Data Privacy: A Model for the Future

IQVIA Supports Model Legislation that Protects Patients and the Clinical Research Ecosystem

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IQVIA by the Numbers

4,600+
Advanced analytics/ data scientists/statisticians

1,900+
Epidemiologists/RWI experts

1,650+
Medical doctors

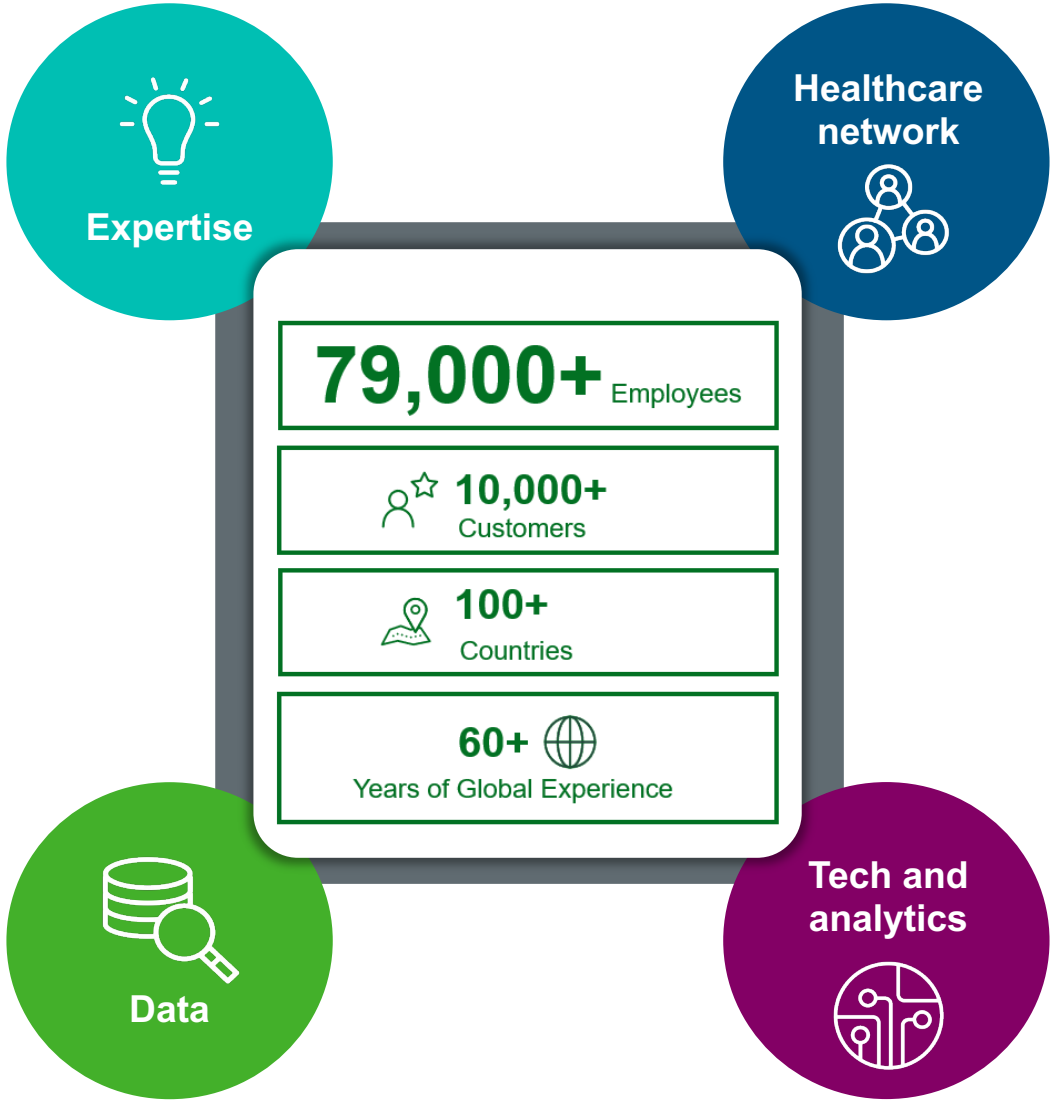
8,200+
Software development/support

1.2B+
Non-identified patient records

85%
Global pharma sales tracked

56+
Petabytes of unique data

300+
Analytic libraries



100+
Countries

50K+
Pharmacy and wholesaler partners

5M+
Clinical trial investigators

100M+
Patient network for trial recruitment

2,000+
Hospital partners

100B+
Records searched in real-time

150+
Patent-pending methodologies

30+
Predictive disease detection solutions

IQVIA CORE™

Dynamic integration
A unique combination of connected capabilities that enables you to adapt to evolving needs and drive healthcare forward.

Deep insights
Get actionable insights from vast amounts of data. Find answers to difficult questions, and make decisions with confidence.

Accelerated innovations
Generate solutions and innovations faster. Develop and implement the breakthroughs that matter most to patients.

Powerful capabilities
Find new and better ways to deliver solutions. From efficiency to leading edge, be at the forefront of problem solving for human health.

Unleash the power of the IQVIA CORE

- Domain expertise
- Unparalleled data
- Transformative technology
- Advanced analytics

>10 Countries
Epi Simulation Models to Predict Future COVID19 active cases

NFL & NBA Integrated Monitoring System
COVID-19 monitoring & contact tracing

>360
Global COVID-19 Clinical Programs in flight

23
COVID-19 Vaccine Trials

>30K participants
COVID Active Research Experience (CARE) Project at helpstopcovid19.com

Back to Work COVID-19 Contact Tracing and Tracing

Thought Leadership/Monitoring the Impact of COVID-19 on the Pharmaceutical Market

Prediction Modeling of Index Cases State/County

>5K COVID-19 Trial
Matching Tool & NYBC Convalescent Plasma Donation Matching

Forecasting models to assess COVID-19 impact on volume of patient visits to doctor's offices

IQVIA's Real-World Data (RWD)

Overview

IQVIA's Real-World Data (RWD): provide access to administrative health and sales data with very large sample sizes to facilitate agile analytics and ***answer time-sensitive questions posed by decision makers***.

1. ***IQVIA's Prescription Drug & Medical Device Data:*** contain pharmaceutical dispensing, medical device, and sales data that provide up-to-date information at the national level.
    - Through various data modules, dispensing and utilization reports are available at the regional, provider specialty group, and patient-level demographics.
2. ***IQVIA's Healthcare utilization data:*** consist of claims data and electronic health records that provide a wealth of information that can be used for surveillance, signal detection and forecasting.
    - **Claims Data:** contain patient level diagnoses, procedures performed, tests ordered, and drugs prescribed during office-based visits to healthcare professionals, ambulatory encounters, general healthcare sites and hospitals.
    - **Electronic Health Records (EHR):** capture key clinical variables such as laboratory test values, height, weight, blood pressure, prescriptions, diagnoses, procedures, and therapeutic outcomes.

Sample IQVIA Data Sets

Overview and Value for Public Health

National Prescription Audit (NPA)

Overview

What	Industry standard and IQVIA's total solution for tracking and projecting volumes for all prescription (Rx) products, classes, and manufacturers
Purpose	Measures demand for prescription and often used to investigate prescription drug utilization, prescription size and average consumption
Source(s)	Adjudicated claims collected directly from retail, mail, and long-term care outlets
Coverage	Capture ***93%*** of all outpatient retail Rx representing 170 unique specialties
Projections	Applied to make data representative of the universe of prescription demand at the national and regional level (NPA-Regional)
Frequency of updates	Weekly and monthly

National Sales Perspectives (NSP)

Overview

What	Industry standard source for measuring pharmaceutical spending in the US
Purpose	Measure the US pharmaceutical drug supply volume in dollars and unit sales for products purchased by retail and non-retail providers
Source(s)	Direct and indirect sales of pharmaceutical products to healthcare outlets
Coverage	Capture more than ***89%*** of the market in the US
Projections	Applied to make the data reflective of the total estimated sales within the US
Frequency of updates	Weekly and monthly

IQVIA's Prescription Data Saved Lives After Hurricane Maria

ASPR & CDC showed the impact of the hurricane on Puerto Rico's drug supply using IQVIA data

IQVIA pulled these data within 45 minutes!

- **Situation:** On September 20th, 2017, Hurricane Maria hit Puerto Rico as a powerful Category 4 hurricane

  IQVIA was contacted on September 25, 2017, by ASPR and CDC for information regarding prescription medication usage on Puerto Rico to assist in planning the relief efforts

- **IQVIA's Solution:** IQVIA provided a data extract of sales and retail pharmacy dispensing for June, July, and August 2017 in order to show the top 200 prescription drugs with the highest utilization and most impacted by the disruption after the hurricane

CDC Pandemic Influenza Response

IQVIA data for near-real time surveillance

- During the 2009-2010 pandemic influenza outbreak, CDC engaged IQVIA to provide timely data for surveillance and response purposes
- IQVIA provided medical and pharmacy claims data supporting weekly monitoring of the outbreak that contributed to timely (short data lag), robust coverage, local-level specificity and consistent completeness

Medical claims (Dx)

- **Patient** ID, age, gender, ZIP3
- **Provider** ID, specialty, ZIP
- ICD-9 **diagnosis**
- CPT procedure
- HCPCS product
- **Date** of service
- **Location of care**
- Reported cost of service
- Payer name and type
- Claim receipt date

Pharmacy claims (Rx)

- **Patient** ID, age, gender, ZIP3
- **Prescriber** ID, specialty, ZIP
- **Pharmacy ZIP**
- National **Drug Code** (drug, strength, manufacturer)
- **Date** Dispensed
- Quantity
- Days Supply
- Method of payment
- New or Refill
- Claim receipt date

ASPE COVID-19 Pandemic Response

IQVIA data supporting statistical analyses for ongoing pandemic response

Situation: During the 2020 COVID-19 pandemic, ASPE engaged IQVIA to provide data through an analytical platform to enable analyses around the impact of COVID

IQVIA's Solution: IQVIA provided medical and pharmacy claims data in a tool that enabled users to conduct robust statistical analyses without the need for programming resulting in faster more streamlined findings

Publications Include:

- Ali MM, Schreier A, West KD, Plourde E. Mental Health Conditions Among Children and Adolescents With a COVID-19 Diagnosis [published online ahead of print, 2022 Jun 2].
- Ali MM. Mental Health Consequences of COVID-19: The Role of Social Determinants of Health (Issue Brief). Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. April 9, 2021.

Value to Public Health

- Access to large-scale RWD with a short data lag to answer more complex health related questions associated with readiness.
- Data queries can be customized and analyzed leveraged IQVIA's state of the Art E360 analytical platform.

Protecting Data and Protecting Patients

Model for Workable Legislation

Virginia Consumer Data Protection Act (VCDPA)

- ✓ On March 2, 2021, Virginia Gov. Ralph Northam (D) signed the Virginia Consumer Data Protection Act (VCDPA) into law, making Virginia the second state after California to officially enact comprehensive consumer privacy legislation.
- ✓ The VCDPA will go into effect Jan. 1, 2023.
- ✓ The VCDPA clearly defines whose personal data is covered, describing consumers as Virginia residents "acting only in an individual or household context."
- ✓ It further clarifies that consumers are not those acting in a "commercial or employment context." Unlike California, where the B2B and employee exclusions have been the subject of several statutory amendments, Virginia has chosen not to leave those potential compliance hurdles up in the air.
- ✓ Additionally, businesses must satisfy one of the aforementioned thresholds to fall within the statute's scope, and unlike California, the VCDPA makes no mention of a threshold based solely on annual gross revenue. Entities are not left to question whether the processing of data from a dozen or so consumers will subject them to the law.
- ✓ Virginia's law has no significant recordkeeping requirements, aside from documenting data protection assessments. If a business already has in place a GDPR- or CCPA-compliant process for receiving and responding to data subject or consumer access requests, that process should be sufficient to handle requests from Virginia residents.

What Does VCDPA Protect?

The VCDPA also provides consumers with certain rights related to their personal data. Under the Act, these rights include:

- ✓ The right to know, access and confirm personal data.
- ✓ The right to delete personal data.
- ✓ The right to correct inaccuracies in personal data.
- ✓ The right to data portability (i.e., easy, portable access to all pieces of personal data held by a company).
- ✓ The right to opt out of the processing of personal data for targeted advertising purposes.
- ✓ The right to opt out of the sale of personal data.
- ✓ The right to opt out of profiling based upon personal data.
- ✓ The right to not be discriminated against for exercising any of the foregoing rights.

Consumers have an extensive set of privacy rights that are not found in other states (other than California).

Why is Virginia's Law Good for Health Data?

- ✓ The Virginia law has carve-outs for protected health information under the Health Insurance Portability and Accountability Act (HIPAA).
- ✓ Those falling outside the scope of the law also include state agencies, nonprofit organizations, colleges and universities (think academic research).
- ✓ It is helpful for small health care businesses by including a '30-day cure period', which allows companies that receive letters alleging noncompliance to communicate with the attorney general's office and remedy any potential violations before fines are imposed.
- ✓ Identifiable private information for the protection of human subjects under 45 C.F.R. Part 46 (or that is otherwise information collected as part of clinical research pursuant to the good clinical practice guidelines) is carved out.
- ✓ Information that is de-identified in accordance with the requirements for de-identification pursuant to HIPAA is also given an exception for the purposes of research.

Questions?

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