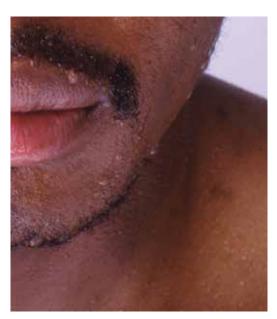
KANTAR HEALTH









REAL-WORLD
EVIDENCE DATASETS
FROM THE
FOUR CORNERS
OF THE WORLD

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KANTAR HEALTH'S WORLD-CLASS DATASETS ENABLE BETTER INFORMED DECISION MAKING

+ Same questionnaire in 10 countries, enabling comparisons of data+ Ability to recontact patients

United States

US EHR (outpatient)

- + Detailed clinical information
- + 50+ million patients

JS EHR with physician notes

- + Inpatient and outpatient integrated
- + 55+ million patients

US Oncology EHR

- + Detailed oncology data for over 500,000 patients.
- + In-depth longitudinal data (including staging over time)

US Claims

- + Healthplan data for over 150m US patients
- + Patient journeys and cost analysis



Brazil

+ Detailed registry on oncology and immunology

Germany

- + Representative data for the German population
- + Rapid approval timelines
- + Inpatient and outpatient data
- + Longitudinal data + Patient journey

South Korea

HIRA National Claims

+ Represent Korean insured people







TURNING A SEA OF CLINICAL DATA INTO ACTIONABLE DATA IS OUR STRENGTH

Real-world data is crucial to decision making when used in conjunction with clinical trials and other commercial or research activities. We deliver comprehensive insights from our data to:

- Define and understand patient subpopulations, including patients with rare diseases
- + Quantify and describe patient characteristics
- Understand and define patient and disease pathways, including treatment patterns
- + Compare patient cohorts longitudinally
- + Assess burden of disease
- + Stratify risk among patient groups
- + Track progress of new drug launches
- + Assess patient preferences

COMPREHENSIVE REAL-WORLD VIEW OF PATIENTS

NATIONAL HEALTH & WELLNESS SURVEY (NHWS)

Over two million total survey respondents.

- + NHWS is a survey of the general population (including healthy individuals)
- + In the United States, 100,000 people are surveyed annually
- + Other countries surveyed include France, Germany, Italy, Spain, UK, Japan, Brazil, Russia and China
- + Over 11,000 variables are collected

The NHWS provides rigorous patientreported outcomes data on more than 165 conditions.

AVAILABLE INFORMATION

Market

- + Epidemiology
- + Prevalence and incidence
- + Class of treatment
- + Trends

Attitudes

- + General healthcare
- + Advertising campaigns
- + Alternative care
- + Compliance

Behaviors

- + Rx usage
- + OTC usage
- + Health resource utilization
- + Cost-cutting strategies
- + Source of information
- + Physician behavior
- + Number of days/pills used

Characteristics

- + Satisfaction
- + Comorbidities
- + Symptoms, frequency and severity
- Quality of life/work productivity
- + Length of time diagnosed

Demographics

- + Family history
- + Prescription coverage and insurance
- + Lifestyle considerations
- + Basics: age, gender, income, education
- + BMI

AUDITRON

One of the largest databases covering the private healthcare system in Brazil.

- + Covers over 10 million lives, approximately 20% of the privately insured market in the country
- + ~5% of the total private market in high cost procedures
- + 4 million in the oncology sector
- + 15,000 evaluations per year

The database encompasses health insurance companies from all geographic regions.

AVAILABLE INFORMATION

Evaluation of claims-requests by physicians to insurance companies (pre-authorization) for high cost procedures

- + Oncology/hematology
- Medical devices
- + Biological agents

Database numbers

- + Data from 25 of 27 states
- + 54 health plans from all over the country
- + 575 different oncology clinics/ hospitals
- + ~1,950 oncologists and hematologists
- + 13,064 patients

Prescriptions and exams results

- + Image exams
- + Biomarkers
- + Labs









COMPREHENSIVE REAL-WORLD VIEW OF PATIENTS

GERMAN POOL OF SICKNESS FUNDS

Fast and with excellent geographic distribution.

- + 5.2 million lives
- + Representative of German insured population
- + longitudinal data starting in 2004/15
- + Diagnosis in ICD-10 GM
- + Fast: 6 months from approval to final reports

Comprehensive claims database, allows for a wide understanding of specific conditions or products and for comparative effectiveness.

US EHR

Large, nationally representative set of patients collected from outpatient electronic medical record systems.

- + 50+ million patients (28+ million active patients)
- + 2012 present history
- + Updated monthly
- + As fast as 4 months from approval to final reports

The variety and granularity of this data give flexibility to analyze, profile and understand patient sub-populations.

AVAILABLE INFORMATION

Registration data Demography

 Age, gender, insurance status, regional distribution, date of death, Charlson-Comorbidity Index (CCI)

Outpatient care

- + ICD-10 diagnoses
- + Type of physician in charge
- Billed Tariff codes according to German system and related costs

Inpatient care

- + ICD-10 diagnoses
- + Billed G-DRGs and related costs
- OPS-Codes per case duration of hospitalizations
- + Medical department of the hospital involved

Sick leaves and sick benefits

- + ICD-10 diagnoses
- + Duration of sick leaves

Drug prescriptions

- + ATC code of prescribed medications and related costs
- PZN (pharmaceutical central number) of prescribed medications to identify the content quantity of a prescribed, medication package and information on substance concentrations, date of prescription
- + Receipt number: links all medications prescribed at the same time
- + Medical aids prescription

Other services

- + Type of service and related costs
- + Onset and end of services

AVAILABLE INFORMATION

Demography

- + Height, weight
- + Race/Ethnicity
- + Location (3 digit ZIP, State, US Census Region)

Vitals

- + Blood pressure
- + Height, weight, BMI

Diagnosis

+ ICD-9, ICD-10, and Snomed

Medications

+ NDC, HCPCS (for injections)

Procedures

+ CPT, ICD-9, ICD-10, HCPCS, Snomed

Medical Tests and Results

Visits

- + Type of visit
- + Doctor specialty

COMPREHENSIVE REAL-WORLD VIEW OF PATIENTS

US EHR AND CLINICAL NOTES

A rich store of EHR data

- + Partnerships with IDNs and physician sites
- + >55 million unique patients
- + >25 million active patients
- + Structured and unstructured data
- + >2,500 locations providing care in the United States

Advanced natural language processing methods extract meaningful information from text notes.

US ONCOLOGY EHR

- + Detailed oncology data for over 500,000 patients.
- + In-depth longitudinal data (including staging over time)
- + Payer data for cost analysis
- + Access to patient charts

US CLAIMS

- Healthplan data for over 150m US patients
- + Patient journeys and cost analysis

AVAILABLE INFORMATION

EHR Data

- + Diagnoses, medications/prescriptions, procedures
- + Observations (including vital signs)
- + Problem lists with symptoms
- + Laboratory and microbiology/ pathology results (i.e. genotypes)
- + Imaging studies (PACS images and radiologist notes)
- + Clinical documents
- + Clinician notes, radiology reports, microbiology/pathology reports
- + Medical test results, symptoms, disease characteristics/qualities





Dataset	NHWS	Auditron	German pool	HIRA	US EHR	US EHR w/ notes
Demographics			роог			Hotes
Age	Υ	Υ	Υ	Υ	Υ	Υ
Gender	Y	Υ	Υ	Υ	Υ	Υ
Insurance status	Y	Y	Y	Y	N	Y
Regional distribution	Y	Y	Υ Υ	Y	Y	Υ
Socio-economic status (indicator)	Y	 N	 N	N	N	 N
Outpatient care	'	11	- 11	TN .	14	14
Date of care	N	Υ	Υ	Υ	Y	Υ
Diagnosis codes	N	Y	Y	Y	Y	
Type of physician in charge/specialty	N	Y	Y		Υ	Y
Costs (billed)	N	N	Y		N	Y
	IN	IN	T	ı	IN	ı
Clinical characteristics	V	N.I.	N.I.	N.I.	V	V
Smoking	Y	N	N	N	Y	Y
BP	Y	Υ	N	N	Y	Y
CCI	Y	N	Y	Y	Y	Y
Alcohol consumption	Υ	N	N	N	N	N
Exercise	Υ	N	N	N	N	N
BMI	Y	Υ	N	N	Y	Y
Inpatient care						
Diagnosis codes	Y	Υ	Y	Y	N	Y
Billed DRGs and related costs	N	N	Υ	Υ	N	Y
Length of hospitalization	N	Υ	Υ	Υ	N	Y
Medical department of the hospital involved	N	Υ	Υ	Y1	N	Υ
Admit diagnosis	N	Ν	Υ	Υ	N	Υ
Sick leaves and sick benefits						
ICD-10 diagnoses	Υ	N	Υ	Υ	N	N
Duration of sick-leaves	Υ	N	Υ	N	N	N
Prescriptions						
Prescribed medication codes	N	Ν	Ν	N	Υ	Υ
Filled medication codes	Υ	Υ	Υ	Y ²	N	Υ
Cost	N	N	Υ	Υ	N	Υ
Content quantity of a prescribed medication	N	Υ	Υ	Υ	Υ	Υ
Substance concentrations (dose)	N	Υ	Υ	Υ	Υ	Υ
Medical aids prescription		N	Υ	Υ	N	
Purchase date		Y	Υ	Υ Υ	N	 N
Prescription date		N	 N	N	Y	Y
Imaging services						
Date	N	Υ	Υ	Υ	Υ	Υ
Type (eg, CT, MRI, US)	Y	Y	Y	 Ү	Y	Y
	 N	Y	 N	Y	N	Y
Body region	N	 N	Y	т 	N N	Y
Cost	IN	IN	Ť	T	IN	T
Laboratory services						
Date Table (1914)	Y	Y	Y	Y	Y	Y
Test (eg, HbA1c, LDL)	Y	Y	Y	Y	Y	Y
Result	Y	Y	N	N	Y	Y
Cost	N	N	Υ	Υ	N	Υ
Other services (ex: individual prevention courses, dietician)						
Type of service	Υ	N	Υ	N	Y	Y
Date	Y	N	Υ	N	Υ	Y
Cost	N	N	Υ	N	N	Y
Registry/other data	Υ	Υ				Υ
Date of death	N	Υ	Υ	N	N	N
1						

¹ specialty only

FOR MORE INFORMATION

Please contact info@kantarhealth.com, or visit us at www.kantarhealth.com

WHY KANTAR HEALTH?

Kantar Health is a leading global healthcare consulting firm and trusted advisor to many of the world's leading pharmaceutical, biotech and medical device and diagnostic companies. It combines evidence-based research capabilities with deep scientific, therapeutic and clinical knowledge, commercial development know-how, and brand and marketing expertise to help clients evaluate opportunities, launch products and maintain brand and market leadership. Our advisory services span three areas critical to bringing new medicines and pharmaceutical products to market – commercial development, clinical strategies and marketing effectiveness.

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² molecule level