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Population Health NEWS

Catching Up With ….

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***Population Health News**: What problems does the issue of health data siloing pose for public health experts? What are potential solutions to this problem?*

Mr. Mathew:

Like To make data-driven policy decisions, public health experts must be able to assemble a complete and accurate picture of population health: trends, risk factors, and social determinants. This is nearly impossible when critical health data is fragmented across multiple systems. With incomplete data, public health experts run the risk of:

- Overlooking critical changes in population health that would enable them to forecast community risks (like disease outbreaks)
- Misidentifying the areas of greatest need around community health
- Missing opportunities to implement policy or channel resources to address a community's specific challenges with social determinants of health

Solving the problem of healthcare data siloing poses many challenges (like ingesting and managing data at massive scale, and securing and governing sensitive patient data). The biggest of these is patient matching: de-duplicating patient records across systems, often with incomplete or inaccurate information. Unifying fragmented or duplicate patient records into a single "source of truth" is a daunting hurdle, requiring specialized engineering expertise and technical infrastructure. Legacy rule-based linking approaches simply do not deliver the accurate, unified patient profiles that are required for breakthrough population-level insights.

That's why a dedicated technology platform – a Healthcare Data Platform, or HDP – is the most effective way to overcome healthcare data silos. An HDP should unify disparate patient data sources and offer specific patient matching capabilities built on machine learning or artificial intelligence (AI): the only approach that can capture the nuance and complexity of patient identity at scale. By providing the infrastructure to de-silo healthcare data and help experts see "the big picture," HDPs can significantly improve community health outcomes at a fraction of the cost of other approaches.

***Population Health News:** How can de-identified population-level health data help population health experts?*

Mr. Mathew: De-identified population-level data helps public health experts identify key health trends, forecast risks, and develop data-driven policy recommendations – all in a fully compliant manner, without the challenge and cost of managing sensitive personal data. For example, using a de-identified dataset, an expert might pinpoint geographic trends in obesity that could help predict an increase in the incidence of type 2 diabetes or identify a food desert that could be addressed with appropriate funding.

The caveat is that de-identified data is only valuable if it is complete and accurate. That's why a comprehensive data infrastructure – in particular, one supported by AI-powered patient matching to de-duplicate and unify fragmented patient records – is a prerequisite for generating meaningful public health insights.

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Population Health News: *How will breaking down data silos improve equitable access to care?*

Mr. Mathew: Sadly, healthcare data silos wreak tremendously disproportionate harm on the most vulnerable communities. These are the populations most in need of data-driven public health interventions: additional resourcing to support wellness and policy recommendations to address structural obstacles (like food deserts or lack of transportation). But with key population-level data fragmented across systems, experts struggle to piece together a complete picture of where need is greatest – and what remedies are likely to be most effective.

Breaking down healthcare data silos enables experts to accurately identify the clusters of greatest need, decode the drivers of risk and wellness, and tailor intervention strategies to the unique social determinants of health in a given community. The result is both more equitable access to care – and better aggregate population-level health outcomes.