



Online | Mobile | Global

Self-Tracking: Persönliche oder öffentliche Gesundheit?

Prof. Marcel Salathé, Digital Epidemiology Lab, EPFL
@marcelsalathe

Epidemiology has a bandwidth problem

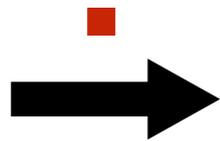


CDC et al.



Academia

Epidemiology has a bandwidth problem



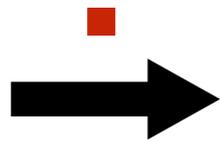
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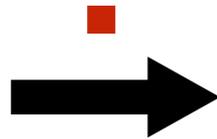
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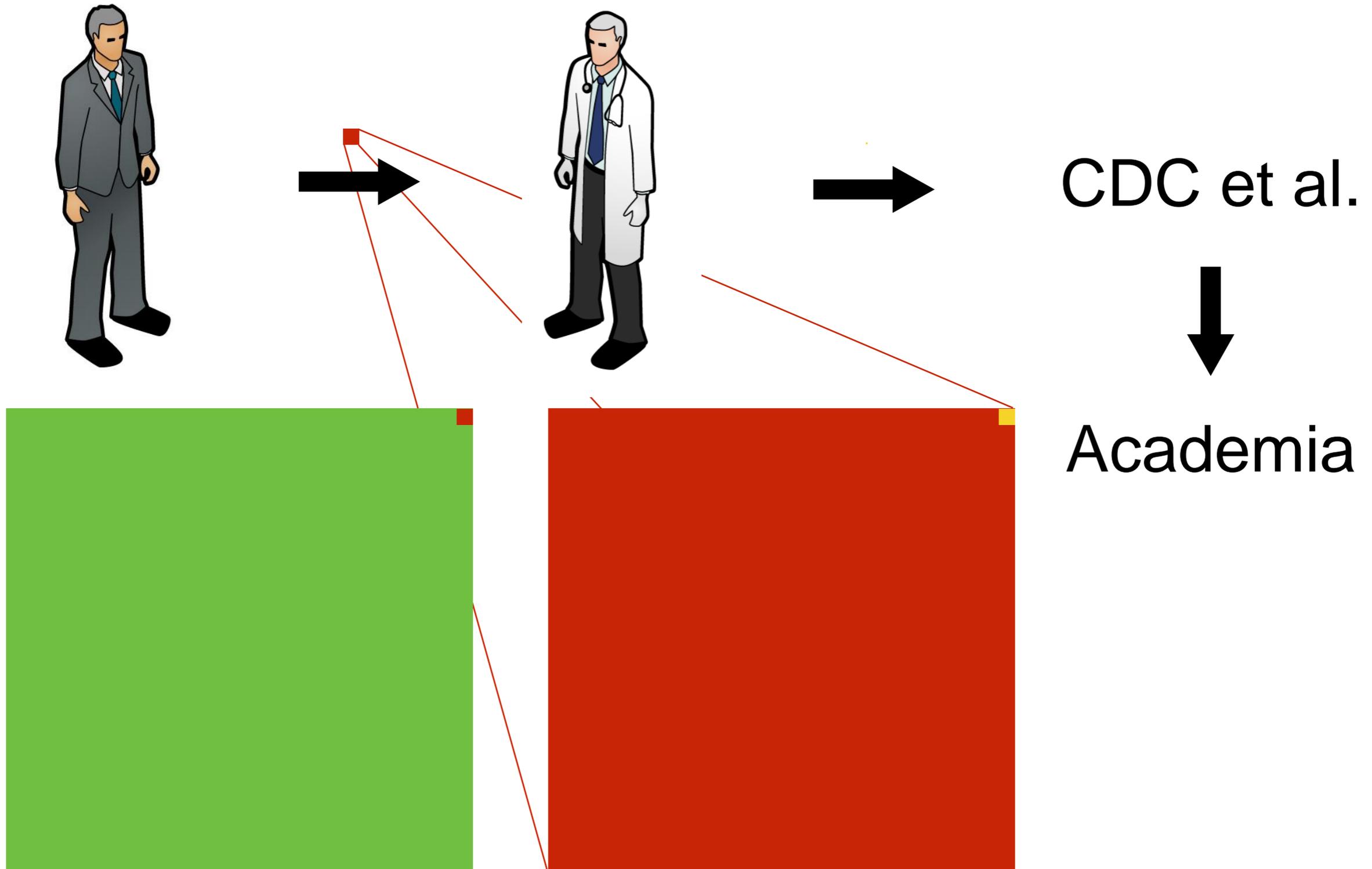
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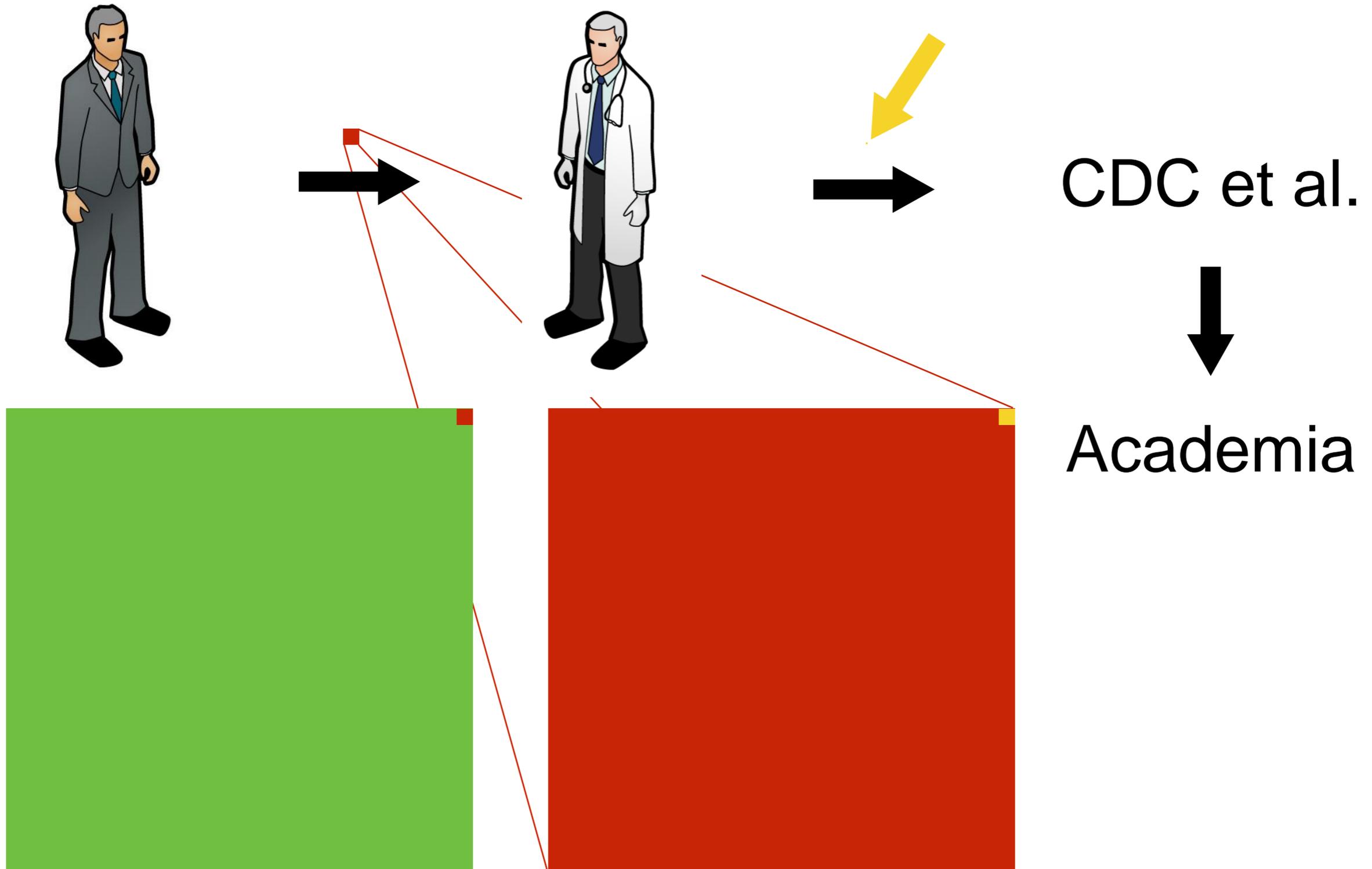
Epidemiology has a bandwidth problem



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Digital Epidemiology: new data streams

"Got my flu shot this morning and now my throat is sore."

"Stomach flu & normal flu in the same month. I'm officially a germaphobe."



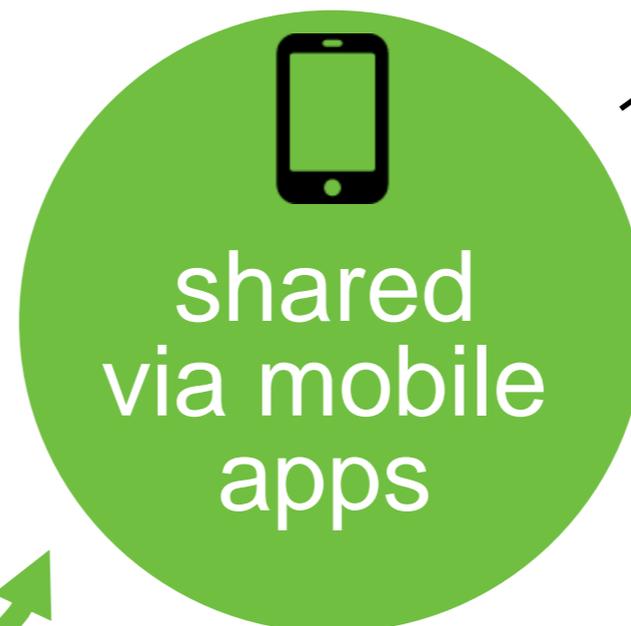
Text
Images
Videos
Sounds
Location
Biological data
etc.

"Such an upset stomach today. I hope it's just a bug and not the Truvada."

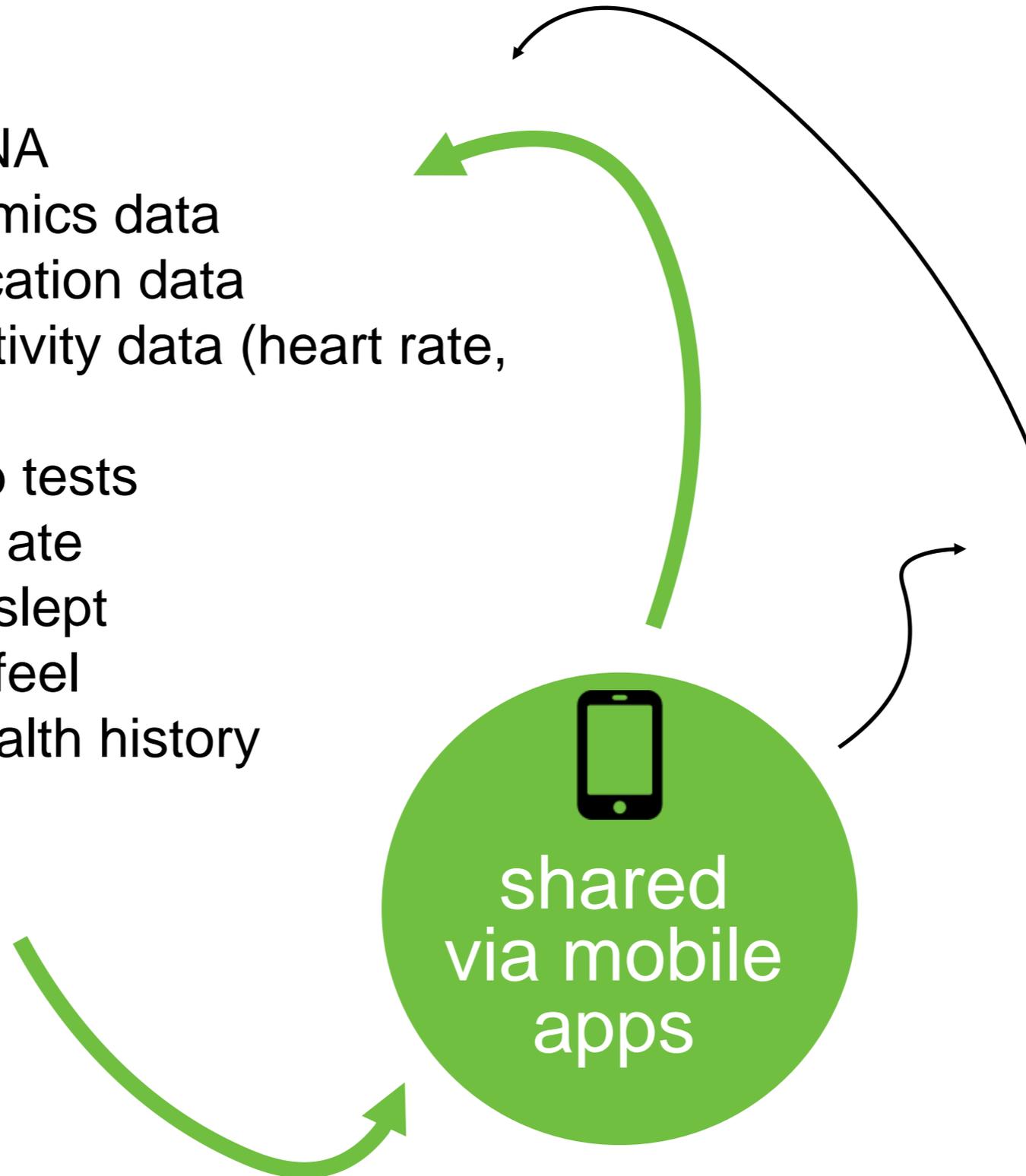
"My weight: 170.1 lb. 10.1 lb to go. #raceweight @Withings scale auto-tweets my weight once a week <http://withings.com>"

From Personalized Health...

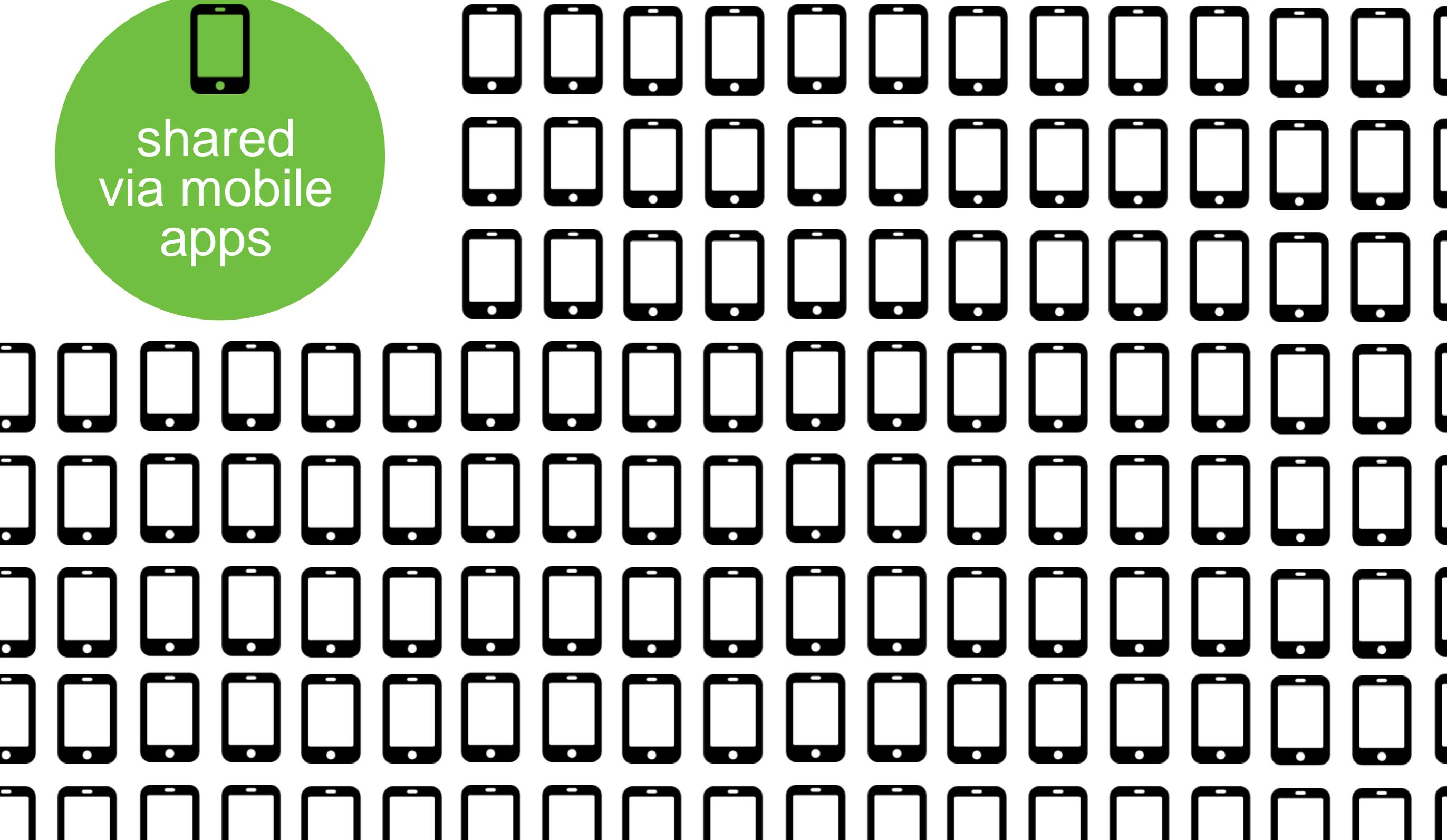
- my DNA
- my *omics data
- my location data
- my activity data (heart rate, etc.)
- my lab tests
- what I ate
- how I slept
- how I feel
- my health history
- etc.



“The
patient
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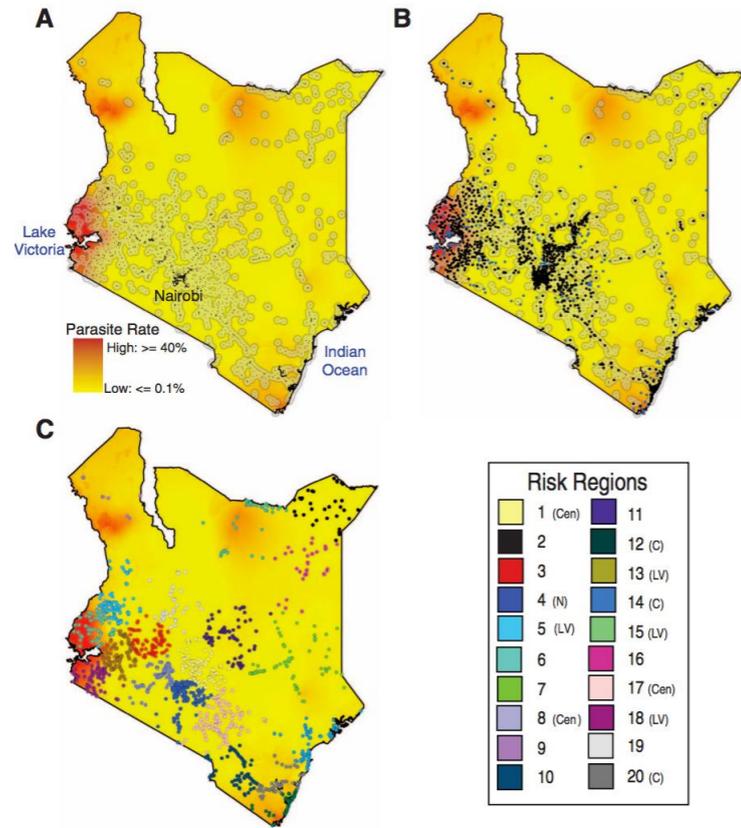


...To Truly Global Health



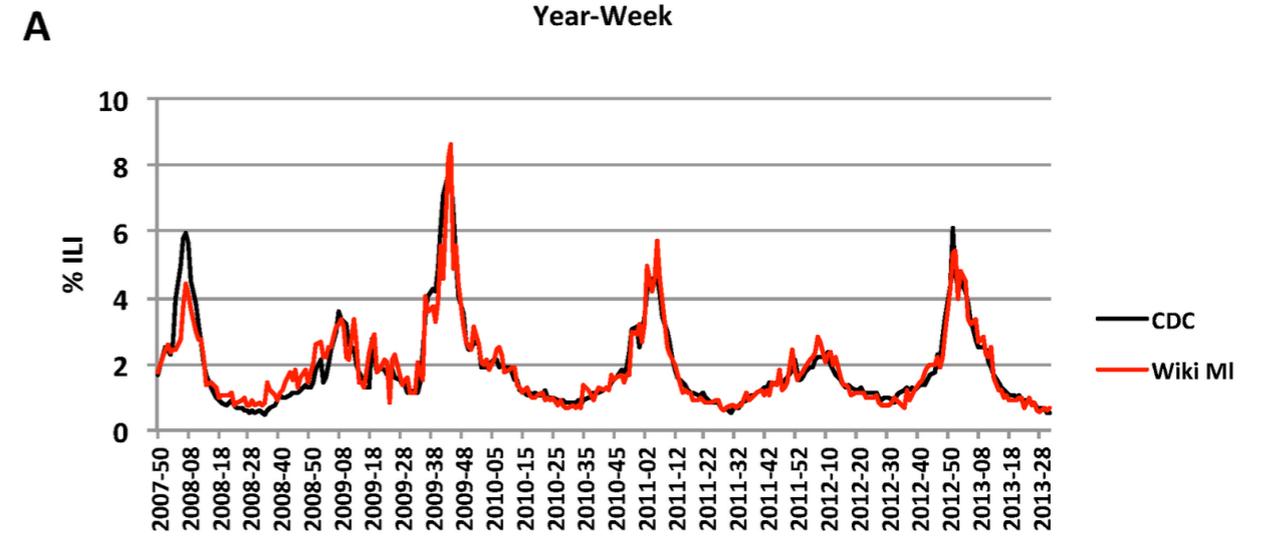
Mobile phones - Malaria elimination

Wesolowski et al 2012



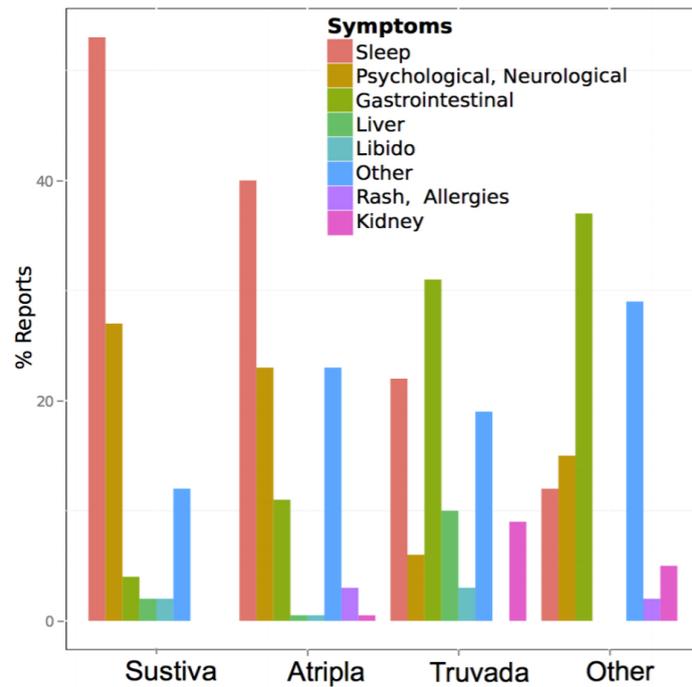
Wikipedia - Influenza forecasting

Mclver & Brownstein 2014



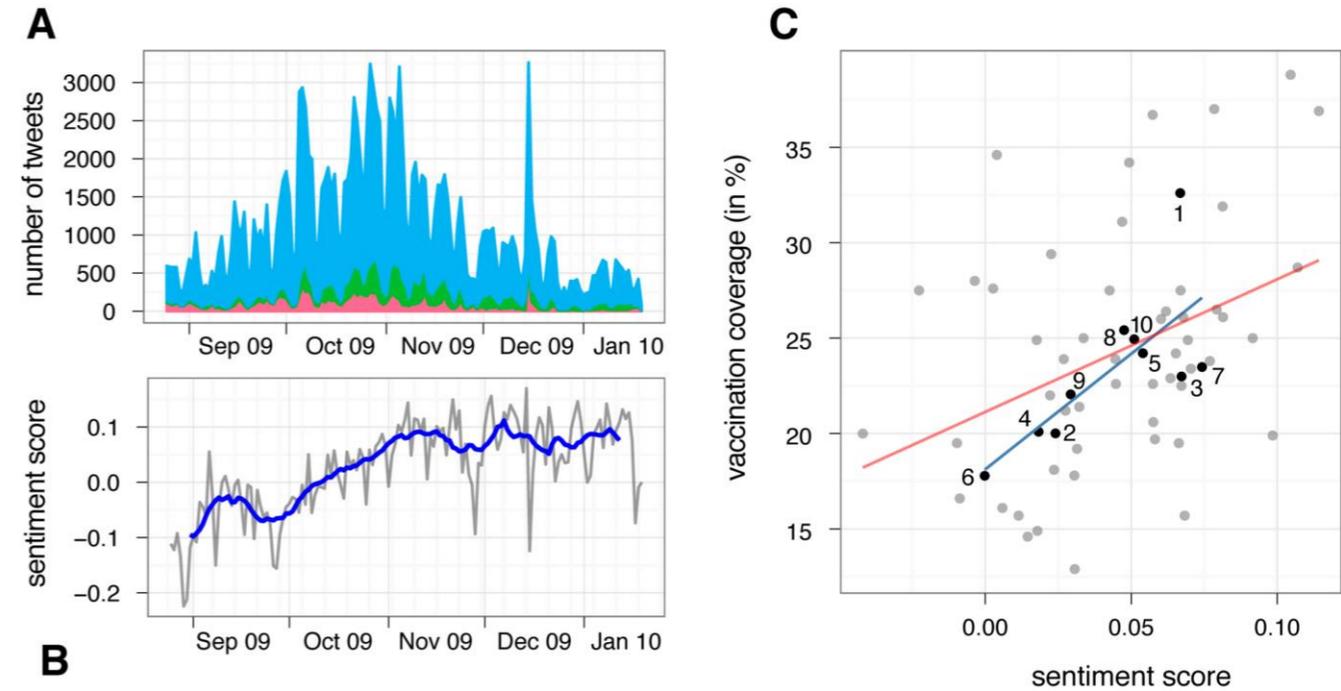
Twitter - Pharmacovigilance

Adrover et al 2015

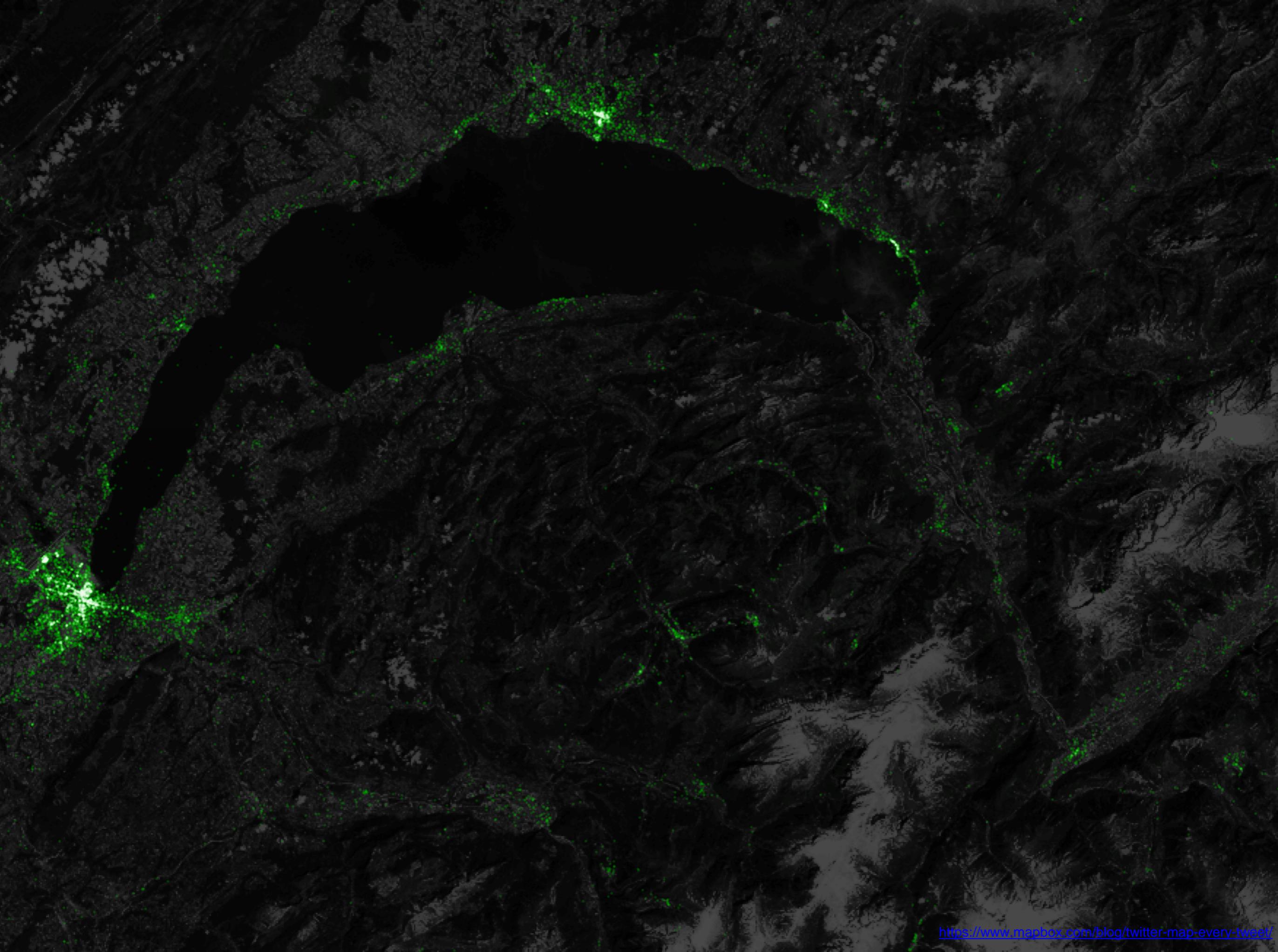


Twitter - Vaccine uptake

Salathé & Khandelwal, 2011









TUNNEL DE VERNIER

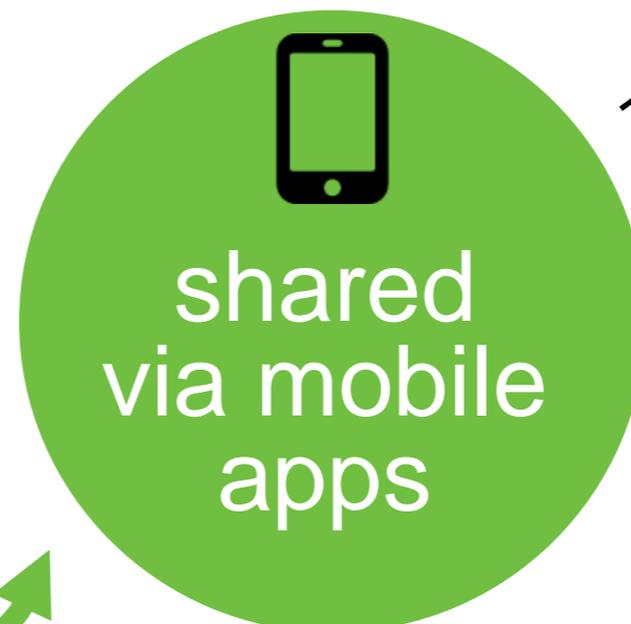
QUAI DE COLOGNY

TUNNEL DE CONFIGNON

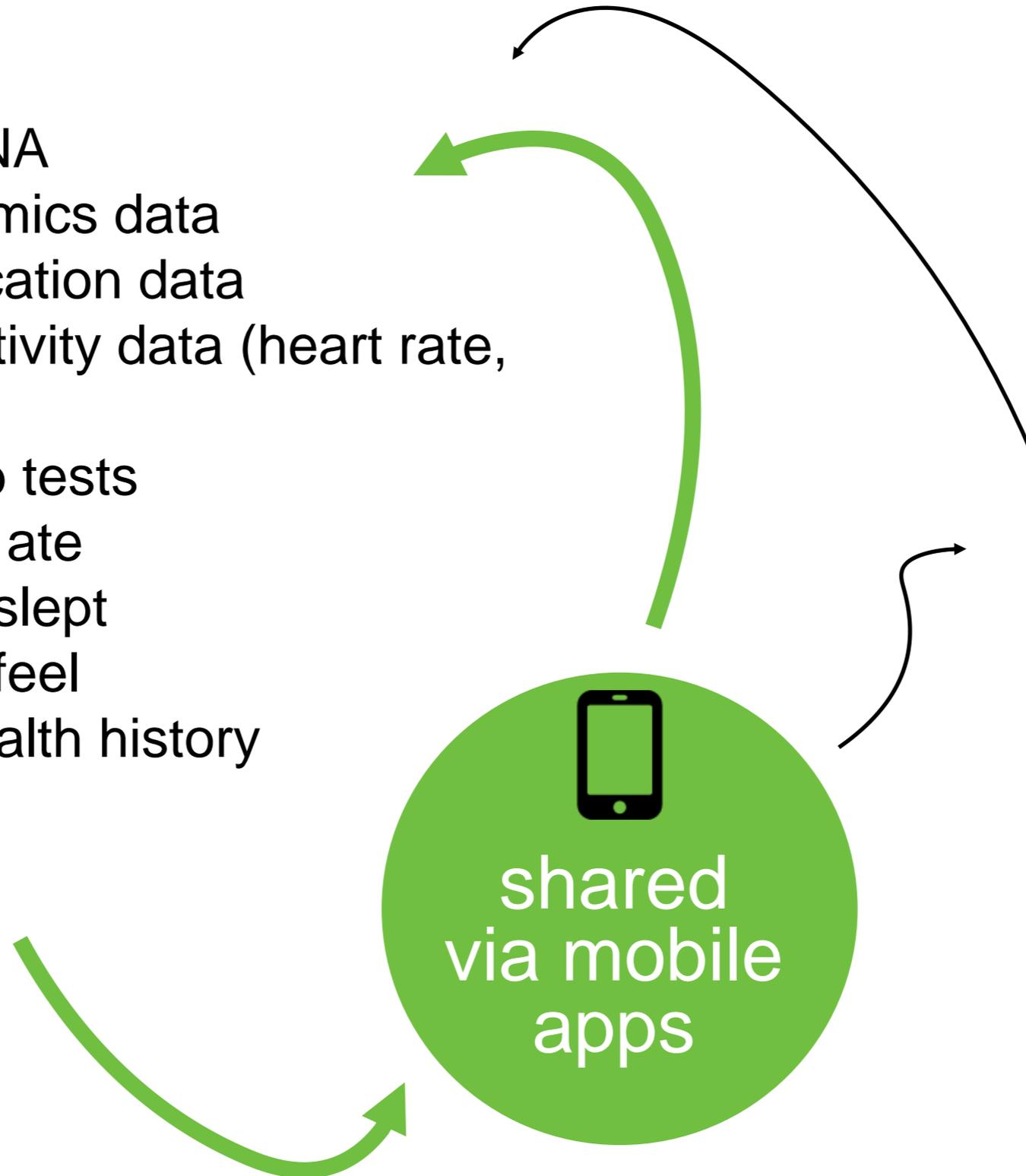
AUTOROUTE BLANCHE

Who owns the data, for what?

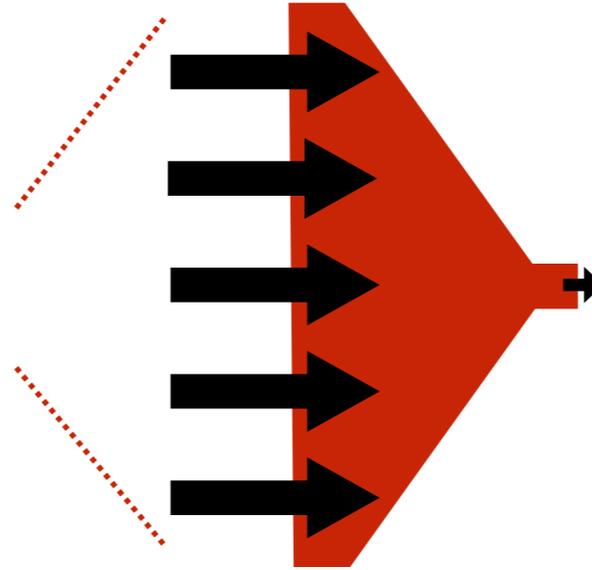
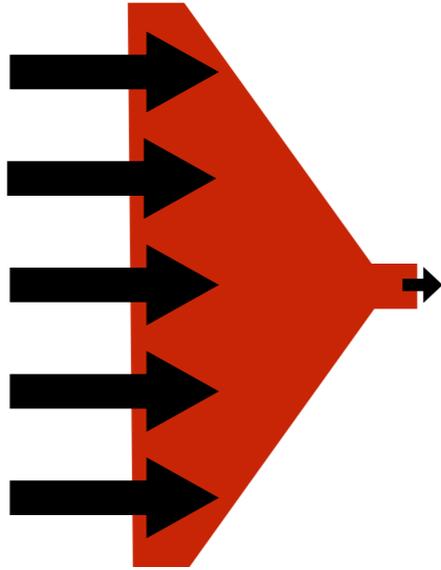
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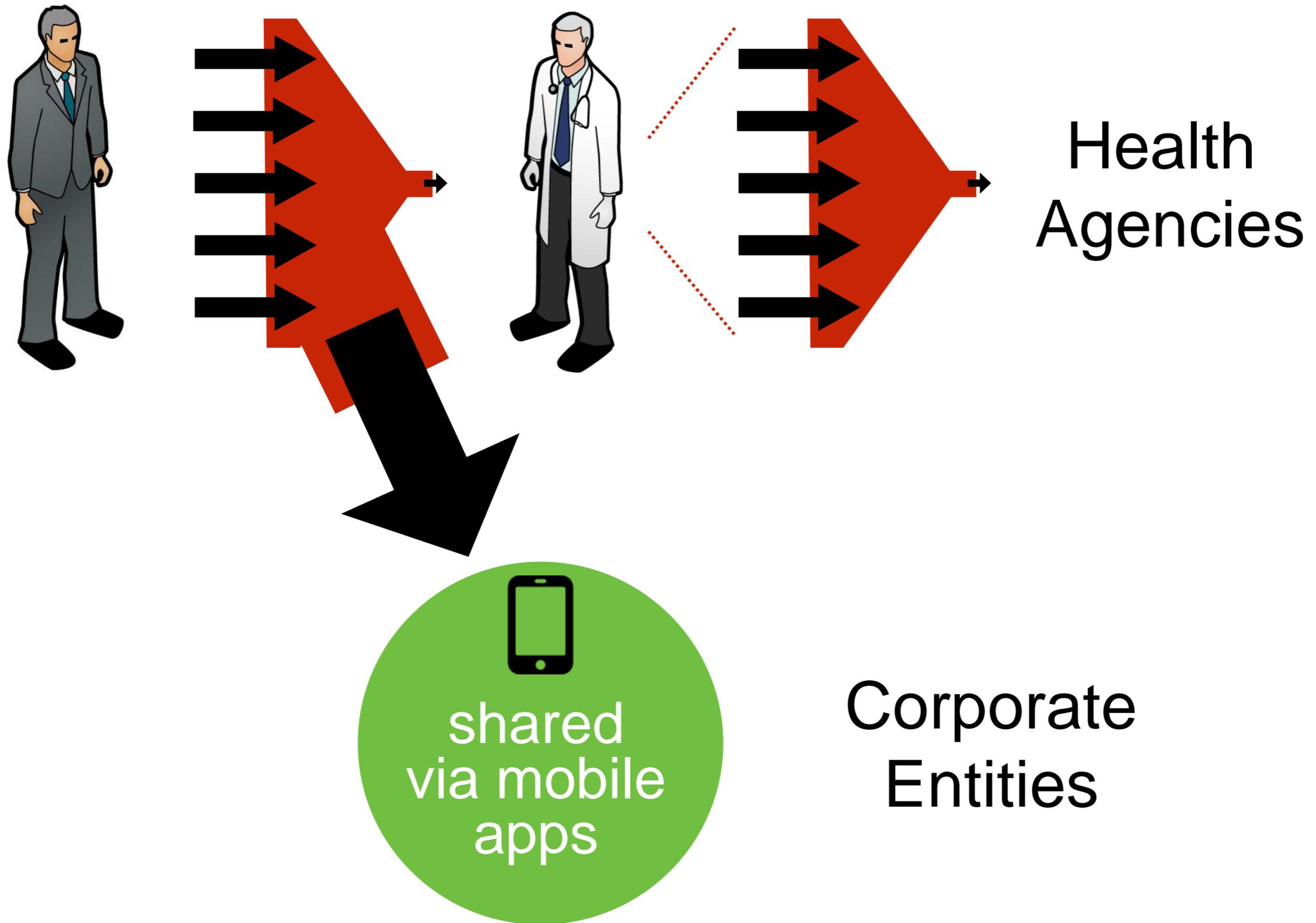


Follow the data...

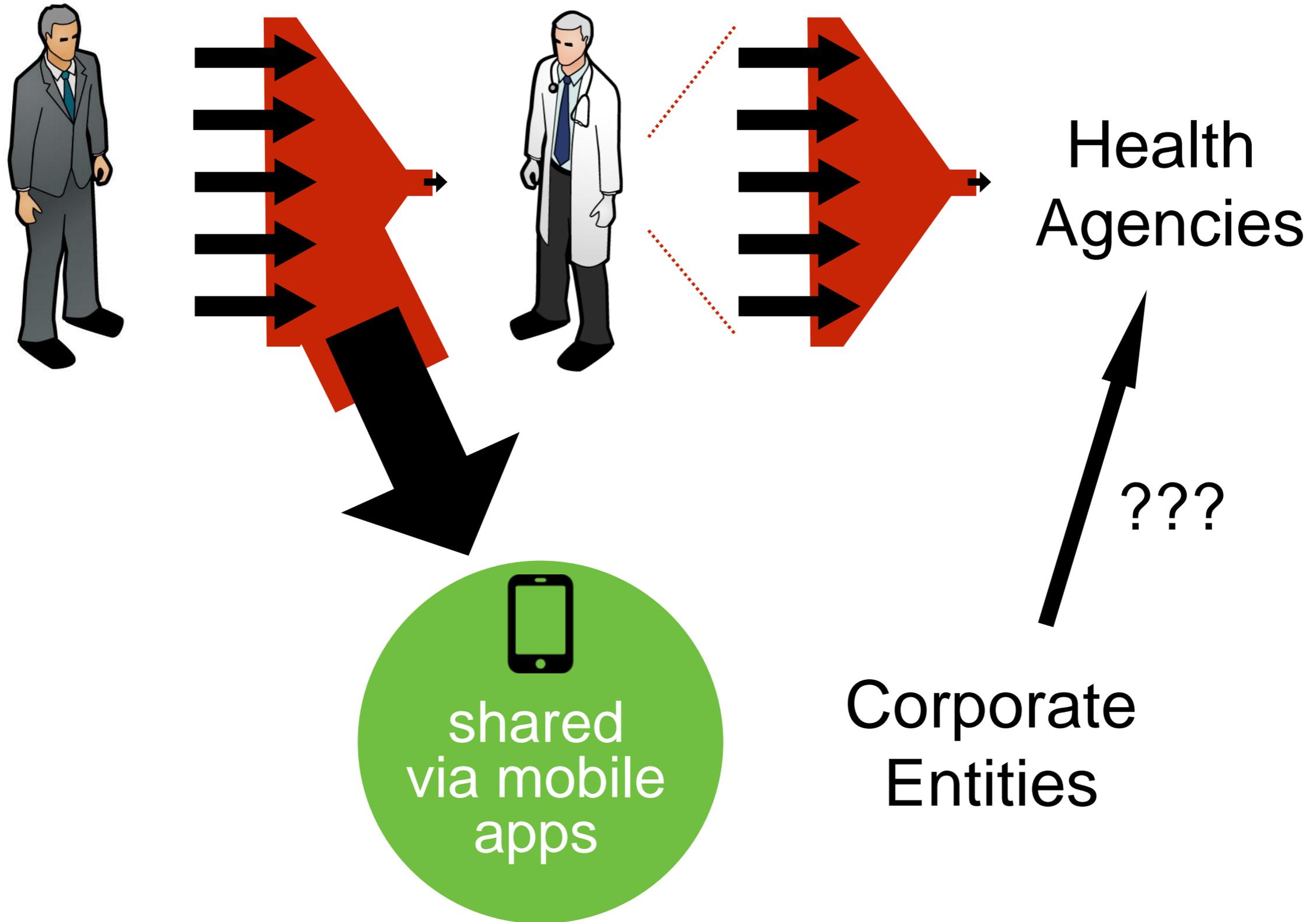


Health
Agencies

Follow the data...



Follow the data...



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my data, my choice, my healthbank

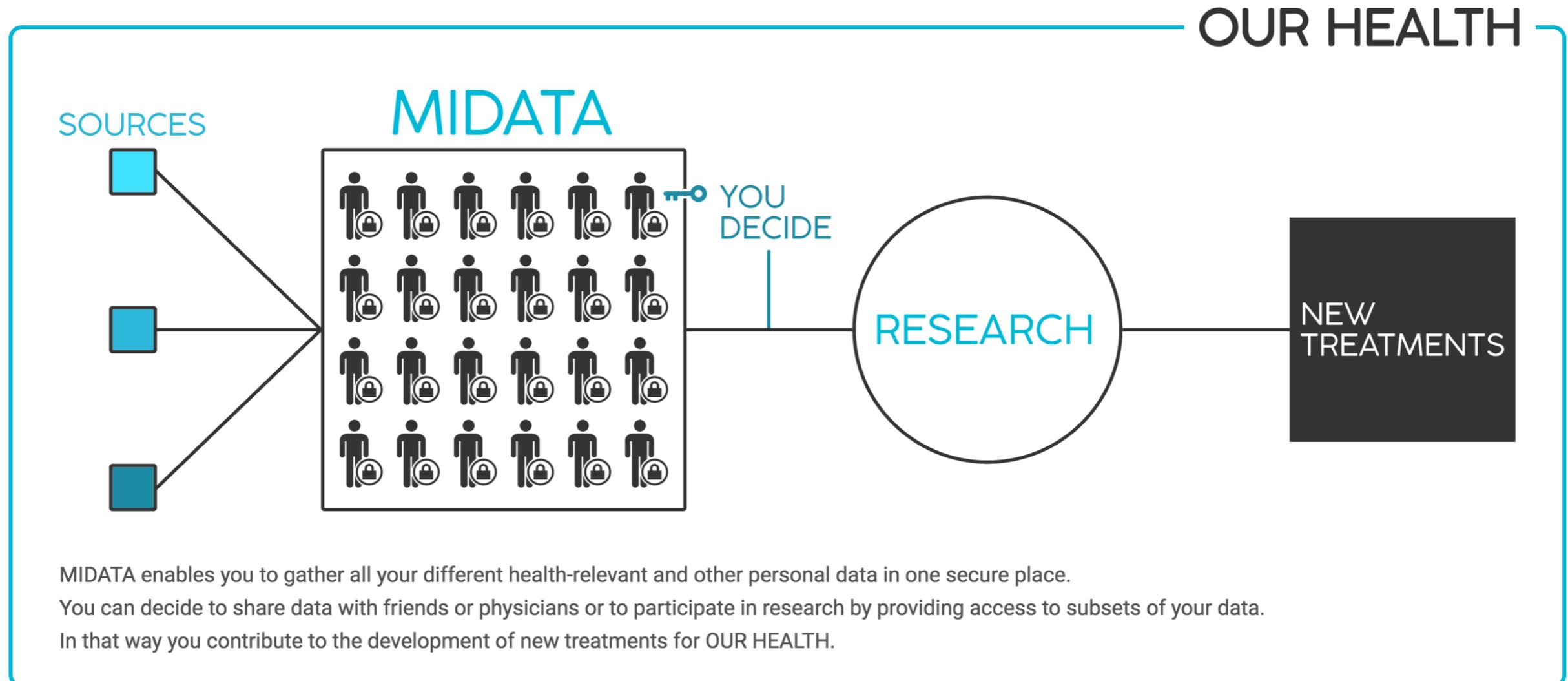
We empower people across the globe to exchange their health data on our uniquely neutral and independent platform.

healthbank drives innovation in health sciences, from prevention to cure, at a better price with better quality for the benefit of both the individual and society.

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we combine all your data







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