The data explosion

DATA GROWTH

X axis: Year
Y axis: Global data
Unit of measurement: Zettabytes
$1ZB = 1{,}000^7$ bytes
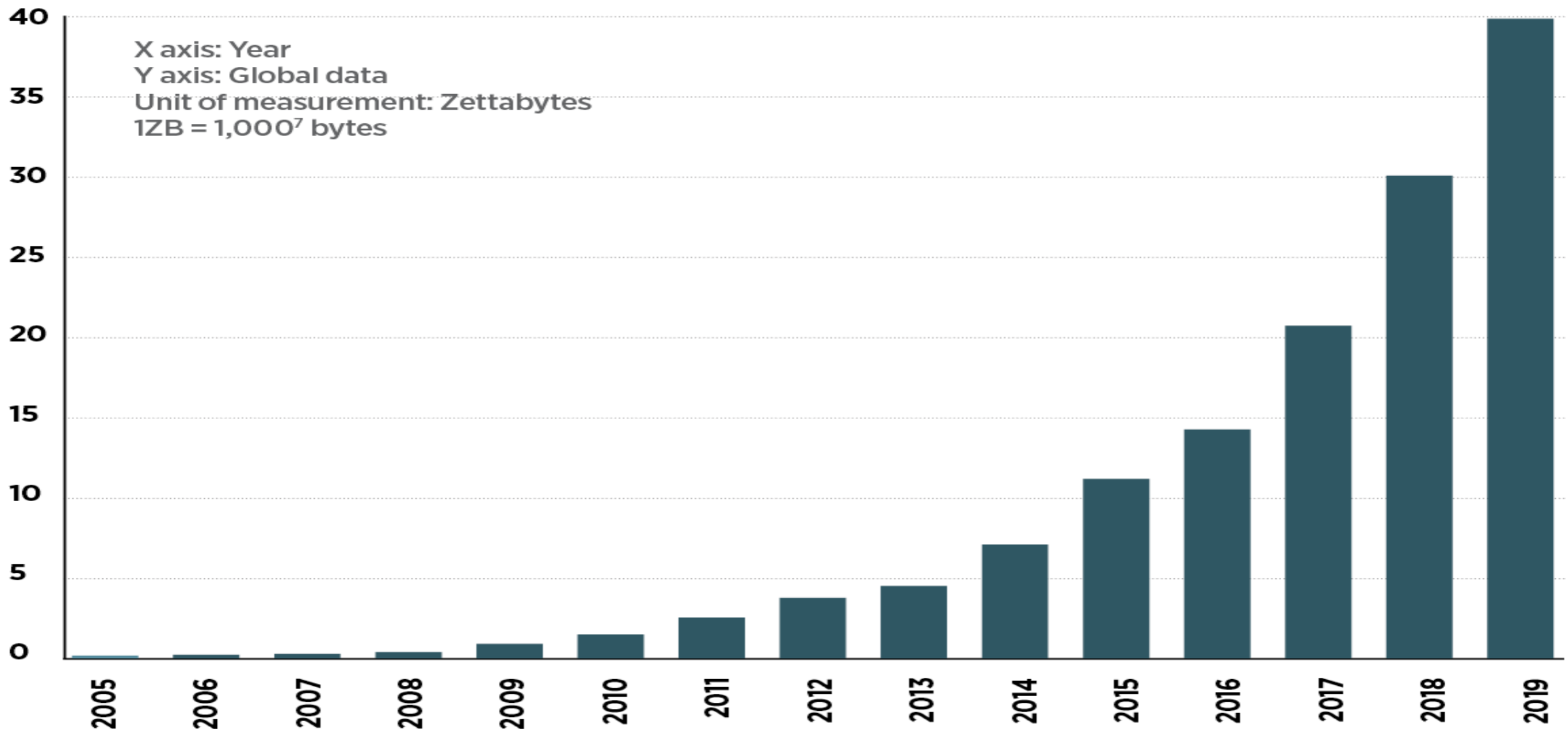
Note: Post-2013 figures are predicted. Source: UNECE

The continuum of care

Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	
Medical bills	Playgrounds	Higher education			Quality of care
Support	Walkability				

Health Outcomes
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

AXIOM:

Knowledge Sharing

is at the heart of everything we can do to improve individual and community wellness

Finding the balance

TRUST

Privacy Policy

Interoperability

Data standards

Governance

The opiod crisis

- Over 64,000 overdose deaths in the U.S. in 2016

- A U.S. National Emergency

- Multi-agency Response

- Captive Data
Medical Services
Law Enforcement
Social Services

- Need for a Coordinated Response Strategy

The basis of trust

- A system of governance to effect policy--privacy, access rules, principles

- Identity management—authentication and authorization
  --Trustmarks
  --Identity confirmation
  --new technology (e.g., blockchain)

- Standards for information exchanges

- Preservation of originator access rules
  --metadata on security, privacy, user privileges

The National Interoperability Consortium

- A "network of networks" involving local, state, and national levels

- A new initiative to advance interoperability and information sharing among health, human services, public safety, public health, and other related realms

- Aimed at catalyzing systemic changes, specifically for underserved populations

- Inaugural partners include California, Virginia, Connecticut and Health Information Management and Systems Society (HIIMSS)

Stewards of Change institute, 2017