Frequently Asked Questions- Drugs
Medical Programs Analytic & Reporting Knowledgebase (MPARK)

General Data Descriptions

1. **How is this table intended to be used?** This detailed table is most meaningful when used in conjunction with either the Recipient or Provider table. This will require the user to have the skills and data environment to summarize the data and join the results to Recipient and/or Provider tables.

2. **From what sources are drug claims drawn**? The drug claims included in this data set are those that are billed through our pharmacy payment system. The drugs included in this data set are all claims marked as a pharmacy type of service, including pharmaceuticals purchased through a pharmacy as well as supplies and equipment classified as a drug service. Some non-drug supplies purchased by prescription at the pharmacy are also included. The data table largely excludes drugs that are given to a recipient in a doctor's office, hospital, or inside another institutional facility, and therefore mostly includes drugs that are prescribed to an outpatient who then submits the prescription to a pharmacy. Some drugs administered in a physician's office can be submitted as pharmacy claims; these are included in the data set.

Recipient and Providers

1. **Are the claims in this data set shown per recipient, per provider, or in both forms?** Information is included with respect to both pharmacies (dispensing providers) and recipients. We also provide the prescribing provider NPI even when the prescribing provider is not a Medicaid provider. Please see the data dictionary for further information on what is included.

2. **What recipients are included in the data set?** The recipient population includes all recipients with full benefits and with at least one pharmacy event during the calendar year, irrespective of age and geographic location.

3. **Are drug claims from the AIDS Drug Assistance Program included in the data set?** The AIDS Drug Assistance Program is for persons living with HIV/AIDS whose income is equal to or less than 300-500% of the Federal Poverty Level. It offers monthly benefits towards the cost of prescription drugs used for the treatment of HIV/AIDS and AIDS-related opportunistic infections. It is considered a partial benefits program and is therefore not included in this table or any table in the data set.

4. **Are drug claims from the Illinois Hemophilia Program included in the data set?** The Illinois Hemophilia Program is a partial-benefits program providing coverage of anti-hemophilic factors, plus other medical expenses for hemophiliacs. Claims from this program are not included in this table or any table in the data set. We do, however, include drugs claims and other costs for hemophiliacs who are enrolled in full benefit Medicaid and CHIP programs. These costs are often substantial.

5. **Are drug claims from the Illinois Healthy Women program included in the data set?** Illinois Healthy Women is a partial-benefits program that covers family planning (birth control) and various other reproductive health services for female Illinois residents ages 19-44 who meet income requirements, are not pregnant, and don't otherwise qualify for Medicaid. Drug claims

from this program are not included in the data set, as the recipients are not full benefits recipients.

6. **Are members of Illinois Cares Rx included in the data set?** No. Illinois Cares Rx was a partial-benefits program that provided assistance with prescription drug costs for low-income disabled persons between 16 and 65 years old and low-income seniors. The program was discontinued June 30, 2012. Claims from IL Cares Rx are not included in this table or any table in the data set. Sometimes a given recipient was inadvertently enrolled in both IL Cares Rx and Medicaid. For any recipient with both enrollments, we have included the drug claims made under their full benefit Medicaid enrollment. We have not included their Illinois Cares Rx claims.

7. **Is Medicare data included in the data set? Why are there no prescription drugs data for most dual eligibles? Doesn't Medicaid pay for the deductibles, donut holes, co-pays, etc.?** The data in this table is limited to claims-based payments made to pharmacies. Medicaid does not pay for the donut holes and copays associated with Medicare Part D on a claim basis. We do, however, pay for drugs that Medicare does not cover. These drugs include some depression and anxiety medications, folate, and other drugs. (A non-comprehensive list is available).

    Dual eligibles who qualify for Part D are eligible for a low income subsidy from Medicare that covers their deductible, co-pay and donut hole costs. All donut holes and co-pay costs are excluded in this data set. The only prescription drug costs that will appear are those for dually eligible recipients who did not have a Part D Medicare plan, and those drugs that were specifically excluded from coverage by the Part D plan.

    Because the dual eligible flag is set as of the anchor date, it is possible to have a positive indicator for dual eligibility while having Medicare eligibility for only part of the year. In these cases, drugs associated with a part of the year that the recipient was not dual eligible are included in the data table. In some cases, the inclusion of prescription drugs data for dual eligibles can be attributed to this fact. Medical equipment and supplies (provider type 063) are recorded as the providers of pharmaceuticals. They are recorded under "Provider ID."

8. **Why don't prescribing provider NPIs match the NPIs found on the Provider table?** As a general rule, a prescription can be written by any clinician who is appropriately licensed – in other words, by medical doctors, nurse practitioners, and in some cases dentists and other practitioners. The prescribing provider does not need to be a Medicaid enrolled provider. The prescribing provider may or may not work for an organization that is a Medicaid enrolled provider. However, the dispensing pharmacy must be a Medicaid enrolled provider.

Costs

1. **What is included in a cost?** A cost reflects Medicaid's net liability paid to the pharmacy towards the total purchase price of a drug. The data set includes separate data points for the professional

fee amount, copay amount, and injection fees, all for any drug for which these fields apply. Net liability amount is included separately; it reflects ingredient costs, dispensing costs, and other fees included in the total price as written into the drug claim. The cost in the data set reflects this sum total, but reduces this price by the amount of any copays, Third Party Liability (TPL) and Medicare, for those recipients to whom such benefits apply.

The data set includes the entire universe of drugs paid under Medicaid. This includes any drug claims for Managed Care Organization (MCO) enrollees. Prior to 2013 drug claims were excluded from voluntary MCO capitations. Drugs, where prescribed to recipients enrolled in Voluntary MCOs, were paid on a fee-for-service basis.

2. **Is there a way to calculate the cost of ingredients?** A cost of all ingredients (whether one, in a simple drug, or all costs together, in a compound drug) can be calculated by adding net liability, third payer liability, and co-pay amounts together, then subtracting the dispensing fee. The remaining cost is the overall ingredient cost.

3. **Why are there two levels of professional fees?** Professional fees are dispensing fees. These are paid according to generic/brand name status. Dispensing fees are higher for generic drugs to encourage their use. (Please note: there is no change in fees for drugs on the "preferred drugs" list.)   Additional values will occur as multiples of the dispensing fees. This is because HFS reimburses a dispensing fee for each ingredient in the compound, compensating the pharmacy for mixing the compound.

4. **How has pricing changed between the time the data was captured and the present moment?** In 2010, Healthcare and Family Services used Average Wholesale Price (AWP) discounted pricing logic to calculate appropriate drug costs. The corporation publishing these figures, First Data Bank, has since discontinued providing AWP, pursuant to legal agreements.

5. **Where do I find additional information regarding Illinois pricing, restrictions, and other issues?** Please consult the Healthcare and Family Services pharmacy webpage for various updates and announcements. Also, the link to Pharmacy Provider Releases on this webpage is a good resource.

Inclusions and Exclusions

1. **Is there an indicator for whether a drug is on the Illinois Medicaid preferred drug list ?** No. This list is subject to revisions that make it impossible to apply a simple indicator to our data. Applying an indicator from the experience period would not necessarily be helpful for determining a drug's current status as preferred or non- preferred. Our partners can access the most up-to-date information on preferred drugs at the HFS website. (HFS does not provide time-stamped versions of this document.)

2. **Is an indicator for Refill Too Soon included?** No. The Refill Too Soon program flags prescription refills that are sought prior to the time when the refill request would be appropriate (calculated

as a function of the total length of time that the prescription was intended to last). When a pharmacy attempts to refill a script before the appropriate amount of time has passed, the script will reject at point of sale. The only claims that are included in the data set are claims that have been generated after a prescription was filled, submitted to HFS, adjudicated and paid.

3. **Are drug rebates included in the data on costs?** No. These are not included in the costs of prescriptions but rather are a form of revenue to the state, received quarterly. They are not linked to a particular prescription or a payment to a specific pharmacy (provider). For this reason they are not included in the data.

4. **Are immunizations included?** Yes, they can be. Flu shots and other vaccines can be purchased through a pharmacy, and these claims are included in the data set. (In some cases, when the pharmacy administers the shot, an administration fee will also be paid.)

5. **Are classes of controlled substances (as defined by the Drug Enforcement Agency) included in the data set?** The drug claims that HFS has covered during the experience period are included in the data set. Some of the included claims are for drugs subject to special restrictions imposed by the Drug Enforcement Agency (for example, narcotic painkillers). We include an indicator for this status in the data set ("DEA Schedule").

    HFS does not cover drugs that cannot legally be prescribed, including controlled substances, and for that reason they are not found in the data set. Drugs used on an experimental basis and not yet approved by the FDA are likewise uncovered and therefore excluded.

6. **Why is there missing drug class information for some drugs?** HFS relies upon a licensed classification system to describe its drugs. Due to contractual constraints, we cannot release that system to outside entities. Therefore, we have used data freely available from the federal government. It provides us only with the descriptive information seen here, formatted somewhat imperfectly. Null values are typically found for over-the-counter drugs, and are also present for a percentage of the prescription drugs.

7. **Are medical testing products (such as a blood testing strip), durable medical equipment, or devices (such as a glucometer) that can be sold or dispensed in a pharmacy included in the prescribed drugs claims?** In some cases, they are. For example, blood sugar test strips and some other non-drug items are dispensed through a pharmacy and will have associated NDCs or procedure codes. These will appear in the data set.

8. **Does the data set include over-the-counter (OTC) drugs?** Yes, if Medicaid covered the cost of the over- the-counter drug for the recipient and it was retrieved through a pharmacy. (This accounts for about 10% of the data set.) There is an indicator that separates prescription from OTC drugs in the data set. To be included, the drug had to be prescribed by a physician.

    Increasingly, OTC drugs are being removed from coverage under benefit plans; therefore partners using 2010 data to infer future drug claims payments may wish to be mindful of the overall steady and continuing reduction of these drugs among current claims. Discontinuation of coverage of

certain over-the-counter drugs went into effect 7/18/2011. No time-sensitive list of OTC exclusions is available. Please refer to the section on diagnostic information in this FAQ for more facts on OTC drugs.

Diagnostic Information

1. **What is the CDPS MRX System, and how does it work?** The Chronic Illness and Disability Payment System is a risk adjustment system specifically designed for Medicaid. (Please see our documentation on CDPS on the MPARK webpage for more introductory information on this system.)

   The MRX component of CDPS is designed to allow for risk adjustment based on pharmaceutical use. However, we are using this system only as a method of rolling up drug claims into categories. As in our previous use of the CDPS diagnostic system, the key purpose is to allow our partner organizations to assess patient needs quickly via a manageable data set. While it is technically possible to complete a risk adjustment using information directly available from CDPS, HFS has no official position as to this method and is making no public comment on risk adjustment strategies at this time. We simply impose this classification system to allow for easy, consistent analyses by our partner organizations.

   CDPS MRX was created several years ago, using data that was then several years old. It does not include the newest drugs, and these exclusions may be important to some analyses. We have implemented a "none/other" category to categorize all NDCs that do not fit within any CDPS category.

2. **Are there indicators that relate a specific prescription to the diagnosis (as defined by a diagnostic code) it was intended to treat?** No. However, we do categorize drugs according to the MRX categories defined by CDPS. These codes give a rough idea of diagnosis for various drug prescriptions. However, the list is not comprehensive and does not differentiate between diagnoses for drugs that can be used for a variety of diseases, such as glucophage/metformin (which is typically used for diabetes care, but can treat polycystic ovarian syndrome and a few other non-diabetic conditions) or Cymbalta (which often treats depression but can treat chronic back pain and fibromyalgia).

3. **Is there a way to tell if a prescription involved inappropriate use, whether by misdiagnosis, patient non-compliance, or some other reason?** No.

NDCs, NPIs and other codes

1. **Who reports the NPIs found in the data table?** The pharmacy verifies that the prescribing physician is licensed, and enters the provider NPI on the claim submitted to HFS. While we have included the prescribing provider NPI as reported on the pharmacy's claim, we validate the accuracy of this field only with respect to ensuring the reported NPI matches the expected

format. A NPI in the data table may be inaccurate; corresponding to a physician that is not a Medicaid provider; or corresponding to a physician who did not get paid for services provided to your population of interest and who is therefore not included in the Provider information. Additionally, we expect that earlier data tables will include some values that are inconsistent with correct NPI formatting, as the implementation of reasonableness checks may not cover the entire experience period.

2. **Is there a way to match NPIs found in the data set to the providers they represent?** Yes. The National Plan and Provider Enumeration System provide a [National Registry Search](#) look-up website. Google also works well for NDC look-up. Other options for NPI look up may also be available, and HFS does not endorse or prefer any particular source.

3. **Do you include old NDC codes, or only new ones?** The drug claims data includes only the NDC codes for which HFS paid claims during the experience period. (Of the drugs documented in the HFS data warehouse under unique brand names, changes have affected approximately 5%, although in many cases these changes pre-date the experience period and are of no concern.) We therefore anticipate that the existence of outdated NDC numbers in our claims data will affect a small percentage of the total claims. Please see our comment on NDC codes below.

4. **Is there a way to look up National Drugs Codes**? Yes. The federal government makes available a [NDC directory.](#) Google can also be helpful.

5. **Why is NDCPackageCd shown with and without dashes**? National drug codes as assigned by the federal government have dashes. Many data applications remove the dashes. Removing the dashes is not a straight forward exercise as depending on where the dashes appear, zeros may get padded at the beginning, middle, or end of the code. We have included both versions of NDCs so that you may join to outside data that uses either version of NDC. See documentation below:

National Drug Code (NDC) Conversion Table –**Converting NDCs from 10-digits to 11 digits.**

It should be noted that many National Drug Code (NDC) are displayed on drug packing in a 10-digit format. Proper billing of a National Drug Code (NDC) requires an 11-digit number in a 5-4-2 format. Converting National Drug Code (NDC) from a 10-digit to an 11-digit format requires a strategically placed zero, dependent upon the 10-digit format.

The below table shows common 10-digit National Drug Code (NDC) formats indicated on packaging and the associated conversion to an 11-digit format, using the proper placement of a zero. The correctly formatted, additional "0" is in a bold font and underlined in the following example. Note that hyphens indicated below are used solely to illustrate the various formatting examples for the National Drug Code (NDC).

NOTE: Do not use hyphens when entering the actual data in your claim.
Converting NDCs from 10-digits to 11-digits

10-Digit Format on Package	10-Digit Format on Example	11-Digit Format	11-Digit Format Example	Actual 10-digit NDC Example	11-Digit Conversion of Example
4-4-2	9999-9999-99	5-4-2	**0**9999-9999-99	0002-7597-01	**0**0002-7597-01
5-3-2	99999-999-99	5-4-2	99999-**0**999-99	50242-040-62	50242-**0**040-62
5-4-1	99999-9999-9	5-4-2	99999-9999-**0**9	60575-4112-1	60575-4112-**0**1

6. **Why are some NDCs a list of zeros?** These are not National Drug Codes. Compound drugs are listed at the total level (under IngrSeqNbr 0) with a row of zeros in the NDC column. Each of the ingredients in the compound is shown below under a specific NDC.

7. **Are drug claims linked to HCPCSs, DRGs, or any other information on healthcare procedures?** No, as we do not pick up the drugs claims that are specific to procedures or care that occurs inside a healthcare facility. Drug claims are billed by National Drug Codes when the drugs are dispensed through the pharmacy. Current Procedural Terminology (CPT-IV) and Healthcare Common Procedure Coding System (HCPCS) procedure codes are used to bill drug items given at a facility other than a pharmacy (such as a clinic or inpatient setting). DRGs are not included in the data set.

Data Use

1. **How is drug quantity measured? Is dosage in the table?** DrugDaySupplyNbr (signifying the number of days that a drug is expected to last) and DrugQuanAllow (signifying the amount of the drug dispensed in a dose) together display drug quantity. A daily dosage of a drug can be calculated as DrugQuanAllow divided by DrugDaySupplyNbr. Dosage per day is not directly included as a data element in the data table. Please note that drugs taken "as needed" and drugs taken in forms other than pills (such as ointments) can also have dosages calculated but may require special attention for meaningful data analysis results. Please note that some data elements, such as days' supply, are not available for supplies and injectables billed outside the pharmacy system.

2. **What is an event?** One prescription fill is one event and one line in the table. The fill may be for a new prescription or refill of a previously filled prescription.

3. **What is a unit?** A unit is a count of days and is signified in the data set by "DrugDaySupplyNbr." Please note that the data set includes various elements that convey drug quantity. These include "Drug Days Supply Nbr," which renames the Recipient and Provider Summary table "units" figure. We also have fields that allow users to clarify dosage and ingredient strength.

4. **Is there an overall count for events, units and costs for the claims data included here?** No. To easily access this information, please use the data set, which provides this information for the same population in the same timeframe. Partners can also easily calculate counts for recipients and providers. (The totals derived from the Recipient and Provider tables should match each other.)

5. **What's the best way to count all prescriptions (events)?** We recommend that you count with the qualifier of IngrSeqNbr=0. With this method, compound drugs will get counted only once. (Non-zero Ingredient Sequence Numbers indicate components of compound drugs.)

6. **Is joining to an outside source acceptable in order to better describe and classify the drugs**? Yes, and we encourage it if it leads to greater insight into the data. Your in-house system or another system may be particularly helpful for describing and classifying specific pharmaceuticals. Any source of outside descriptive and classification information may be appropriate for your data analysis. We do not intend to provide an exhaustive list, nor make an endorsement of a particular proprietary product. A variety of options are available. First DataBank, Lexi- Comp, Medispan, Micromedex, McKesson, Health Information Designs, Affiliated Computer Systems, EDS, etc., provide systems. These systems include the AHFS classification system from the American Society of Health-System Pharmacists, while others include Cerner Multum's Lexicon Plus (used by the CDC) and Thomson Reuter's Red Book.

7. **Can the data in this data release be used to create baselines for quality measures defined by HFS as important to care coordination?** We know that our partner organizations have an interest in the use of our data to analyze recipients' use of specific services important to quality measures. We recognize some drug data could possibly be useful towards this end. Please note that the drug data table has not been designed expressly for this function, and does not include data on diagnosis, monitoring and/or clinical testing.