrich their data, gain longitudinality, and establish critical links with other authoritative data sources.

**Data enrichment.** Agencies struggle to maintain a real-time view of their members and their changing life circumstances, hampering agency ability to effectively conduct outreach, follow changes in member health status, and monitor efficacy of treatment. Further, when time is of the essence, real-time data is critical to successfully identify and communicate with high-risk individuals and networks. This data includes Social Determinants of Health – the conditions in which people are born, live, work and age that impact their likelihood to develop health conditions as well as their ability to effectively manage those conditions – and has the power to influence population trajectories and their long-term care outcomes.

**Data sharing.** Bringing data together is hard, especially given its disparate nature within state systems, the sensitive nature of Personal Identifiable Information (PII) and Protected Health Information (PHI), and the implications that it could have for specific populations and disease states. Sharing data can quickly become an effort of Everest proportions… but it doesn’t have to be. Next generation data sharing initiatives are already underway. Through next generation tokenization, agencies can leverage referential data to securely link deidentified data with the accuracy and precision of identified data.
sets. This new industry reality stands at the forefront of longitudinality, helping agencies bring their data together to gain comprehensive insights on their shared populations. When working toward data sharing, agencies need to:

- **Protect their populations** from being disclosed due to sensitive status.
- **Provide medical claims intelligence** to understand disease emergence, preventative treatment, active treatment, and post-care efficacy.
- **Build longitudinal data sets** to capture a whole person picture of care, treatment, risk, and situational outcomes.
- **Deliver a rapid response requirement** for coordinated care and outreach for time-sensitive population contact – data accuracy is critical.

Discover how to collaborate and learn how to mitigate these challenges through real-world examples and best practice frameworks.

Data assets can support risk modeling for research and clinical trials as agencies seek to gain a better understanding of the influences on their populations.

Layering in data on their populations can give real world context and offer longitudinal intelligence that can complete the picture of the patient’s journey.

Provider and hospital networks can spur better patient conversations and care.

Extensive deidentified patient data can be used to drive more informed cohort analytics.

Agencies can leverage outside data to evaluate treatments through comorbidity analysis, tracking diagnosis and treatment outcomes, and evaluating disease states.

A holistic view of your patient population is now within reach. Through effective data management, data enrichment, and data sharing strategies, agencies can begin to capture a whole person view, one informed by real-world data, and joined with industry assets. Longitudinality is challenging, but it doesn’t have to be... and gaining that longitudinal view can fundamentally change the trajectory and outcomes for your most at-risk populations.

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