

The Kaiser Permanente Center for Health Research Data Warehouse

At the core of KPCHR's data warehouse are a series of standardized files. Content areas and data elements that are commonly required for research studies are available, and data dictionaries are created for each of the content areas, specifying the format of each of the elements, such as variable name, variable label, extended definition, code values, and value labels.

Key Data Resources		
Electronic Data Files	Description of data source	Available Since
<i>Automated Medical Record</i>	Unified and readily accessible EMR provides data on diagnoses and medical history	1997
<i>Administrative Data</i>		
Membership & billing	Age, sex, every person who has ever been a plan member (including dates of enrollment and disenrollment) , address, membership data and employer group data to support member and patient identification, group contract and benefit administration, group and direct-pay billing, and membership and revenue reporting.	1982
Outside Claims	Treatment outside KPNW: hospital, ER, and outpatient clinic diagnoses and procedures	1986
Patient Scheduling		1985
Deaths	Date and cause of death from membership files and state death files	1979
Census	County, state, zip code, educational variables, income variables, and race variables from 2000 census. The member's address is obtained from historic and current membership	2004
Cost	Relative value units for costs for procedures	1998
<i>Automated clinical data</i>		
Outpatient visits	Diagnoses associated with clinic, urgent care, and ER visits. Include: provider, encounter date and type, and procedure or diagnosis code	1987
Hospitalizations	Admin/discharge dates, discharge diagnoses, procedures for within KPNW hospitalization	1965
Pharmacy	KPNW outpatient and inpatient prescription, prescription date, prescription amount (amount prescribed and days supply), and prescribing physician. An estimated 90-95% of all prescriptions are filled at our pharmacy, including those for members without a prepaid drug benefit.	1986
Laboratory	Results of clinical laboratory tests done at KPNW	1993
Pathology	All tissue specimens analyzed by KPNW pathology department including the tissue type and test findings.	1970
<i>Cancer registry</i>	Cancer data: site, stage, diagnosis date, cancer sequence, some treatment information, follow-up information, race/ethnicity	1960

HMORN Tables

CESR VDW

CESR VDW (draft)

Pharmacy

Pharmacy (Rx fills)	EverNDC
Person ID Dispensing date Dispensing MD NDC Days supply Amount dispensed	NDC Generic names Brand names AHFS code GPI code

Utilization

Encounters	Diagnoses	Procedures	Providers
Person ID Encounter ID Dates of service Provider ID Encounter type Facility Department DRG	Person ID Encounter ID Encounter type Date Diagnosis code Diagnosis type Primary diag. flag Principal diag. flag Provider ID	Person ID Encounter ID Date of service Procedure type Procedure code Encounter type Provider ID	Provider ID Specialty Birth year Gender Race Year graduated

This set of four tables incorporates data for all medication encounters.

Census

Census Demographics	Census Location
Person ID Geocode Census year Census source Race Ethnicity Education Household income	Person ID Geocode Location start date Location end date

Labs

Lab Results	Lab Notes
Person ID Order date Collection date Result date Test immediacy Test location LOINC code Test result and unit Normal result range Ordering provider Department Facility Row ID	Row ID Result note Note type Line

Death

Cause of Death	Death
Person ID Cause of death Type of cause Source Confidence	Person ID Date of death Source Confidence

Demographics	Enrollment	Language	Social History	Tumors	Vital Signs
Person ID Birth date Gender Race Ethnicity	Person ID Start and end dates Outside utilization flag Insurance plan and type Drug coverage Primary care clinic Primary care provider	Person ID Language Primary language Y/N Spoken/written	Encounter ID Person ID Date Education Drug history Alcohol history Sexual history Tobacco history	Person ID Diagnosis date Tumor type variables Tumor stage variables Treatment variables	Person ID Encounter ID Encounter type Measurement date Blood pressure, pulse Height, weight Head circumference

Infusion

Treatment	Drugs Ordered & Dispensed	Drugs Administered
Person ID Protocol ID Provider IDs Encounter ID Treatment day ID Treatment plan ID Treatment plan status Treatment type Treatment intent Episode information Future treatment dates Associated Dx codes Outpatient vs inpatient	Person ID Treatment day ID Treatment plan ID Medication ID Order ID Medication name Mixture additive name Mixture base name NDC Dosing parameters Infusion rates Dispensing process status Encounter date	Person ID Treatment day ID Provider ID Treatment plan ID Encounter date Administered medication ID Administered medication name Administered dose amount Administered dose unit Administration time NDC

Personal Health Records (PHR)

PHR Registration	PHR Activity	PHR Test
Person ID Create date Last login Acct active	Person ID Access date Type of activity	Person ID Access date Test name

PHR Messages	PHR Proxy
Person ID Message ID Thread ID Message date Sending provider	Person ID Proxy person ID Proxy relationship Proxy start date Proxy end date

Medication Orders

Medication Orders	Medication Orders Diagnoses	Medication Lookup
Person ID Encounter ID Order ID Prescription ID Medication ID Order date SIG Simple generic name	Order ID Order diagnosis Order Dx code type	Medication ID Medication name Medication route Generic name Therapeutic class Pharmaceutical class Controlled substance Y/N

Exclusion	Inpatient Pharmacy
Person ID Excl from Patient Contact studies Excl from Data Only studies Excl from Chart Review studies	Encounter ID NDC Action for medication Action date/time Medication Names

Patient Reported Outcomes (PRO)

PRO Type	Surveys	Survey Questions	Survey Responses
PRO ID PRO type PRO type description PRO type notes	Survey ID Survey Name	Survey ID Question ID Question date Question text Question order	Person ID Question ID Encounter ID Response date Response SEQ Response text

Benefits

Member	Choice
in development*	in development **

* The benefit member table lists members and the coverage that each member has during a specified time period.

** The benefit choice table is a lookup table that lists the specifics of each type of coverage a member may choose.

BMD

Person ID Date Type of machine Bone measured Bone mineral density T-score
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GEMS

Person ID Reported race/ethnicity Imputed race/ethnicity* Death date
