

# HIX Compare Documentation

Welcome to HIX Compare, a free plan-level data base covering the fully insured market in all fifty states and D.C., available for non-commercial use.

HIX Compare includes substantially all individual and small group marketplace plans offered from 2014-2018, and most off marketplace plans as well.

If you have questions about HIX Compare, please email [HIXsupport@vericred.com](mailto:HIXsupport@vericred.com)

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# HIX Compare Files

## Plan Level

HIX Compare data are currently available for the individual market 2014-2018 and the small group market 2014-2017. The zip files contain the data in both Stata and CSV formats.

## Issuer County Level

HIX Compare is on the rating area level, but issuers often do not sell plans across an entire rating area. The "Issuer County Report" lists the number of on- and off-market plans offered in each county at the issuer level. Although plans are not always sold countywide, they will be included in this report if they are available in at least part of the county. The "Issue County Report" is available in CSV format for each year/market for which there is a plan level HIX Compare file. For small group, the "Issuer County Report" counts a plan if it exists in any of the 4 quarters.

# Data Updates

HIX Compare plan data are updated periodically as we work to improve our data completeness and quality. Current year data are updated monthly, while previous years' data are updated quarterly.

## Next Scheduled Data Release

- 2018 individual data are scheduled to be updated in early March
- All other data are scheduled to be updated in early April
- 2018 small group will be released near the end of 2018

## Data Quality

We perform a number of quality checks, but we also rely on users to help us improve the quality of HIX Compare. Please contact us with any data quality questions at

[HIXsupport@vericred.com](mailto:HIXsupport@vericred.com)

The following are issues we are aware of that will be addressed in the next data release:

- 2015 Individual: a small number of NY child-only plan/rating areas have incorrect (unreasonably high) premiums. We will correct this before the next data release.
- 2015, 2017 and 2018 Individual: a small number of plans have incorrect \$0 premiums. We will correct this before the next data release.

## Change Log:

2018-02-02

- Added flag for child-only plans (childonly).
- Set adult and family premiums (premi27, premi50, premi2c30, premc2c30) to missing for child-only plans.
- Added a field for child premium (premic) for child-only plans.
- Added a network id field (networkid).
- Fixed copay/coinsurance codes. In previous versions, "no charge" and "no charge after deductible" were being coded 3 or 4 with value 0 instead of 1 or 2 as listed in the documentation. Coding has been corrected to match the documentation.
- Fixed a bug where a handful of plans with -11 and -77 plan IDs were incorrectly being flagged as CSRs.
- Changed variable prefix for inpatient\_mental\_health benefit variables to "IN". The "IM" prefix is used for imaging.

# Dataset Limitations

## Completeness:

Availability of data from some issuers in some areas is better than others. In general, on-market FFM (Healthcare.gov) plans are the most complete, followed by on-market SBM (state-based marketplace) plans, and then by off-market plans.

## Volume-Dependent Cost-Sharing Benefits:

Some plans have benefit designs where, for some services, cost-sharing changes based on the volume of services used, e.g., “first 5 days \$350 per day then \$0 per day” for a hospitalization or “first 3 visits \$0 then 20% after deductible” for a primary care visit. We cannot code these complex benefits into the structure of HIX Compare. The benefit codes capture the cost sharing for the first contact (e.g., \$350 per day for the hospitalization example above and \$0 for the primary care example). Volume-dependent benefits are most common for primary care physician (around 10% of plans). A future iteration of HIX Compare will include a flag to identify volume-dependent benefits.

## Limitations on Coverage and Other Complex Conditions

Some benefits have limitations or conditions that the HIX Compare fields cannot capture. For example:

- 1) Some benefits like skilled nursing and durable medical equipment may be covered only up to a certain volume, e.g., “In-Network: \$0 after deductible / Out-of-Network: 20% after deductible | limit: 4 Item(s) per Year”. The benefit codes in HIX Compare capture the cost sharing before the volume limit is reached.
- 2) Some benefits may have a condition that changes the cost sharing, e.g., “copay waived if admitted” for an emergency room benefit or a lower copay if visiting a patient centered medical home for a primary care benefit. The benefit codes in HIX compare capture the cost sharing when the special condition is not met.

Benefits with a limitation are most common (50%-100% of plans) for child eye wear, child eye exam, skilled nursing, rehabilitation services, habilitation services, home health, and chiropractic services. A future iteration of HIX Compare will include a flag to identify benefits with a limitation.

## Defining a “Unique Plan”

HIX Compare’s “planid” is the plan’s HIOS ID. These are the Health Insurance Oversight System identifiers assigned to plans by CMS. HIOS IDs are an administrative label. For the reasons listed below, HIOS IDs may not map to what consumers or researchers would necessarily consider a “unique plan”.

Factors that affect the definition of a unique plan:

- CSRs—Each on-market silver plan is required to have 3 cost sharing reduction variations denoted by HIOS IDs ending in -04, -05, and -06. Because consumers will only be eligible for one of these variants (based on income), they are typically considered to be variants of the same plan.
- Child-only plans—Issuers offering child-only plans are required to offer a non-child-only plan with the same set of benefits. These have separate HIOS IDs, but are typically considered variants of the same plan.
- Riders and other plan variants—Some plans have optional additions beyond essential health benefits. For example, the addition of adult vision, dental, or allowing dependents to be covered up to age 29. These variants have different HIOS IDs and change the premiums for the plan, but because they have the same set of essential health benefits, they are typically considered variants of the same plan.
- Different HIOS IDs by rating areas—Some issuers in some states offer the same set of benefits (typically with the same plan same) under a different HIOS ID in different rating areas. See many Texas 2018 plans for an example of this. When there is no difference in benefits, these are typically considered to be the same plan.
- Different HIOS IDs in the same rating area—Some issuers in some states offer the same set of benefits under different HIOS IDs *within* a single rating area, but in non-overlapping service areas. These plans have different premiums, but are typically considered to be the same plan, because the set of benefits is the same.
- Networks—Some issuers offer the same set of benefits with two different networks. Because the provider options available to the consumer are different, these are typically considered to be different plans.

Suggested method to define a unique plan:

We define a “unique plan” as a base plan (removing CSRs and child-only plans) with a unique combination of year; state; carrier; metal level; plan type; market; network; and all benefit, deductible, and maximum out of pocket fields present in HIX Compare with the exception of skilled nursing. Skilled nursing is not included, because it is the only essential health benefit that can be changed by a rider.

For example, in Stata:

To contract the dataset to one line per “unique plan”:

```
drop if csr == 1 | childonly == 1
contract year st carrier metal plantype planmarket networkid ab_copayinn_tiers-
rh_coinsoutofneta sp_copayinn_tiers-tehboutofnetfamilymoopa
```

To assign a new “unique plan” ID:

```
egen unique_planid = group(year st carrier metal plantype planmarket networkid
ab_copayinn_tiers-rh_coinsoutofneta sp_copayinn_tiers-tehboutofnetfamilymoopa)
if childonly == 0 & csr == 0, missing
```

# Data Dictionary

We divide the fields into three types:

- Benefits – Coverage types and amounts for various office, home or hospital visits and drugs.
- Values – Deductibles and out-of-pocket maximums
- Pricing and Additional Data – Premiums, metal level, plan type, and other plan metadata.

## Benefit Fields

Below is a table detailing the various benefit fields that we capture along with their abbreviations, descriptions, and their coding map

Benefit Name	Abbreviation
ambulance	AB
child_eye_exam	EY
child_eyewear	EW
diagnostic_test	DT
durable_medical_equipment	DM
emergency_room	ER
generic_drugs	GD
habilitation_services	HA
home_health_care	HH
hospice_service	HS
imaging	IM
inpatient_birth	IB
inpatient_facility	IP
inpatient_mental_health	IM
inpatient_physician	IH
inpatient_substance	IS
non_preferred_brand_drugs	ND
outpatient_facility	OP
outpatient_mental_health	OM
outpatient_physician	OH
outpatient_substance	OS
preferred_brand_drugs	PD
prenatal_postnatal_care	PN
preventative_care	PV
primary_care_physician	PC

rehabilitation_services	RH
skilled_nursing	SN
specialist	SP
specialty_drugs	SD
urgent_care	UC

Each Benefit Field includes a total of 14 components comprised of in/out-of network data for copays and/or coinsurance.

Suffix	Description	Possible Values
CopayInn_TIERS	Number of in-network tiers for this benefit	1, 2
CopayInnTier1	The copay code for Tier 1 In-Network. If a plan does not have multiple tiers, this is the code for the In-Network benefit	See Copay/Coinsurance Codes
CopayInnTier1A	The copay amount for Tier 1 In-Network. If a plan does not have multiple tiers, this is the amount for the In-Network benefit. If a plan does not have a copay for this benefit, the value is blank	Blank if not applicable or any positive integer if applicable
CopayInnTier2	The copay code for Tier 2 In-Network, if applicable.	See Copay/Coinsurance Codes
CopayInnTier2A	The copay amount for Tier 2 In-Network, if applicable.	Blank if not applicable or any positive integer if applicable
CoinsInn_TIERS	Number of in-network tiers for this benefit	1, 2
CoinsInnTier1	The coinsurance code for Tier 1 In-Network. If a plan does not have multiple tiers, this is the code for the In-Network benefit	See Copay/Coinsurance Codes
CoinsInnTier1A	The coinsurance amount for Tier 1 In-Network. If a plan does not have multiple tiers, this is the amount for the In-Network benefit. If a plan does not have coinsurance for this benefit, the value is blank	Blank if not applicable or any percent up to 100



CoinsInnTier2	The coinsurance code for Tier 2 In-Network, if applicable.	See Copay/Coinsurance Codes
CoinsInnTier2A	The coinsurance amount for Tier 2 In-Network, if applicable.	Blank if not applicable or any percent up to 100
CopayOutofNet	The copay code for any Out-of-Network benefits	See Copay/Coinsurance Codes
CopayOutofNetA	The copay amount for any Out-of-Network Benefits. If the plan does not have a copay for Out-of-Network coverage, this value is blank	Blank if not applicable or any positive integer if applicable
CoinsOutofNet	The coinsurance code for any Out-of-Network benefits	See Copay/Coinsurance Codes
CoinsOutofNetA	The coinsurance amount for any Out-of-Network Benefits. If the plan does not have coinsurance for Out-of-Network coverage, this value is blank	Blank if not applicable or any percent up to 100

### Copay/Coinsurance Codes

To simplify analysis of benefit design, we categorize benefit designs and identify those categories based on the codes below

Code	Description
0	Not applicable or no coverage. This benefit is completely uncovered and/or there is no coverage for the relevant tier.
1	No charge. This benefit requires no payment by the consumer.
2	No charge after deductible. The consumer pays 100% until the deductible is reached, after which there is no charge to the consumer.
3	The copay/coinsurance amount is always applicable for this benefit.
4	The copay/coinsurance amount is applicable for this benefit only after the deductible has been reached.
5	The copay/coinsurance amount is applicable for this benefit only before the deductible has been reached.
6	The copay is calculated per day (for inpatient facility only). E.g. \$100 per day for hospital charges.

7	The copay is calculated per stay (for inpatient facility only). E.g. \$500 per stay for hospital charges.
8	The copay is calculated per day (for inpatient facility only), but is only applicable after the deductible has been reached. Before that, the consumer is responsible for 100% of the cost.
9	The copay is calculated per day (for inpatient facility only), but is only applicable before the deductible has been reached.
10	The copay is calculated per stay (for inpatient facility only), but is only applicable after the deductible has been reached. Before that, the consumer is responsible for 100% of the cost.
11	The copay is calculated per stay (for inpatient facility only), but is only applicable before the deductible has been reached.

### Putting It All Together

The codes and fields for each benefit allow us to express complex benefit designs in a standard way. Here is an example to illustrate:

Example:

Specialist is a \$30 copay after deductible in Tier 1, \$50 copay after deductible in Tier 2, and no coverage Out of Network

SP_CopayInn_TIERS	2
SP_CopayInnTier1	4
SP_CopayInnTier1A	30
SP_CopayInnTier2	4
SP_CopayInnTier2A	50
SP_CoinsInn_TIERS	2
SP_CoinsInnTier1	0
SP_CoinsInnTier1A	
SP_CoinsInnTier2	0
SP_CoinsInnTier2A	
SP_CopayOutofNet	0
SP_CopayOutofNetA	
SP_CoinsOutofNet	0
SP_CoinsOutofNetA	

## Value Fields

Below is a table detailing the various value fields that we capture along with their abbreviations, descriptions, and their coding map. Value fields refer to deductibles and maximums-out-of-pocket.

### Medical, Drug and Total

It is important to note that value fields are either separate Medical/Drug amounts or Total. Total means that the Medical and Drug values are integrated. Having values in Medical and Drug or values in Total are mutually exclusive.

### Value Types

All values are either of type "Individual" or "Family". This is substituted for {TYPE} in the table below. For example, the code for Medical In-Network Individual Deductible would be MEHBDedInnIndividual

Field	Description	Possible Values
MEHBDedInn{TYPE}	Code for the Medical In-Network Deductible Value	See Value Codes > In-Network Value Codes
MEHBDedInn{TYPE}_TIERS	Number of Tiers for the Medical Deductible In-Network Value	Blank if integrated, 1 or 2 otherwise
MEHBDedInnTier1{TYPE}A	Medical Deductible In-Network Tier 1 Value	Blank if integrated or \$0, positive integer otherwise
MEHBDedInnTier2{TYPE}A	Medical Deductible In-Network Tier 2 Value	Blank if integrated or \$0 or if value has a single tier, positive integer otherwise
DEHBDedInn{TYPE}	Code for the Drug In-Network Deductible Value	See Value Codes > In-Network Value Codes
DEHBDedInn{TYPE}_TIERS	Number of Tiers for the Drug In-Network Deductible Value	Blank if integrated, 1 or 2 otherwise
DEHBDedInnTier1{TYPE}A	Drug Tier 1 In-Network Deductible Value	Blank if integrated or \$0, positive integer otherwise
DEHBDedInnTier2{TYPE}A	Drug Tier 2 In-Network Deductible Value	Blank if integrated or \$0 or if value has a single tier, positive integer otherwise
TEHBDedInn{TYPE}	Code for the Integrated In-Network Deductible Value	See Value Codes > In-Network Value Codes

TEHBDedInn{TYPE}_TIERS	Number of Tiers for the Integrated In-Network Deductible Value	Blank if separate Medical and Drug, 1 or 2 otherwise
TEHBDedInnTier1{TYPE}A	Integrated Tier 1 In-Network Deductible Value	Blank if separate Medical and Drug or \$0, positive integer otherwise
TEHBDedInnTier2{TYPE}A	Integrated Tier 2 In-Network Deductible Value	Blank if separate Medical and Drug or \$0 or if value has a single tier, positive integer otherwise
DedOutOfNet{TYPE}	Code for the Out-of-Network Deductible Value	See Value Codes > Out-of-Network Value Codes
MEHBDedOutOfNet{TYPE}A	Medical Out-of-Network Deductible Value	Blank if integrated or not applicable or \$0, positive integer otherwise
DEHBDedOutOfNet{TYPE}A	Drug Out-of-Network Deductible Value	Blank if integrated or not applicable or \$0, positive integer otherwise
TEHBDedOutOfNet{TYPE}A	Integrated Out-of-Network Deductible Value	Blank if separate Medical and Drug or not applicable or \$0, positive integer otherwise
MEHBInn{TYPE}MOOP	Code for the Medical In-Network MOOP Value	See Value Codes > In-Network Value Codes
MEHBInn{TYPE}MOOP _TIERS	Number of Tiers for the Medical MOOP In-Network Value	Blank if integrated, 1 or 2 otherwise
MEHBInnTier1{TYPE}MOOPA	Medical MOOP In-Network Tier 1 Value	Blank if integrated or \$0, positive integer otherwise
MEHBInnTier2{TYPE}A	Medical MOOP In-Network Tier 2 Value	Blank if integrated or if value has a single tier or \$0, positive integer otherwise
DEHBInn{TYPE}MOOP	Code for the Drug In-Network MOOP Value	See Value Codes > In-Network Value Codes
DEHBInn{TYPE}MOOP_TIERS	Number of Tiers for the Drug In-Network MOOP Value	Blank if integrated, 1 or 2 otherwise
DEHBInnTier1{TYPE}MOOPA	Drug Tier 1 In-Network MOOP Value	Blank if integrated or \$0, positive integer otherwise

DEHBInnTier2{TYPE}MOOPA	Drug Tier 2 In-Network MOOP Value	Blank if integrated or if value has a single tier or \$0, positive integer otherwise
TEHBInn{TYPE}MOOP	Code for the Integrated In-Network MOOP Value	See Value Codes > In-Network Value Codes
TEHBInn{TYPE}MOOP_TIERS	Number of Tiers for the Integrated In-Network MOOP Value	Blank if separate Medical and Drug, 1 or 2 otherwise
TEHBInnTier1{TYPE}MOOPA	Integrated Tier 1 In-Network MOOP Value	Blank if separate Medical and Drug or \$0, positive integer otherwise
TEHBInnTier2{TYPE}MOOPA	Integrated Tier 2 In-Network MOOP Value	Blank if separate Medical and Drug or if value has a single tier or \$0, positive integer otherwise
OutOfNet{TYPE}MOOP	Code for the Out-of-Network MOOP Value	See Value Codes > Out-of-Network Value Codes
MEHBOutOfNet{TYPE}MOOPA	Medical Out-of-Network MOOP Value	Blank if integrated or not applicable or \$0, positive integer otherwise
DEHBOutOfNet{TYPE}MOOPA	Drug Out-of-Network MOOP Value	Blank if integrated or not applicable or \$0, positive integer otherwise
TEHBOutOfNet{TYPE}MOOPA	Integrated Out-of-Network Deductible Value	Blank if separate Medical and Drug or not applicable or \$0, positive integer otherwise

## Value Codes

### In-Network Field Codes

Code	Description
0	Value is not applicable
1	Value is applicable

These values denote whether or not this type of Deductible/MOOP applies

### Examples

For a plan with separate In-Network Individual Drug and Medical Deductibles

MEHBDedInnIndividual	1
DEHBDedInnIndividual	1
TEHBDedInnIndividual	0

For a plan with an integrated In-Network Drug and Medical Deductibles

MEHBDedInnIndividual	0
DEHBDedInnIndividual	0
TEHBDedInnIndividual	1

#### Out-of-Network Field Codes

Code	Description
0	No Out-of-Network Coverage (Not Applicable)
1	Value is integrated (Medical and Drug values are combined, so the Medical or Drug value is not applicable)
2	Value is separate for Medical and Drug

## Pricing and Additional Data Fields

Below is a table detailing pricing and metadata fields we capture for plans

Field	Description	Possible Values
YEAR	Plan Year	2014-2018
DATECAPTURE	The last modified date of this plan's data	Any DateTime
PLANID	The HIOS ID of the Plan Please note: <ul style="list-style-type: none"> <li>• HIOS IDs do not necessarily mean a "unique plan", (Defining a "Unique Plan")</li> <li>• HIOS IDs ending in -04, -05, and -06 are CSR plans</li> <li>• HIOS IDs ending in -11 or -77 are placeholder HIOS IDs where the actual HIOS ID was not available</li> </ul>	A valid HIOS ID (example format: 12345NY6789012)
ST	State Code	Any valid State Code (e.g. NY)

AREA	Rating Area ID—State code and rating area number	Any valid Rating Area ID (example format: NY01)
CARRIER	Carrier Name	Any String Carrier Name
PLANNAME	Marketing name of the Plan	Any String
METAL	Plan metal level	catastrophic, bronze, silver, gold, or platinum
PLANTYPE	Plan type	See Plan Types
PREMIC	Premium for a child aged 0-14	Blank if not a child-only plan or any positive number
PREMI27	Premium for an individual age 27	Blank if child-only plan or any positive number
PREMI50	Premium for an individual age 50	Blank if child-only plan or any positive number
PREMI2C30	Premium for one individual age 30 and 2 children aged 0-14	Blank if child-only plan or any positive number
PREMC2C30	Premium for two individuals age 30 and 2 children aged 0-14	Blank if child-only plan or any positive number
CSR	Is this a CSR plan?	1 if true, 0 if false
PLANMARKET	Is this plan available on a health insurance marketplace?	See Plan Markets
CHILDONLY	Is this a child-only plans?	1 if true, 0 if false
NETWORKID	Arbitrary identifier for unique network	Blank for 2014 and 2015 files or where network is unknown. Otherwise, numeric ID

## Plan Types

We maintain a map of integers to Plan Types

Code	Description
1	PPO
2	HMO
3	POS
4	EPO
5	Other

## Plan Markets

We maintain a map of integers to Plan Markets

Code	Description
1	This plan is available only on a State or Federal Marketplace
2	This plan is available only off a State or Federal Marketplace
3	This plan is available both on and off a State or Federal Marketplace



# Documentation Change Log

2018-02-02

- Added documentation for child only plans (CHILDONLY and PREMIC)
- Added documentation for network ID (NETWORKID)
- Added documentation for "unique plans", "issuer county report", data updates, and data limitations

2017-03-05

- Added documentation for Premium fields (PREMI27, PREMI50, PREMI2C30, PREMC2C30)
- Added new year availability information
- Renamed file from "writeup" to "documentation"

2017-01-23

- Added documentation for CSR and PLANMARKET fields