CP ListMaker is bundled as part of CarePrecise Gold and CarePrecise Platinum.

CP ListMaker is an add-on tool for CarePrecise Access and Master Bundle datasets (and is part of CarePrecise Platinum and CarePrecise Gold), designed to simplify the process of creating lists of healthcare providers from within our comprehensive U.S. healthcare provider database based on specialty and subspecialty (taxonomy codes), geographic location (zip codes and/or states, geographic radius), provider type (individual, such as physician, or organization, such as hospital), Medicare billing eligibility, gender, wealth, and more.

CP ListMaker includes support for the Extended Professional, Group and Hospital (EPGH) dataset with tools for connecting physicians to practice groups and their hospital affiliations, as well as support for connecting the Authoritative Hospital Database and Authoritative Physician Database, as part of our CarePrecise Platinum product.

>> **Visit the CP ListMaker product page to review product features.**

Quick Start Tutorial

Check out the tutorial: Build a Physician Mailing List

User Manual: Using the CP ListMaker Tools

> *To search for a term in this documentation, use your browser's Find feature - [ctrl] F.*

Table of Contents

Complete CarePrecise Dataset Documentation on the Help page...

SYSTEM REQUIREMENTS: A monitor with screen resolution of at least 1280 x 960 is recommended (CP ListMaker's main window is almost 1200 pixels wide to accommodate criteria codes and descriptions). A copy of CarePrecise Access, CarePrecise Gold, CarePrecise Platinum, Master Bundle, or CarePrecise Select is required for use of CP ListMaker (CP ListMaker does not contain the provider data found in those products). You will need Microsoft Access® 2007 or later installed on your computer. Microsoft Access is part of Microsoft Office 365 Pro. A computer running Windows 7/8/10, a mouse, keyboard and hard drive with at least 7 GB of free space is required. For improved functioning we recommend a minimum 2 GHz dual processor computer with at least 4GB RAM (8GB recommended) and 20GB of free hard drive space; a faster processor and more RAM will speed operation, and greater hard drive space will permit you to save and export larger lists.

Regarding the maximum size of list that can be processed within CP ListMaker, please keep in mind that Microsoft Access imposes a limit of 2GB on the size of a database, no matter how much RAM and hard drive space is available. Creating lists increases the size of the CP ListMaker database. In order to prevent generating an oversize error, please follow the guidelines in Selecting Criteria, below.

Getting CP ListMaker

Product information about CP ListMaker can be found here.

INSTALLING CP ListMaker

>> NOTE: In recent versions of Microsoft Access (Access 2007 and later), you will need to make your CarePrecise folder and its subfolders a "Trusted Location". Click for a step-by-step guide to making your CarePrecise folder a Trusted Location...

To install CP ListMaker, simply unzip (extract) the contents of the download file directly into the folder on your computer where your CarePrecise Access or CarePrecise Select data files are stored (in the same folder as the file NPPES_[...].mdb files). When you open CP ListMaker for the first time it will sense its location on your computer and know where to find the CarePrecise data files. The order in which you extract the zip files doesn't matter. We strongly recommend that you create a folder directly on your hard drive: C:\CarePrecise (CP ListMaker is not designed to work over a network). When you see a prompt

informing you that an extracted file already exists in your CarePrecise folder, just OK that prompt to overwrite the existing files; this occurs because each zip file contains some of the same files, such as the the license document.

When you have extracted all of the needed files correctly, the contents of the folder will look like this image at right, with the CPListMaker.mdb file, the NPPES_[...].mdb files, and the Extended_[...].mdb files all in the same folder.

>> You may obtain some processing speed improvements by installing your CarePrecise and CP ListMaker files on the same or a different hard drive that Microsoft Access is installed on, depending on your drive configuration; consult your system administrator concerning your hard drive configuration.

Name	Date modified	Type	Size
cplmupgr	11/17/2022 12:...	File folder	
dat	11/17/2022 12:...	File folder	
Output	11/17/2022 12:...	File folder	
_WAIT- READ ME FIRST.pdf	10/21/2011 7:2...	Adobe Acrob...	72 KB
CarePrecise_AccessMDB_US.zip	11/17/2022 1:1...	WinZip File	2,330,604 KB
CarePrecise_ExtendedMDB_US.zip	11/17/2022 12:...	WinZip File	204,365 KB
cp.ico	12/27/2008 2:3...	Icon	5 KB
CPListMaker.mdb	6/2/2022 2:59 P...	Microsoft Ac...	20,332 KB
CPListMaker_New_Install.zip	11/17/2022 12:...	WinZip File	4,414 KB
cplm.ico	2/12/2015 11:1...	Icon	5 KB
cplmupgr.mdb	6/2/2022 1:56 P...	Microsoft Ac...	380 KB
EULA.rtf	11/2/2011 11:4...	Rich Text For...	54 KB
EULA_CPListMaker.pdf	9/17/2012 4:39 ...	Adobe Acrob...	20 KB
Examples - Extended Data.txt	2/13/2014 4:12 ...	Text Document	2 KB
Examples.txt	7/26/2010 1:48 ...	Text Document	4 KB
EXCLUDED.mdb	10/13/2022 2:5...	Microsoft Ac...	30,060 KB
Extended_CORE.mdb	12/19/2019 12:...	Microsoft Ac...	980 KB
Extended_Group.mdb	10/16/2022 2:0...	Microsoft Ac...	25,932 KB
Extended_GroupProfessional.mdb	10/16/2022 2:0...	Microsoft Ac...	149,808 KB
Extended_HospAff.mdb	10/16/2022 2:0...	Microsoft Ac...	189,152 KB
Extended_Hospital.mdb	10/16/2022 2:0...	Microsoft Ac...	4,012 KB
Extended_Professional.mdb	10/16/2022 2:0...	Microsoft Ac...	411,548 KB
NPPES_Added.mdb	10/13/2022 9:4...	Microsoft Ac...	315,940 KB
NPPES_Addresses.mdb	10/16/2022 1:0...	Microsoft Ac...	1,252,984 KB
NPPES_CoLoCode.mdb	10/13/2022 5:4...	Microsoft Ac...	897,096 KB
NPPES_CORE.mdb	8/26/2020 2:18 ...	Microsoft Ac...	780 KB
NPPES_Deact.mdb	10/16/2022 1:1...	Microsoft Ac...	24,660 KB
NPPES_Delta.mdb	10/16/2022 1:2...	Microsoft Ac...	199,560 KB
NPPES_Dropped.mdb	10/13/2022 9:4...	Microsoft Ac...	55,508 KB
NPPES_Entity.mdb	10/16/2022 1:0...	Microsoft Ac...	1,137,352 KB
NPPES_Entity-B.mdb	10/16/2022 1:1...	Microsoft Ac...	611,520 KB

UPGRADING the CP ListMaker Software (NOT the data):

Geographic/econometric Data Upgrade
A geographic/econometric upgrade simply upgrades some of the internal data within CP ListMaker such as zip codes and wealth information, and is very easy to install. When you receive a notice to install this type of upgrade, follow the instructions in the upgrade link email.

Version Upgrade
From time to time, CarePrecise distributes a version upgrade (for instance, from version 6.1.8 to version 7.0). The upgrade utility makes it easy to upgrade CP ListMaker while keeping your saved Criteria Sets, Lists and Custom Queries from earlier versions. Version upgrades are free to current database subscribers, or for 60 days following a single download purchase.

1. Back up everything by copying the entire folder in which you keep your CarePrecise files!
2. In order to preserve your stored Criteria Sets and Lists, you will need to prepare the old version of CP ListMaker for the upgrade BEFORE extracting any of the new files to the CarePrecise folder. Open the OLD version of CP ListMaker, and on the main window click the Utilities button. Click the Step 1 button in the upgrade box to prepare for the upgrade.
3. After the above preparation process has finished, close the OLD CP ListMaker and extract the NEW files to the CarePrecise folder, overwriting the old ones.
4. Open the NEW CP ListMaker and in the main window, click the Utilities button. Click the Step 2 button in the upgrade box. Once this process has completed, your upgrade is finished.

If you have built sub-queries under your Custom Queries, or other queries with names that do not begin with "CUSTOM_", or other objects such as Reports that you have created in Access, you will have to import those after the upgrade, using the ACCESS import objects process.

UPDATING the Data (NOT the software):

If you have a subscription to data updates, you will receive a completely new package of data every month or quarter, depending on your subscription. Updating is very simple. Using the download link provided in your update email, download the compressed (zip) file anywhere on your computer. Then open the zip file, and extract the contents of the folder named "CarePrecise_AccessMDB_US" into your CarePrecise folder (the directory where your CPListMaker.mdb file lives), allowing the extraction process to overwrite the old files.

>> *NOTE: If you have made changes to the Extended_CORE.mdb or NPPES_CORE.mdb files, you may wish to rename these before extracting the new files.*

Even if you do not have a subscription to data updates, any time you wish to purchase a new data package, you will follow the same instructions to apply the update to your CP ListMaker installation.

After extracting, run CPListMaker.mdb and note the date in the upper right of the CP ListMaker window. It should be for the year and month of the current monthly release.

UNINSTALLING CP ListMaker: To uninstall CP ListMaker, simply delete the CP ListMaker files from your CarePrecise folder. No registry keys or proprietary DLLs are involved.

Using CP ListMaker

CP ListMaker is a tab-driven, wizard-like application built in Microsoft Access. All of Microsoft Access' built-in functionality is supported. CP ListMaker is supplied open source, and all functionality is available for review at the commented source code level.

You might find it helpful to check out our step-by-step tutorial showing how to build a physician mailing list.

STARTING CP ListMaker: To start CP ListMaker, open the file named CPListMaker.mdb, located with your CarePrecise data files. When you open CP ListMaker, the program checks to see that the CarePrecise data files are in the same folder. Be sure that the files distributed with CP ListMaker are located in the same folder as your CarePrecise data files.

>> *Depending on your computer's configuration, you may need to identify the location of your CarePrecise folder as a **Trusted Location**. Refer to Microsoft Access Help for instructions.*

When you open CP List Maker you will see the main program window (click image for larger view):
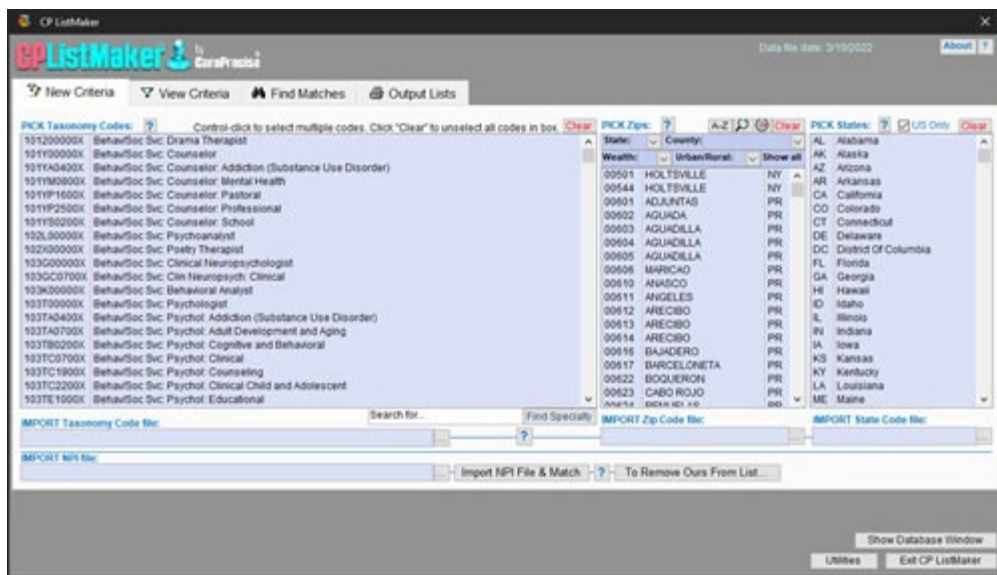
Depending on whether you have some matches found, or some criteria collected, in a previous session, the window will open displaying the Find Matches tab, the View Criteria tab, or the New Criteria tab (default).

>> NOTE TO DEVELOPERS: This window (and all others in CP ListMaker) are standard Microsoft Access forms. You can examine the forms in design view, and the VBA (Visual Basic for Applications) modules that contain processing code, to see how the program works. All queries and VBA code are open and viewable. All code is extensible via Microsoft Access and VBA objects, and the Windows API. [Editor's note: Understand, though, that this level of interaction with CP ListMaker is NOT required for easy use; CP ListMaker is designed for use by non-technical people who don't know diddly about Access or VBA. :)]

Workflow

1. Select specialties and geographic criteria on the New Criteria tab.

2. Review and edit selected criteria on the View Criteria tab.

3. Review found records on the Find Matches tab.

4. Filter, choose which data to export, proper-case, and output lists on the Output Lists tab.

Selecting Criteria (the New Criteria tab)

CP ListMaker helps you create lists of healthcare providers using several criteria, including taxonomy

code (the specialty or subspecialty for individual providers, or the facility or practice type code for organizations), Zip Code®, and state/territory. You can use one of these criteria at a time, any two, or all three. On the New Criteria tab, you can select taxonomy codes, zips and states from the list boxes, and/or import text files of these criteria. (See the screenshot above.)

>> *After using these criteria to establish a list of providers, you can also choose between Type 1 (individual providers, such as physicians, nurses or dentists) and Type 2 (organizational providers such as hospitals, labs and pharmacies) on the Output tab. Other filters are also available on the Output tab.*

>> *CP ListMaker is designed to create lists of any size, but Microsoft Access has file size limitations, which means that you will not be able to make lists of more than a few hundred thousand records each, depending on the number of fields your output list contains. Plan ahead, creating separate lists by state, specialty, or other criteria so that no single Find Matches operation will create too large a list. Because the data is updated and changes frequently, and because CP ListMaker allows you to make lists of many different kinds, we cannot give you a specific maximum number of records.*

How CP ListMaker Uses Criteria

It will be easier to jump right into using CP ListMaker if you understand how the program uses the criteria selections you make and edit on the New Criteria and View Criteria tabs to determine which provider records to show on the Find Matches tab. In logical terms, CP ListMaker sees your criteria as follows:

(Taxonomy **OR** Taxonomy **OR** Taxo...) **AND** ((Zip **OR** Zip **OR** Z...) **OR** (State **OR** State **OR** Sta...))

In other words, CP ListMaker first finds all providers matching the taxonomy code(s) you gave it (if you did so), then it finds all of *those* providers whose practices are located in the zips or states you've given it.

Using filters that select zip codes matching certain geographic and economic data, CP ListMaker is also able to select for wealth, urban/rural status and county.

>> *Additional criteria for filtering output is available on the Output Tab, including Entity Type (individual or organization), gender, practice groups, PECOS enrollment, and exclusion from billing Medicare. Even more filtering can be done using the Custom Queries feature.*

>> *In order to avoid a Microsoft Access oversize error, do not select a very large number of separate criteria for each of your Criteria Sets. For instance, do not select 50 taxonomy codes and 200 zip codes -- it simply will cause Microsoft Access to crash. It is best to keep Criteria Sets to just a few taxonomy codes and zip codes in separate runs, and then build a combined list in the Find Matches tab that merges the results of multiple lists. This will increase the speed of operation and make much larger lists possible. See Combining Saved Lists, below.*

Selecting Providers by Taxonomy Code

The provider taxonomy code is a ten-character alphanumeric code that describes a provider's practice. All of the U.S. taxonomy codes active as of the date of your CP ListMaker purchase are listed on the New Criteria tab. For individuals like physicians, the taxonomy code describes the type of practice, from high-level views like Internal Medicine, to specific practices like gastroenterology. For organizations like hospitals, the taxonomy codes identify the type of facility and/or the kind of treatment it offers, like acute care hospital or family planning clinic.

You can tell CP ListMaker which taxonomy codes to use to select providers using either an imported list of codes, or by selecting codes in the PICK Taxonomy Code list box. Select criteria using the New Criteria tab. You can also use the Search Specialties/Facilities feature.

Note that many providers list multiple taxonomy codes within their NPI record (multiple taxonomy codes under a single NPI number); i.e., a physician may list both 207Q00000X Family Practice, and 207QG0300X Geriatric Medicine. However, CP ListMaker will not output duplicate provider records (except in the View/Export Taxonomy Codes function, which lists all taxonomy codes in the providers' records, one per output record).

Selecting Taxonomy Code Criteria

Select taxonomy codes from PICK Taxonomy Code list on the New Criteria tab. To select more than one code, hold down the Control key while clicking on each desired code (control-click), or the shift key (shift-click) to select blocks of codes. Use the scroll bar on the list to locate codes. To view a list of all available taxonomy codes, open the tTaxoLookup table in the Database Window.

>> *Note that a single provider may practice under more than one taxonomy code; some hospitals have listed dozens of taxonomy codes. CP ListMaker will not create duplicate records in the output, except when you wish to view all of a provider's taxonomy codes using the View Taxonomy Codes button.*

Search the Specialties/Facilities

The Search Specialties/Facilities tool enables full-text searches of the specialty/facility descriptions when selecting taxonomy (specialty and facility) codes. Enter search terms, like **pediat*immun**, in the "Search for..." box under the taxonomy code box on the New Criteria tab, then click the Find Specialty button. A new window will open, showing all of the specialty and facility descriptions that contain the text you searched for, including **"Physicians: Pediatric Allergy & Immunology"**. Notice that you can use the asterisk (*) symbol as a wildcard, representing any amount of text between.
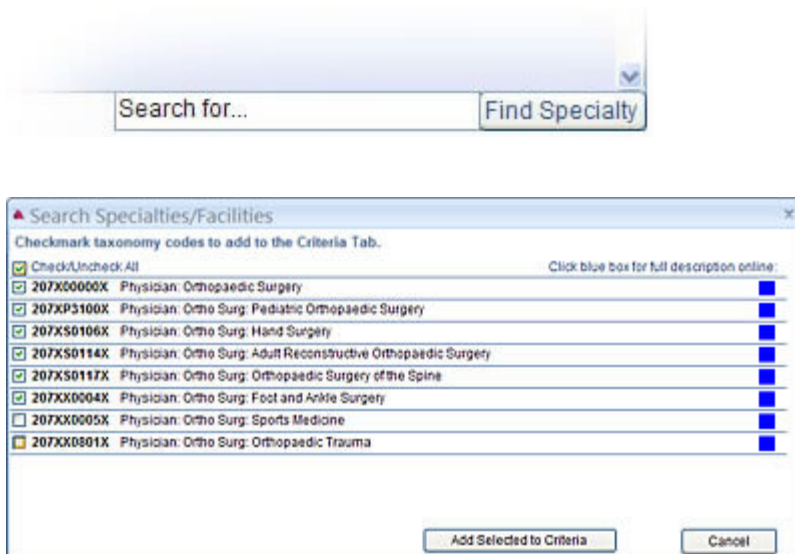
In the Search Specialties/Facilities window, you will see the 10-character Provider Taxonomy Code, the Entity Type (1 is individual, 2 is organization), and a description of the taxonomy (specialty or facility). You can checkmark the taxonomy codes for the specialties/facilities you want added to your criteria. When you click the button labeled "Add Selected to Criteria", the checkmarked taxonomy codes will be added to the taxonomy codes list on the View Criteria tab.

Those blue "i" buttons on the right hand side are Internet links to the full definition of each specialty and facility code.

>> *If you want to save the newly collected codes to a Criteria Set, you must enter a set name and click the Save button on the View Criteria tab. Remember that newly collected criteria is not reflected in the Find Matches tab until you click the Find Matches button.*

Importing Taxonomy Code Criteria

On the New Criteria tab, click the "..." button to browse to a CSV or TXT file on your computer that contains the taxonomy codes, each code on a separate line, with the first line containing the word "Taxo" (without the quotation

marks), and select the file. CP ListMaker will capture the file's location and place it in the IMPORT box. It is a good idea to place your code import files in a folder within your CarePrecise data folder so you can find them later if necessary.

>> *CP ListMaker will import the codes later when you click the Collect Criteria button on the View Criteria tab.*

Selecting Providers by Zip Code®

You can use one or more 5-digit zips as selection criteria. All of the U.S. Zip Codes active as of the most recent USPS partner release date prior to your CP List Maker purchase are included in the PICK Zips list box on the New Criteria tab.

You can tell CP ListMaker which Zip Codes to use to select providers using either an imported list of codes, or by selecting codes in the PICK Zips list box. Select criteria using the New Criteria tab.

Selecting Zip Code Criteria

Select zips from PICK Zips list in the New Criteria tab. To select more than one code, hold down the Control key while clicking on each desired code (control-click), or the shift key (shift-click) to select blocks of codes. Use the scroll bar on the list to locate codes. CP ListMaker uses providers' practice zip code, which may differ from the mailing address zip code for some providers; however, you will be able to view and export either the practice address or mailing address in the Output window. While only the first 5 digits of the zip may be used as selection criteria, output will include the full 9-digit zip where provided. Note that Zip Codes change occasionally, and a (very) small percentage of provider records may list a zip code that is either no longer active or that has been changed by the United States Postal Service.

Sort Zips by City or by Zip Code - If you're looking for all the zips for a particular city, you can sort the order of the zips in the box by city. Clicking the gray "A-Z" link toggles between sorting by city/state order and sorting by zip order.

If you need to find a range of zip codes within a certain mile radius, see Getting Zips within a Geographic Radius below.

>> *If you wish to update your CP ListMaker zip list, please contact technical support for assistance.*

State Filter

Since there are many thousands of Zip Codes, CP ListMaker provides some help to find the ones you're looking for. You can select a state in the State dropdown box (at the top of the PICK Zips list box). To show all zips, simply delete the state selected in this box, or click on the highlighted word "State:" to clear the box and show zips for all states.

County Filter

You can also view just the zips for a given county using the County dropdown box (at the top of the PICK Zips list box). To show all zips, simply delete the county selected in this box, or click on the

Sort by Zip/sort by City alpha   Lookup Zip online

Filter in selector box by State,   Geo Radius Zip Search
County, Wealth, and/or
Urban/Rural/Suburban Zips

PICK Zips:	?		A-Z	🔍	Ⓖ	Clear	

State: NY ∨	County:	∨	AL
Wealth: 1 ∨	Urban/Rural: ∨	Show all	AK

00501	1	=<50% FPL	Y	∧	AB
00544	2	50-100% FPL	Y		AS
10008	3	100-150% FPL	Y		AZ
10020	4	150-200% FPL	Y		AR
10041	5	200-300% FPL	Y		AE
10043	6	300-500% FPL	Y		AA
10045	7	500-700% FPL	Y		AP
10055	8	700-1000% FPL	Y		BC
10060	9	1000-1500% FPL	Y		CA
10065	10	1500-2000% FPL	Y		CO
10075		NEW YORK	NY		CT
10080		NEW YORK	NY		DE
10081		NEW YORK	NY		
...7		NEW YORK	NY		
		NEW YORK			

highlighted word "County:" to clear the box and show zips for all states.

Wealth/Poverty Filter

You may need to pull a list of providers with practices in wealthy or low income areas. On the New Criteria tab, use the Wealth dropdown to select a wealth level by which CP ListMaker will filter the Zip Code Pick list. Wealth levels are based on average income for the average household size within each zip, and reflect percentage of the Federal Poverty Level (FPL), ranging from under 50% of FPL to >3000% of FPL (or as high as the current wealth level of the current dataset). See the screenshot at right.

Urban/Rural Filter

On the New Criteria tab, use the Urban/Rural dropdown to select Urban, Rural or Other. For most Zip Codes, Other indicates a non-rural mildly populated area, such as small towns and small cities. After selecting, the Zip Code Pick list will show only those zips matching your selection.

Clear All Zip Filters

To clear all zip filters, click the Show All link (at the top of the PICK Zips box).

Getting Zips within a Geographic Radius

It can be very helpful to find healthcare providers within a certain geographic radius. To find out which zip codes to enter for a particular radius from a Central Zip, click the Radius button on the Select Criteria window. The Zip Radius tool is now built into CP ListMaker (version 2.2 and newer). Use this tool to locate providers with a practice address within a certain number of miles of a central point.

Geographic Radius

Ⓖ Geographic Radius Tool

Use this tool when you want to locate providers with a practice address within a certain number of miles of a central point.

Use all of the Zip Codes within a radius of [100] miles

of this 5-digit central Zip Code: [10018]

Zips found within the radius will appear in the View Criteria tab after you click the Add to Criteria button below.

Remove From Criteria		Add to criteria	Cancel

Click the Radius button, located directly above the Zip Code list on the New Criteria tab (see the

screenshot below). In the Geographic Radius window, enter the number of miles of the radius and the central Zip Code. Click the Add to Criteria button, and the zips within the radius will be added to the Zip Code criteria in the View Criteria window. If you instead click the Remove From Criteria button, all zips in the radius will be removed from the criteria; useful, for instance, if you want all providers in a particular state except for those in particular areas.

Exclude a Geographic Radius

You can also *exclude* zip codes within a radius *from* your criteria. First, make all of the other zip code selections, then use the Geographic Radius tool to enter the radius and central Zip Code, and click the Remove from Criteria button. This action remove all of the zips found within the radius from zip codes already showing on the View Criteria tab, if there are any. This is a useful way to eliminate urban core zip codes and focus on suburban areas, or to remove an individual's sales territory from selection criteria, or to remove providers with addresses near a particular hospital's service area. To visualize how this works, let's imagine that you've first collected all of the zips within 100 miles of Chicago using the Geographic Radius tool. If you want to remove the downtown area and surrounding urban districts from your selections, use the tool a second time to remove the zips within 2 miles of the central Chicago (downtown) zip code (60601).

>> The center latitude and longitude of the Zip Code is used for the calculation, so if you want all zips within 1 mile of a zip that itself has a larger radius than 1 mile, you'll need to enter a larger number for the radius.

>> When you enter as your central zip a Zip Code in a dense urban center, you will get a lot of zips within the radius, even when you specify 1 mile as your radius. This is because special zips have been assigned to some areas with a high density of addresses, as is the case in office districts.

Importing Zip Code Criteria

Click the "..." button to browse to a CSV or TXT file on your computer that contains the 5-digit zips, each code on a separate line, with the first line containing the word "Zip" (without the quotation marks), and select the file. CP ListMaker will capture the file's location and place it in the IMPORT box. It is a good idea to place your code import files in a folder within your CarePrecise data folder so you can find them later if necessary.

>> CP ListMaker will import the codes later when you click the Collect Criteria button on the View Criteria tab.

Selecting Providers by State

You can use one or more 2-character state code as selection criteria. All of the U.S. state codes plus Puerto Rico and the District of Columbia are included in the PICK states list box on the New Criteria tab when the "Show US" checkbox is checked. To display all geographic areas where U.S. HIPAA-covered healthcare providers are practicing, such as military bases abroad, uncheck the "Show US" box. *The "Show US" setting applies only to the states that are shown in the PICK States criteria box.*

You can tell CP ListMaker which states to use to select providers using either an imported list of state codes, or by selecting state codes in the PICK States list box. Select criteria using the New Criteria tab.

Selecting State Criteria

Select zips from PICK States list in the New Criteria tab. To select more than one state code, hold down the Control key while clicking on each desired code (control-click), or the shift key (shift-click) to select blocks of codes. Use the scroll bar on the list to locate codes. CP ListMaker uses providers' practice state, which may differ from the mailing address state for some providers; however, you will be able to view and export either the practice address or mailing address in the Output window.

>> *While only the 50 states, Puerto Rico and District of Columbia are included in the list box, CarePrecise data includes all territories, military installation codes and other regional codes reported to the NPPES by healthcare providers. To include other state codes as criteria, place them in a text file and import it as described under Importing State Criteria.*

Importing State Criteria

Click the "..." button as shown in the screenshot at right to browse to a CSV or TXT file on your computer that contains the 2-character state codes, each code on a separate line, with the first line containing the word "State" (without the quotation marks). Select the file; CP ListMaker will capture the file's location and place it in the IMPORT box. It is a good idea to place your code import files in a folder within your CarePrecise data folder so you can find them later if necessary.

IMPORT State file:

>> *CP ListMaker will import the codes later when you click the Collect Criteria button on the View Criteria tab.*

Importing an NPI file

To the right of the "IMPORT NPI file:" box, click the button marked "..." to browse to a file of NPI numbers on your computer, then click the "Import NPI File & Match" button. The NPI numbers are now loaded into the Find Matches tab, and provided that the NPI record is in the CarePrecise data, you will see it matched to the data. You can save this as a List and use it again, update it with new or dropped NPI numbers, etc. You can use the "Remove From List" function to removed these records from a future list, for instance, to avoid sending communications to provider already in your database. See the section *Excluding Certain Providers*.

IMPORT NPI file: [...] [Import NPI File & Match] [?] [To Remove Ours From List...]
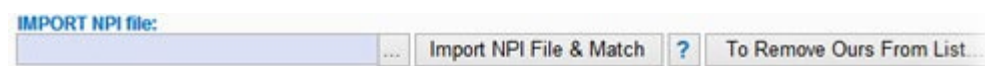
## Selecting by Provider Type, Gender, Added Since Date, Update Date, PECOS Enrollment, etc.

These selections are Output Options available not selected on the New Criteria tab, but on the Output Lists tab as an output option. Go here for Output Lists tab selections.

Collecting and Viewing Criteria (the View Criteria tab)

After selecting and/or importing the criteria to create a list of providers, the next step is to

collect the criteria. Click the View Criteria tab, and click the Collect Criteria button. Now you will see that the criteria you had selected on the New Criteria tab has been collected on the View Criteria tab. Here, you can review your criteria selections. You can select a criterion and delete it using the Delete key on your keyboard. You can add new criteria to the collection using the New Criteria tab again, then clicking the Collect Criteria button again.
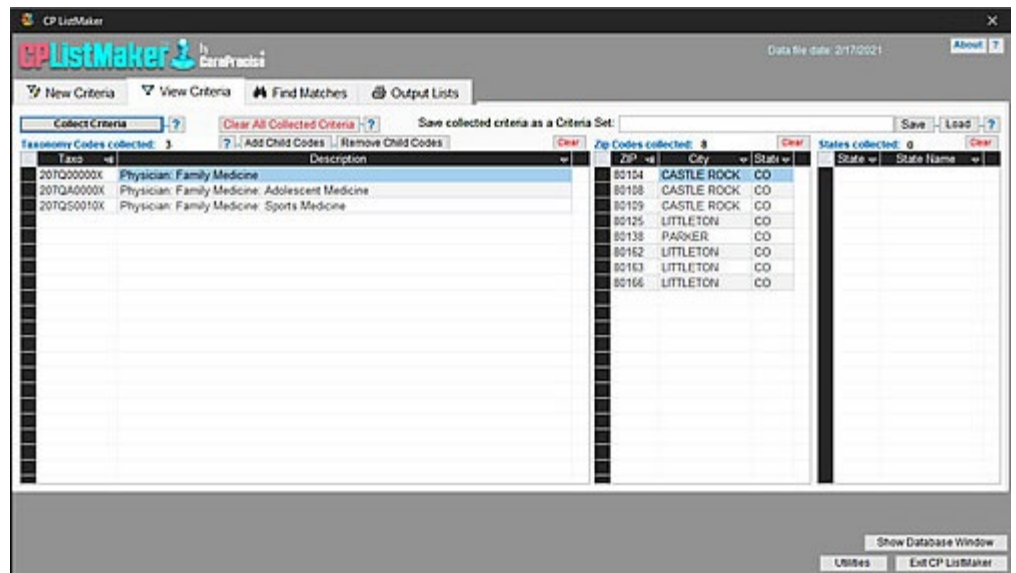
Collect Criteria

After you have made all of your criteria selections and/or located criteria import files on the New Criteria tab, click the View Criteria tab. Click the Collect Criteria button to enter the criteria you selected into your criteria "collection." Now you can see the criteria you've collected in the three datasheets displayed on the View Criteria tab, one for taxonomy codes, one for zips, one for states. Review and edit criteria here before proceeding to the Find Matches tab.

Editing Criteria

On the View Criteria tab you can select one or more criteria on a criteria datasheet and delete them. This removes the criteria from the collection.

>> *Editing the criteria contained in a collection does not affect a saved criteria set unless you re-save the criteria set under the same name.*

Adding Criteria

To add more criteria, return to the New Criteria tab and select it, then back on the View Criteria tab, click Collect Criteria again to add it to the collection. You will now see all of the criteria collected so far on the View Criteria tab.

>> *Adding criteria does not affect a saved criteria set unless you re-save the criteria set under the same name.*

Add/Remove Child Codes

The taxonomy codes are structured hierarchically, with many codes having a "family cluster" comprised of a Parent Code and numerous Child Codes. The Parent Code is always structured like ####00000X, where # is the alphanumeric r-character Class. You may want to add the child codes for a cluster to speed up building a Criteria Set, adding in all of the sub-specialties for the Parent Code. "Add Child Codes" adds any child codes associated with any Parent Codes in your Taxonomy Criteria. The Parent Code can be understood as the general specialty, and a Child Code as a sub-specialty. Some providers do not include the Parent Code of their specialty, so this will often find more providers."Remove Child Codes" takes out any Child Codes associated with any Parent Codes in your criteria.

Clearing Criteria

Any time you want to "start from scratch" with all new criteria, you can click the Clear Collected Criteria button on the View Criteria tab.

>> Clearing Collected Criteria does not affect a saved criteria set.

Criteria Manager

Saving Criteria for Re-use

CP ListMaker provides a way to save your criteria selections for re-use. You can save an unlimited number of different criteria sets, each under a unique name. After you have selected criteria using the New Criteria tab, added it to the criteria collection and reviewed it and/or edited it on the View Criteria tab, you can type a name for the set in the Save Collected Criteria as Criteria Set box, and click the Save button.

When you use the Save button to save a Criteria Set, you will be asked if you want to also save the settings on the Output tab. You may choose to wait and save these filter settings later after making Output tab settings.

>> You can also save the Filter Settings on the Output Lists tab along with your saved Criteria Set. See Saving Output Lists Tab Settings below.

Loading Saved Criteria

At any time, you can load previously saved criteria so that it can be used to find matching providers again. This is very useful after a data update, since new providers matching your criteria are likely to be found, and others may have dropped off.

To load a previously saved criteria set, click the Load button

on the View Criteria tab and select it from the yellow dropdown menu on the window that appears. Click OK to close the Saved Criteria Sets window and load the criteria into the current collection. After loading criteria, you can proceed to the Find Matches tab to use the criteria to pull a list of matching healthcare providers.

>> When you load a Criteria Set that has Output tab settings saved with it, the saved Output tab settings will also be loaded.

Combining Criteria Sets

You can use the Load feature on the View Criteria tab to "stack" criteria, adding a previously saved criteria set to whatever criteria is already loaded in the collection. You can load as many criteria sets as you like with successive load operations.

>> A note about criteria logic... Be careful. Let's say you have one criteria set that finds chiropractors in Utah, and another set that finds optometrists in Oklahoma. If you load both of these sets you will not get the same result when you find matches that you would have gotten by finding matches on one criteria set

at a time! You will now see all chiropractors in both Utah and Oklahoma, and all optometrists in Utah and Oklahoma. Oops... unless, of course, that's what you wanted to do.

Deleting a Criteria Set

To delete a saved Criteria Set, click the Load button on the View Criteria tab. Select the Criteria List you wish to delete from the green dropdown menu on the window that appears. Click the Delete button, and close the Saved Criteria Sets window.

Find Matching Providers (the Find Matches tab)

Find Matches

After you have created a criteria collection using the previous tabs, the Find Matches tab is used to build a list of providers matching your criteria, and display them for review and editing. On the Find Matches tab, click the Find Matches button.

Because CarePrecise datasets are very large (CarePrecise Access Complete contains about 7.9 million NPI records normalized into many tables,

comprising more than 50 million total discrete records, not including EPGH data), this step may take some time. Depending on such issues as the speed of your computer's processor, number of processor cores, bus speed and size of your RAM memory, plus the number of individual criteria elements you have specified, this step may take between a few seconds and over an hour. Please be patient; once this list has been compiled it need not be done again for the Output stage.

>> The first time you run a Find Matches operation after opening CP ListMaker, it will run more slowly than subsequent runs. This is an artifact of Microsoft Access, not CP ListMaker.

>> You will find some clues about speeding up CarePrecise processes here.

The Count

When the matching process has completed, the number of matching records is shown in the pink box in the Find Matches tab, i.e., "Found 369 records."

The number of matches shown in the box indicates the number of unique NPI numbers. A single provider may have more than one NPI number, and all NPI entries for those providers will be included in the output. For instance, a physician may have enumerated as an individual physician (Type 1 provider) and as a corporation (Type 2 provider), and both records will be included in the output. Depending on your end use of the data, you may consider the second listing a duplicate record.

Editing Your Match List

On the Find Matches tab you can select one or more of the matching provider records on the datasheet

and delete them. This removes the provider record from the matches list, but does not affect data in the underlying CarePrecise data tables.

>> *Deleting matches on the Find Matches tab does not affect a saved List unless you re-save the List under the same name.*
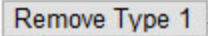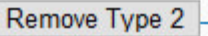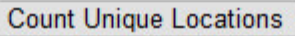
Adding to Your Match List

To add more provider records to your matches you can widen your criteria, either by including more provider taxonomy codes, or widening the geographic are by adding more zips and/or states. Repeat the process of selecting and collecting criteria on the New Criteria and View Criteria tabs, then return to the Find Matches tab and click Find Matches again.

>> *Adding new matches does not affect a saved List unless you re-save the List under the same name.*

Removing Type 1 or Type 2 Records

You may want to create a list of only individuals (Type 1), or organizations (Type 2). Use the "Remove Type 1" or "Remove Type 2" button on the Find Matches tab below the List. CP ListMaker will remove the records, then recalculate the record count.

Counting

Unique Locations or Unique Phone Numbers

A good way to see how many different practices (or other medical services locations) are on your List is to use the Count Unique Locations button on the Find Matches tab. In certain situations, it may also work to count the unique phone numbers, since multiple practices may share the same location, but have different phone numbers.

Clearing Matches

Any time you want to remove previously found matches you can click the Clear Matches button on the Find Matches tab.

>> *Clearing matches does not affect a saved List.*

List Manager

What is a "List?" In CP ListMaker, a List is a saved list of NPI numbers that you have created using the Find Matches tab. A List does not save the criteria used to find the provider matches, rather, it saves *only* the NPI numbers for these providers. Over time, as new providers are added to the database and old providers are dropped, the List will become "stale," and need to be updated by re-running Find Matches with the original criteria.

Saving Matches as a List

You can save a List of found matches for historical purposes, or to be output later or added to another List later. Theoretically you can save an unlimited number of Lists, each under a unique name, but we recommend that you use this feature sparingly, as too many large Lists will bloat the size of the CP ListMaker database and potentially slow down operation.

After you have used the Find Matches button and reviewed and edited your matches, type a name for the List in the "Save found matches as a List" box, and click the Save button.

>> *Periodically deleting unused saved Lists will help you keep the size of the database in check.*

Loading a Saved List

To load a previously saved List, click the Load button on the Find Matches tab and select it from the green dropdown menu on the window that appears. Click OK to close the Saved Lists window and click the Load This List to Matches button to load the List into the current matches shown on the Find Matches tab. After matches are loaded you may proceed to the Output Lists window to export your data and create customized fieldsets.
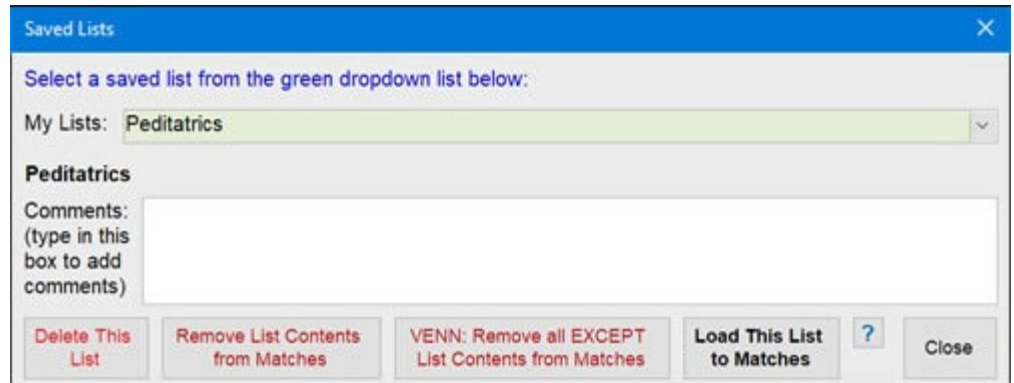
Combining Saved Lists

You can use the Load feature on the Find Matches tab to combine lists, adding a previously saved list to whatever matches are currently displayed on the Find Matches tab. You can load as many saved Lists as you like with successive load operations.

Excluding Certain Providers

CP ListMaker makes it easy to not only *positively select* certain providers or types of providers, but to *exclude* providers or types of providers, as well. To remove the providers that are on one List from the Providers that are on another List, first use the Find Matches tab to display the providers on the List you wish to output. Then click the Load button and select the List of providers you wish to remove from the output, and click the Remove List Contents from Matches button. When you return to the Find Matches tab, you'll see that the excluded providers have now been removed from the matches. Save this List (optional), and proceed to the Output Lists tab.

This feature may be used to maintain a "Do Not Send" list of persons who have opted out. It may also be used for such useful tasks as removing existing clients from a promotional mailing to prospective clients. Researchers use the feature to perform complex analysis of provider service offerings; such as developing a list of family practice physicians who *do not* also practice sports medicine, for example.

Venn: How to Create a List with Overlapping Criteria

Let's say you have a list of Family Medicine physicians that you created using the taxonomy code(s) in the New Criteria tab, and then saved on the Find Matches tab as a List (We'll call it "Family Practice").

>> *Before saving the List, you may want to click the Remove Type 2 or Remove Type 1 button, depending on whether you want your list to show only Type 1 (individual) or Type 2 (organization) providers. If you do not remove Type 2 providers, the Venn may have unexpected results. Do this with both Lists.*

Now you want to remove any of these physicians *except* those that *also* practice pediatrics. You'll need to create a second search for pediatricians, and save it as a List (we'll call it "Pediatrics")...
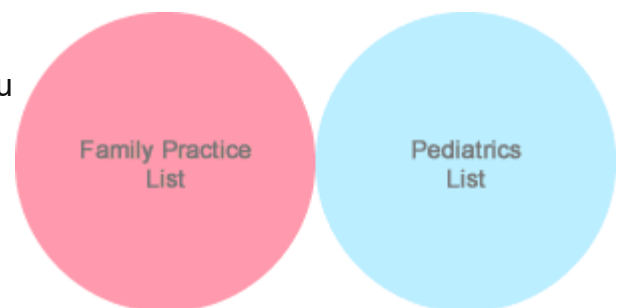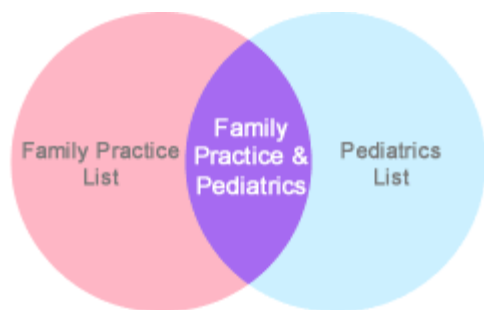
With the Family Practice List loaded on the Find Matches tab, click the Load button to display the Saved Lists window. Now select the Pediatrics List, and click the VENN: Remove all EXCEPT List Contents from Matches button...

When you return to the Find Matches tab you will see that only those family medicine physicians that *also* practice pediatrics are contained in the matches. (If you want to keep this List this way, save it now.)
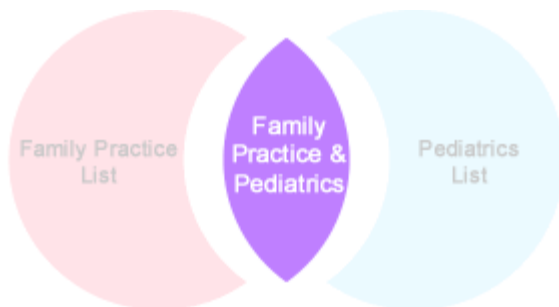
Deleting a Saved List

To delete a saved List, click the Load button on the Find Matches tab. Select the List you wish to delete from the green dropdown menu on the window that appears. Click the Delete This List button, and close the Saved Lists window.

Delete Your Old Lists to Speed CP ListMaker

It is important to delete old Lists, because the part of the database that stores these lists of NPI numbers can become very large, and slow the operation of CP ListMaker. It is a good practice to open the List Manager now and then (click the Load button on the Find Matches tab), and then look through the dropdown List selector to find old lists. Select a List to delete, and click the Delete This List button. Repeat for all old lists that you do not need to save any longer.

Output Your Healthcare Provider List (the Output Lists tab)

After you have found matching provider records using the previous tabs, the final step is to output the resulting list of provider records. The Output Lists tab presents the option to output Type 1 providers only (individuals), Type 2 providers only (organizations/facilities), or both. You can also choose from several standard output styles (fieldsets), or create your own using the Clone feature.
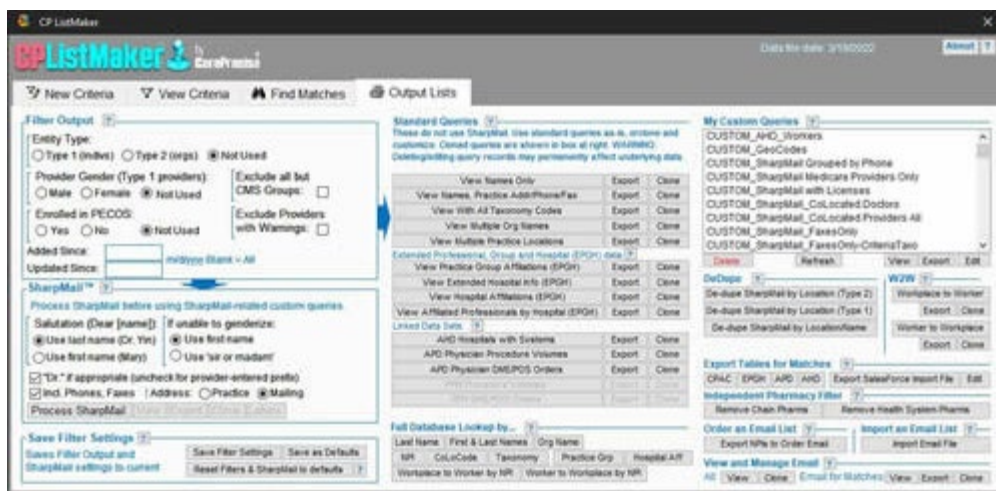
Output Filtering Options

Provider Types

Choose whether you want to output just Type 1 providers (individuals), Type 2 providers (organizations/facilities), or both types (the default).

Type 1 providers are individuals, such as doctors, nurses or dentists. Type 2 providers are organizational providers, such as hospitals, health systems, laboratories, clinics, group practices, pharmacies, DME providers, etc. We often say that Type 1 providers are "faces" and Type 2 providers are "places." Note that many physicians are incorporated, and can list their practices as a Type 2 provider; frequently, physicians are listed both under Type 1 and Type 2, sometimes with the same or different taxonomy codes.

>> *When you select the Type 2 provider option, CP ListMaker will show the Gender and PECOS options grayed out because they do not apply to Type 2 providers.*

Gender Selection

Choose whether you want to output just Male, Female or Both. CP ListMaker uses the gender entered by the healthcare provider when they created their NPI record with the Department of Health and Human Services. This is for Type 1 (individual) providers only.

Exclude All Except Groups (CMS)

Checkmark this box to view only those providers who have explicitly reported to CMS in their NPI enrollment that they are practicing as a Multi-Specialty Group or Single-Specialty Group. NOTE: CP ListMaker also provides means of identifying providers practicing together, unrelated to the CPAC groups data; see About Co-Location Codes and Standard Queries - CPAC plus EPGH.

PECOS Enrollment

Choose whether to include only those providers who are enrolled in PECOS (eligible to bill Medicare), or those who are NOT in PECOS, or all providers regardless of of PECOS enrollment status ("not used" option). (A "Y" or "y" in a provider's tEntity/InPECOS field indicates that a provider is enrolled.)

>> *Beginning with December 2011 release, an uppercase "Y" indicates that the NPI record matches exactly with a PECOS historical record NPI; a lowercase "y" indicates that the match was made algorithmically, using the last four digits of the NPI and a name conformation components of our QoRelate™ record linkage system.*

Exclude Providers with Warnings

CarePrecise datasets include a "Warning" field in the tEntity table that is derived algorithmically based on federal Excluded Provider data in the LEIE (List of Excluded Providers) database. The LEIE data does not include an NPI number for providers, so CarePrecise uses an advanced record linkage system to correlate these databases. A "Y" in the Warning field indicates that a provider's record matches a record in the LEIE, as having been barred from billing Medicare due to a fraud conviction or other infraction. Checkmark this box to exclude these providers from output.

>> *The Warning field is derived algorithmically using name, address and UPIN conformation components of our QoRelate™ record linkage system.*

'Added Since' Date

Optionally, you may enter a date here in the format m/d/yyyy to output only those providers who have created their NPI record since a particular date. This is a good way to find new individual providers who are just entering practice.

>> Healthcare providers began enumerating in this database in 2005, with large numbers of enumerations completed by mid-2008, so there are no earlier enumeration dates. If you want to use the Added Since date to find providers with new records (for instance, physicians who have just started practice or enumerated as a medical student/intern), be aware that only dates later than perhaps mid-2008 can be used effectively for this purpose.

'Updated Since' Date

Optionally, you may enter a date here in the format m/d/yyyy to output only those providers who have updated their record since a particular date. This is a good way to find providers who may have moved, expanded or otherwise changed their practices.

Output Styles

SharpMail™

The SharpMail tool is a powerful feature that tidies up your list and gets it ready for mailing:

- Properly cases difficult names, i.e., "deVon L. MacRae, MD, PhD, EdD"
- Uses an expanded database of credentials, acronyms and honorifics to correctly case most, such as EdD, PsyD, MDiv, and hundreds more.
- Genderizes providers with 100% accuracy on individual providers, 93%+ accuracy on organization contacts
- Intelligently creates salutations, i.e., "Dr. Smith" or "Mr. Wilson" based on credentials and providers' expressed preferences
- Lets you choose between a formal salutation or a casual first name salutation
- Intelligently selects between first names (Bob J. Jones) and middle names when the first name is an initial (J. Bob Jones) >> "Bob"
- Choose to use the practice address or mailing address, properly cased, with properly formatted 9-digit zip
- Puts telephone and fax numbers in the output file, along with the Added Since Date and Update Date

SharpMail can be used to export tidied-up lists, or can print mailing labels directly from within CP ListMaker.

First, use the New Criteria, View Criteria and Find Matches tabs to gather your provider list, as instructed above. On the Output Lists tab, click the Process SharpMail button. This process may take a few moments, depending on the number of providers on your list. When SharpMail reports that it has finished, click the View SharpMail button to look at your provider list, properly cased, and with intelligently built name and address fields.

Intelligent Salutation Creation

Formal or Casual? - Select whether to use the "Dear Mr. Jones" or "Dear Bob" form.

If Formal but cannot genderize, use first name or "sir or madam"? - If you've selected the formal salutation type "Mr. Jones" but SharpMail cannot determine the gender, you can choose whether SharpMail uses the first name (reverting to a casual salutation) or inserts "sir or madam."

"Dr." or Mrs.? - SharpMail makes it easy to build mailing lists by creating a custom salutation for each record. The "Dear Dr. Smith" salutation created by SharpMail is built using either the provider's self-

entered prefix (frequently Mrs. or Mr., even when the provider possesses the degree of Doctor), or can use the "Dr." honorific when justified by data contained in the credential and suffix fields. Just choose whether you want to use "Dr." in all such cases, or the provider-entered prefix instead.

Use Dr. if appropriate - You can let SharpMail decide if it's appropriate to say "Dear Dr. Smith" or "Dear Ms. Smith" based on a search of credentials, or to use the prefix explicitly entered by the provider. (More "Dr." salutations will appear if you checkmark the box.)

Include Phones/Faxes

If you don't need the phones and faxes in your output file, you can uncheck this checkbox.

Select Address: Mailing or Practice

Many providers maintain a PO Box or other address for business communications, separate from the physical address at which they practice. CarePrecise gives you both, and SharpMail lets you select which one to use.

Process SharpMail

In order to run the proper-casing and salutation generation functions on your output, you must click the Process SharpMail button. The process may take a long time depending on the number of records in your output.

View SharpMail

After processing SharpMail, click the View button to see the processed output.

Export SharpMail

After processing SharpMail, click the Export button to export the processed output as a comma delimited text file.

Clone SharpMail

After processing SharpMail, click the View button to see the processed output.

SharpMail Labels

After processing SharpMail, click the Labels button to open the Avery 5160 labels preview.

Saving Output Lists Tab Settings

When you make changes to the filter settings, you may want to save them, along with your Criteria Set you've saved on the View Criteria tab. To do that, you must have a saved Criteria Set displayed on the View Criteria tab. Click the Save Filter Settings button in that section on the Output Lists tab. If you want to save these filter settings as the default for future list outputs, click the Save as Defaults button. To return these settings to the original default settings, click the Reset Filters & SharpMail Settings Defaults button.

Standard Queries - CarePrecise Access Complete (CPAC) Dataset

Viewing/Exporting Provider Name Only

This option on the Output Lists tab includes one record for each NPI (National Provider Identifier) number,

the universal number identifying HIPAA covered entities who must submit their healthcare provider data in the National Plan and Provider Enumeration System (NPPES) database at the Centers for Medicare and Medicaid Services (CMS) under the US Department of Health and Human Services.

On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button.

Viewing/Exporting Providers with Practice Addresses, Phones and Faxes

This option on the Output Lists tab includes one record for each NPI (National Provider Identifier) number, the universal number identifying HIPAA covered entities who must submit their healthcare provider data in the National Plan and Provider Enumeration System (NPPES) database at the Centers for Medicare and Medicaid Services (CMS) under the US Department of Health and Human Services. Data included are those reported by providers as their *practice* addresses, phone and fax numbers. By default this output is sorted by NPI number; sort order may be changed by clicking on the field name in the header row, and changes may be saved so that they are reflected in exported output.

On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button.

Viewing/Exporting Providers with Taxonomy Code Information

This option on the Output Lists tab includes one record for each taxonomy code reported by the provider. It is sorted in order of NPI number so that duplicate provider records appear in sequence. Sort order may be changed by clicking on the field name in the header row, and changes may be saved so that they are reflected in exported output.

On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button.

Viewing/Exporting with Primary Taxonomy Only

Use the View with Primary Taxonomy Code buttons to see only the specialty/facility taxonomy code reported by each provider.

>> *Not every provider's record contains a Primary indicator (a "Y" in the tTaxo.TaxoSwitch field), although the vast majority do so.*

Viewing/Exporting Multiple Organization Names

Organizations may list multiple company names, and these are stored in a separate table from the OrgNames table. To view or export all of these names for the Type 2 records in your Match List, use the "View Multiple Org Names" buttons. On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button.

Viewing/Exporting Multiple Practice Locations

Providers may have multiple locations, and these are stored in a separate table from the Addresses table. To view or export all of these locations for the providers in your Match List, use the "View Multiple Practice Locations" buttons. On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button.

Standard Queries - CPAC Dataset plus Extended Professional, Group and Hospital (EPGH) Dataset, and other CarePrecise Datasets

These queries will appear grayed-out if the EPGH dataset is not installed. The EPGH is available optionally as a bundle with CarePrecise Access Complete (CPAC) that provides additional information on healthcare professionals (particularly physicians), practice groups and hospitals, and reveals the affiliation links between all three. Note that EPGH data is not "complete," in the sense that not all providers that are listed in the CPAC dataset will be found in the EPGH dataset. EPGH entries include only those providers who are active, as determined by the fact that they have billed Medicare at least one time in the past nine months. Providers who do not bill Medicare, or have not done so in the past nine months, will not be found in the EPGH dataset. However, as of July, 2013, this extended data is available for approximately 940,000 individual medical professionals (approximately 560,000 physicians and surgeons) and is growing. Additionally, the hospital data in EPGH provides an unduplicated listing of hospitals and their highest priority NPI number based on taxonomy code, and is linked to each hospital's affiliated professionals/physicians and practice groups, and the EPGH practice group data makes it possible to see the multiple locations at which an individual provider practices. EPGH data is linked to the CPAC data using the NPI number.

>> *Advanced:* Linking CPAC to EPGH data. In the CPAC dataset, the NPI number for individual professionals links to the EPGH NPI number in the tExtended_Professional table. To obtain the practice group location data for these professionals, link the individual (Type 1) NPI of the professional to the NPI in the tExtended_GroupProfessional table, and then link the PACID in that table to the PACID in the tExtended_Group table. (There is no single NPI number available for groups, although we provide one of the available NPI numbers where the connection is known.) Similarly, to link CPAC individuals' records to EPGH hospital affiliations, link the CPAC Type 1 NPI belonging to the professional to the tExtended_HospAff (hospital affiliation) table, then link the CCN in that table to the CCN in the tExtended_Hospital table. (There is no single NPI available for Hospitals, although we provide one of the available NPI numbers where the connection is known.)

Viewing/Exporting Extended Practice Group Affiliations

This option on the Output Lists tab returns practice group data for providers in the current List. On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button.

Viewing/Exporting Extended Hospital Info

This option on the Output Lists tab returns extended information for hospitals in the current List. Current List must contain hospitals. This query will return only one record per hospital. On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button.

Viewing/Exporting Extended Hospital Affiliations

This option on the Output Lists tab returns hospital affiliations for individual professionals in the current

list. Current List must contain individual professionals. On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button.

Viewing/Exporting Affiliated Professionals by Hospital

This option on the Output Lists tab returns the individual professionals affiliated with hospitals in the current List. Current List must contain hospitals. On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button.

Linked Datasets (If you have purchased them separately):

Starting with version 7, CP ListMaker integrates with your other CarePrecise data products, including the Authoritative Hospital Database (AHD), Authoritative Physician Database (APD), and the Physician Performance Module (PPM). If you have any of these products and have extracted them to your CarePrecise folder where the CP ListMaker application (CPListMaker.mdb) is stored, the relevant Standard Query buttons will be enabled.

Viewing/Exporting Authoritative Hospital Database with Health Systems

This option on the Output Lists tab returns AHD hospitals with their health systems. On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button. Note that you must have purchased the Authoritative Hospital Database and extracted it into your CP ListMaker folder for these buttons to work.

Viewing/Exporting Authoritative Physician Database Procedure Volumes

This option on the Output Lists tab returns APD physician procedure volumes for those physicians currently on the Find Matches tab. Current List must contain physicians. On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button. Note that you must have purchased the Authoritative Physician Database and extracted it into your CP ListMaker folder for these buttons to work. Note that CP ListMaker does not contain a search facility based on the procedure or DME codes. You'll use the Microsoft Access query tool to create specialized output filtered to your preferred codes. Review the Microsoft Access documentation for your version of Access.

Viewing/Exporting Authoritative Physician Database DME/POS Order Volumes

This option on the Output Lists tab returns APD physician DME (durable medical equipment) and POS (prosthetics, orthotics, and supplies) order volumes for those physicians currently on the Find Matches tab. Current List must contain physicians. On the Output Lists tab, choose whether you want to view your provider matches (on the screen), or to export them as a text (.txt) file. Click the respective button. Note that you must have purchased the Authoritative Physician Database and extracted it into your CP ListMaker folder for these buttons to work. Note that CP ListMaker does not contain a search facility based on the procedure or DME codes. You'll use the Microsoft Access query tool to create specialized output filtered to your preferred codes. Review the Microsoft Access documentation for your version of Access.

Provider Lookup

Using the buttons in this section you can quickly
view basic data on a specific provider or providers,

based on their name, NPI number, practice location, or taxonomy (specialty/subspecialty/facility type). These offer full database search (ignoring filters and any current List that my be loaded).

If the EPGH dataset option is present, two additional buttons are enabled, offering searches by practice group and hospital affiliations.

By Last Name

When you click the "Last Name" button you'll be prompted for a fragment of the Type 1 practitioner's last name, and then for the two-character state code. A datasheet will open listing all providers found sharing the same name fragment in the state you entered.

By First and Last Names

When you click the "First & Last Names" button you'll be prompted for a fragment of the Type 1 practitioner's first name, then, last name, then the two-character state code. A datasheet will open listing all providers found sharing the same name fragments in the state you entered.

By NPI

When you click the button labeled "NPI" you'll be prompted to enter an NPI number. The NPI number is the common unique identifier (CUI) used for healthcare providers and facilities of every type. Click here for more about the NPI number. The datasheet will show a single provider record.

By CoLoCode

When you click the button labeled "CoLoCode" you'll be prompted to enter a co-location code (CoLoCode). A datasheet will open listing all providers found sharing the same practice location data. For more about co-location codes, see About Co-Location Codes.

By Workplace or Worker

To find a worker's workplace (for example, a physician's practice organization records), click the Worker to Workplace button and enter the worker's NPI number to pull a full list of all of the the Type 2 (organization) records co-located with that worker. To find all of the workers co-located with a Type 2 (organization), click the Workplace to Worker button and enter the workplace's NPI number.

About Co-Location Codes

Frequently, it is useful to find all of the providers practicing at the same address (or all of the NPI records associated with a given practice or facility location). For instance, you may want to find out which group practices are larger or smaller, or which providers may know and work with others in the database. Unfortunately, the providers' practice addresses (often entered by the providers themselves) can appear differently to your computer; "123 W 49th St, Suite 405" would not be the same as "123 West 49th Street #405," even though, in fact, it is the same location. CarePrecise creates a co-location code (CoLoCode) based on each record's practice location data to overcome this challenge. The CoLoCode is not an address per se, but rather a code that uniquely identifies the address (to the extent possible). The CoLoCode for each record is included in SharpMail output and the Standard Queries (and some of the sample Custom Queries). To find all of the providers practicing at a given location (or records for a facility at a given location), simply copy the CoLoCode for that record in any of the queries, click the "Lookup All

Providers at..." button (see above), and paste the code into the dialog.

>> *A single provider record may have up to two different CoLoCodes, in the event that our system was unable to determine precisely the practice location.*

>> *CoLoCodes are distinct from group practice data provided by CMS; however, both can be used together to perform certain types of research on practice groups. (See Exclude All Except Groups)*

By Taxonomy Code

When you click the button labeled "Taxonomy" you'll be prompted to enter a taxonomy code (specialty/subspecialty/facility type code). The datasheet will display all providers who have reported that taxonomy in their NPI record, whether it is their primary practice or facility type, secondary, or otherwise. Providers can claim up to 15 taxonomies on their records.

>> *You can find taxonomy codes easily on the New Criteria tab.*

>> *The table "tTaxoLookup" contains the taxonomy codes and their descriptions, along with a web link to a more detailed description of the specialty, subspecialty or facility type referenced by the code.*

By Practice Group

When you click the "Practice Grp" button you'll be prompted for the practice group's two-character state code, then a fragment of the Type 1 practice group's name. A datasheet will open listing all practice groups found sharing the same name fragment in the state you entered.

By Hospital Affiliation

When you click the "Hospital Aff" button you'll be prompted for the hospital's two-character state code, then a fragment of the Type 1 hospital's name. A datasheet will open listing all practice groups found sharing the same name fragment in the state you entered.

Creating Custom Output

Because CP ListMaker is built on one of the most powerful and easy-to-use database platforms available, you can use all of Microsoft Access' search and sort features to customize your CP ListMaker application. Numerous built-in queries are provided that can be cloned, changed and saved under new names. Additionally, you can make changes to the standard queries themselves, or create new ones using the Microsoft Access query features and the visual QBE (query by example) grid. Custom queries created using the Clone feature appear in the selector box on the Output Lists tab.

>> *An advantage of using the Clone feature is that when you update your CP ListMaker software to a new version, the queries in the My Custom Queries box will be brought into the new version, whereas changes you've made to the underlying CP ListMaker queries will be discarded upon upgrading.*

WARNING: *DO NOT DELETE RECORDS IN QUERY DATASHEET VIEW! Deleted records in data view are deleted from the underlying CarePrecise data tables and cannot be undone. Instead, prune your lists in the Find Matches tab, where the underlying data files are not affected by your deletions. If you do lose data, you will need to restore the tables from the original data files.*

Cloning and Customizing Queries

You can clone and customize queries to create unlimited data views of the CarePrecise Access data. CP ListMaker's built in queries on the Output Lists tab have a "Clone" button at right of the query name. The Clone button beside each of the built-in queries and the SharpMail functions on the Output window allows

you to copy a built-in query and save it under a new name so that you can customize it without altering the built-in query. Then, when you want to use the query, you can locate it in the My Custom Queries box on the Output Lists tab. After opening the query, you can use Access' Design View to edit the query.

To add data tables, click the "Show Database Window" button at the lower right of the CP ListMaker main window, and drag a table name from the database window (also called the "Navigation Pane") into the top area of your query in Design View. After you make changes, be sure to save the query by clicking the Save icon in or above the Access ribbon.

To add fields from these tables to your query, drag the field name from the table box into the QBE grid below. You will notice that the built-in queries have information in some of the criteria rows in the QBE grid. These allow the query to be filtered by the settings in the Filter box on the Output Lists tab. Unless you do not want this filtering capability in your custom queries, do not delete these columns or criteria. Also, if you add new criteria to fields that you have added, such as to use the "TaxoSwitch" field of the tTaxo table to display only a provider's primary taxonomy by typing a "Y" (with the quotation marks) in the criteria row, be sure to place the new filter criteria (in this case "Y" for Yes) in ALL of the rows that have criteria showing in the other columns. Otherwise your new criteria will be ignored for the rows in which you did not include it, and you will have unexpected results.

>> *To display the database window to drag tables into your custom query, refer to Help for your version of Microsoft Access. If you are viewing the CP ListMaker main window, click the "Show Database Window" button at the bottom right of the window.*

>> *It is best to drag only tables, and not other queries, into your custom query. If you are an experienced Access user, you may experiment, but you may get unexpected results unless you fully understand what the query is doing. Dragging in only tables - as long as you have purchased the data, making them active - will deliver truly useful and powerful results.*

WARNING: *DO NOT DELETE RECORDS IN QUERY DATASHEET VIEW! Deleted records in data view are deleted from the underlying CarePrecise data tables and cannot be undone. Instead, prune your lists in the Find Matches tab, where the underlying data files are not affected by your deletions. If you do lose data, you will need to restore the tables from zip file you obtained from us.*

Editing the Built-in Queries

In addition to cloning and saving the built-in queries under new names, you can change the actual standard queries themselves. This is only recommended if you have some Microsoft Access query skills and are familiar with the CarePrecise data structure and fieldset.

To edit a built-in query, open the Output window and click the View button for the query style you want to edit. The query will open in datasheet view. Switch to design view (refer to Help for your version of MS Access), make your changes, and save. If you make changes in this way, they will be reflected when you click the query's export button in the Output Lists tab.

>> *NOTE TO DEVELOPERS: Editing the standard queries (those that appear when clicking one of the "View..." buttons on the Output Lists tab gives you the opportunity to create custom exports, since "Export..." buttons use these same queries. Be sure you know exactly what you want to do, and how to use MS Access' query functionality to achieve the desired result. If you mess up, you can always retrieve a clean copy of the CP ListMaker MDB file from the original compressed delivery file into a temporary folder, then import the query objects into the CP ListMaker database. If you accidentally delete provider records from your CarePrecise databases, simply re-extract the affected database(s) from the original CarePrecise Access compressed delivery file.*

The 5-digit Zip Code Field

When you click the Find Matches button on the Find Matches tab, CP ListMaker builds a table of the NPI numbers that are used to link to provider information in output queries. Not only is the NPI number written in the tSelect_Matches table, but also the first 5 digits of the mailing address zip, and the first 5 digits of the practice address zip. This lets you add the tZips table in your Custom Queries to include such information as the provider's county, geolocator codes, wealth and urban/rural status information in your output.

Microsoft Access SQL Queries and the Query-By-Example (QBE) Grid

Microsoft Access has provided a substantial asset within the Access DBMS known as the QBE Grid. This visual tool lets you build complex database queries without any knowledge of SQL (Structured Query Language). The complete NPPES database is exposed to the Microsoft Access SQL engine and QBE grid with your CarePrecise Access Complete and CP ListMaker products.

SQL-savvy users will appreciate the ability to use standard SQL query expressions within CP ListMaker and other CarePrecise products. You can access all of the data and all of the powerful MS Access features without leaving the CP ListMaker application.

Complete export features are available to export built-in, cloned and user-developed queries in a variety of data formats, and to add or remove specific fields from files to be output.

A Word About Excel, CSV and Exporting

If you are preparing output for use in Excel, there is an important consideration to keep in mind about Excel and data types. Because the majority of CarePrecise customers are using Excel as a stage in their output, we have decided that our built-in output will be in .TXT format. This is to help overcome a very problematical Excel "feature" that truncates leading zeroes when CSV files are opened directly. If you need your files to be in CSV format, you can first open Excel, then import (open) the .txt output file. In the Excel Import Wizard, choose the options for delimited text file, comma delimiter (not tab). On each of the numerical fields (particularly the zip and license fields) set the import data type to Text. Otherwise the data you import will be changed to Excel's strict numerical format, in which a Zip Code of 01647 will be changed to 1647. Since most of the zips in CarePrecise data are full 9-digit codes and do not include the hyphen, a zip of 01647 would appear in Excel as 1647. We continue to hope that Microsoft will one day fix this "feature" in Excel, and stop changing delimited fields to numerical values. Hope springs eternal!

We have also included a README file in the /Output folder within your CP ListMaker installation explaining this reasoning.

>> *If you are not using Excel and prefer to export files in CSV format, refer to MS Access Help on exporting. You can open queries using the View buttons (datasheet view) and then use the Access tools to perform an export to your own specifications.*

Workplace-2-Worker and Worker-to-Workplace (W2W Matching)

The W2W section on the Output Lists tab makes it easy to link practitioners with their practice group locations, or to the hospitals they work for. Other useful applications of CarePrecise's exclusive CoLoCode are also possible, but we've built-in two automated W2W functions:

Workplace-to-Worker

The Workplace to Worker button requires that you have "workplaces" (clinics, hospitals, practice groups... Type 2 providers) on the Find Matches tab. Click the button to view

all of practitioners ("workers") practicing at these workplace locations. The process use the CoLoCode, and matches are made using a hyper-conformed version of the practice location data; as an algorithmically-derived data point, a margin of error is to be expected. Use the Export button to directly export as a .txt file. Use the Clone button to edit the query, creating a Custom Query under a name you choose.
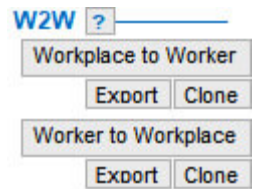
Worker-to-Workplace

The Worker to Workplace button requires that you have "workers" (physicians, nurses, dentists... Type 1 providers) on the Find Matches tab. Click the button to view all of practice locations and their business NPI records ("workplaces") where these individuals ("workers") practice. The process use the CoLoCode, and matches are made using a hyper-conformed version of the practice location data; as an algorithmically-derived data point, a margin of error is to be expected. Use the Export button to directly export as a .txt file. Use the Clone button to edit the query, creating a Custom Query under a name you choose.

Email Integration

Your CarePrecise email address lists can be integrated with CP ListMaker, making it possible to include email addresses in your Custom Queries.

Order an Email List ?
Export NPIs to Order Email

Import an Email List ?
Import Email File

View and Manage Email ?
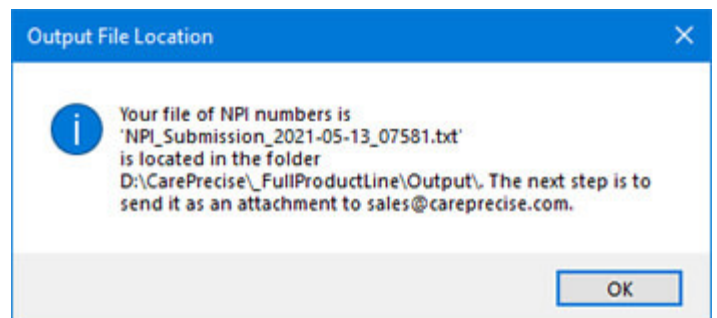All: View Clone Email for Matches: View Export Clone

Ordering Email Addresses

To order healthcare provider email addresses from CarePrecise (or elsewhere) based on specific providers' NPI numbers, first collect your target providers to the Find Matches tab as explained in the section above, Selecting Criteria. Then, on the Output Lists tab, click the Export NPIs to Order Email button. A list of NPI numbers will be saved as a .txt file in the Output folder within four CP ListMaker folder, with a name that is displayed in the dialog popup.

>> If you are importing email addresses from a vendor other than CarePrecise, please make sure that the first two columns

Email the file as an attachment to sales@careprecise.com, and indicate whether your purchase is to be via payment or Click Pack. You will receive a reply with a count and a quote. You will be able to make your payment online using the PayLink button in your quote.

Output File Location ✕

ⓘ Your file of NPI numbers is
'NPI_Submission_2021-05-13_07581.txt'
is located in the folder
D:\CarePrecise_FullProductLine\Output\. The next step is to send it as an attachment to sales@careprecise.com.

OK

Importing Email Addresses

To import an email file, follow these steps:

1. Prepare your file. Name (or rename) your file to "FlatFile_withEmail.csv" making sure that this is *exactly* the file name. It must be in the same folder as your CP ListMaker application (CPListMaker.mdb), and your other CarePrecise Gold or Platinum files. If you already have a file of that name from a previous CarePrecise email purchase, either rename it to something different or move it to a separate folder.
2. Click the Import Email List button.

3. When prompted for a name for this email address import, give a name that will identify the source, date, or other characteristic of the email purchase. For instance, you might want to name it for the types of providers in the file, or for a specific email campaign, or the date and source when and where you acquired the email addresses. The file will be imported into the tEmailAddresses table, with the email address and the provider's NPI number.
4. To view your email addresses, click the View button in the View and Manage Email section. To clone this query and make it is just like you like it, click the Clone button and give the Custom Query a new name.

View and Manage Email Addresses

To view the email addresses you have for the providers currently collected on the Find Matches tab, click the View button in the section labeled View and Manage Email. To export this query in .txt format, click the Export button. To clone this query and make it is just like you like it, click the Clone button and give the Custom Query a new name. In your cloned query you can add other tables and insert their fields for output.

Other Special Functions

Dedupe by Co-Location Code

>> *You must first run SharpMail before running this process.*

When you click the button labeled "Deduplicate SharpMail by Location " a special process is launched that creates a list containing only one provider record per practice location. The process gives highest priority to provider records that are not a subpart of another organization record, then to undeclared subparts, and only then to subpart records. The datasheet displays data deduplicated by CoLoCode. (Co-location code, based on provider practice locations. See About CoLoCodes.)

It is helpful to understand how this deduplication process works. The process consists of multiple queries, run in succession. The first queries write the SharpMail records to a table that will accept no duplicated physical locations (practice/business addresses, as expressed in the CoLoCodes), so that as records are added to the table, only the first record with a given CoLoCode is accepted, and all others are rejected. That's why the first query writes only non-subpart records (that is, it writes the first one it finds with a given address), presuming a priority, in that these records would not generally be an entity's secondary records. Then the second query writes records without a declared subpart indicator (these may or may not be the priority record), and finally the third query writes the remaining records (the declared subparts). The IsOrgSubpart field in the tEntity table (NPPES_Entity.mdb/csv) is used for this purpose. Note that the subpart prioritization is effective only on Type 2 (organization) providers.

This process uses deduplication by location, and additional steps can be taken to further reduce duplicated providers in output. To customize the final output query, first run the process, and when the datasheet opens to display the records, select Design View in the Access menu bar or ribbon, or rightclick the datasheet and select Design View. This opens the QBE grid where you can add tables and fields, set criteria, etc. One way to further reduce duplication while making sure you have good records for mailing

purposes would be to add the following criteria to the Company name field: **<>"" And Is Not Null** - which will suppress records that do not have a company name; again, useful primarily for Type 2 records.

Of course, deduplication starts with good record criteria and filtering. In the Filter Options section of the Output tab, select only Type 1 (individuals) or Type 2 (organizations) to limit your records to just those. Familiarize yourself with these options to prepare better lists.

>> *If you are trying to deduplicate a listing of hospitals, you may want to use an EPGH query. Hospitals in the EPGH dataset are already deduplicated, having a single NPI record per hospital. Include a link to the tExtended_Hospitals table via the NPI number in your matches to hospital records, and your query will return only a single record per hospital. See* Viewing/Exporting Extended Hospital Info *above.*

Export All CPAC Fields in Normalized Files

The button labeled "CPAC" in the Export Tables for Matches section of the Output Lists tab exports the CPAC fieldset for each record in the match table (the current List), in the same data structure as the complete CarePrecise Access Complete (CPAC) dataset. See the field list and data structure on the CarePrecise database documentation page for details.

SalesForce Export

>> *You must first run SharpMail before running this process.*

When you click the button "Export SalesForce Import File" a special process runs that creates an Access datasheet formatted to export to SalesForce, and exports that file to the CP ListMaker Output folder. However, you may want to make changes in that datasheet, such as adding or renaming columns to match your particular SalesForce configuration. To do that, right click on the top bar of the datasheet window and select Design View. You will now see the familiar Microsoft Access QBE window, where you can make changes to the query and save it, so that future exports to SalesForce will follow the same format.

You may have to add or change columns in your SalesForce configuration, depending on which columns you want to import.

>> *CarePrecise cannot offer SalesForce technical support beyond the export process in CP ListMaker.*

Identifying Independent vs Chain Pharmacies

>> *An example of how CP ListMaker can be extended with additional tools for specialized tasks. The steps below are for the optional Independent Pharmacies Tool that can be obtained by contacting* CarePrecise Sales.

Get the $99 Independent Pharmacy Identifier Module

Requires CarePrecise Gold or Platinum and CP ListMaker 6.1 or later.

CP ListMaker is an open source product, and to show how it can be customized to produce specialized output, in version 6.0 we added a new feature. It is an optional feature available only in 1-year monthly Platinum subscriptions and higher, including 2-year and 5-year quarterly and monthly Platinum subscriptions. 1-year quarterly subscriptions, single downloads, and Gold subscriptions are not eligible for this modular feature. If your copy of CP ListMaker shows the "Remove Chain Pharms" and "Remove Health Systems" greyed-out (disabled) on the Output Lists tab, or the buttons do not appear at all there, then you'll need to purchase the Independent Pharmacy Identifier Module.

To identify independent pharmacies, follow these steps:

1. Load the View Criteria tab with all of the pharmacy types you want to include in your output. For

instance, if you are not interested in compounding pharmacies, then skip adding that taxonomy code from the New Criteria tab.

2. Click the "Find Matches" button on the Find Matches tab to find all of the records. (It doesn't matter if some Type 1 records appear, as they will be eliminated in the next step.)
3. On the Output Lists tab, click the "Remove Chain Pharms" button. (This will remove any Type 1 records, pharmacies with name elements that match text masks in the KEY_PHARMCHAIN table).

Independent Pharmacy Filter ?
| Remove Chain Pharms | Remove Health System Pharms |
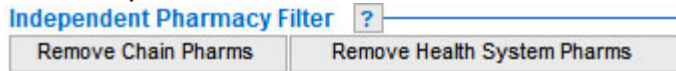
4. On the Output Lists tab, click the "Remove Health Systems" button. (This will remove pharmacies that have hospital, clinic, and health system name elements.)
5. Once these steps are completed, you can return to the Find Matches tab to view the remaining independent pharmacies, and use the functions on the Output Lists tab to export the file. You can also use the "Workplace>>Workers" Custom Query to view pharmacists practicing at these locations.
6. In a final step, you may want to use a CUSTOM query to unduplicate by location, to get a count of the unique pharmacy locations. You can create your math query in Access for the purpose. For instance, as of 3/28/2020, using this method we found 28,943 independent pharmacy locations.

This process relies on "text masks" in the KEY_PHARMCHAIN and KEY_HEALTHCENTERS tables to remove all but these from the output. If you have the need to remove additional pharmacies, you can add name elements to the tables.

Because CP ListMaker is an open source Microsoft Access application, you can add your own functionality similar to this one by studying the design views of the related objects and creating your own variations.

Connecting ScribeFax Data

If you have purchased ScribeFax, the enhanced prescribing clinician fax database from CarePrecise, you can make it available in CP ListMaker by following these steps. You must have CP ListMaker version 7.5 or later to incorporate ScribeFax or ScriptFax data.

- Close CPListMaker.mdb if it is open.
- Copy the ScribeFax data file, PrescriberFax_Enhanced.csv, into your CarePrecise folder (the folder where your data files and CPListMaker.mdb reside).
- Open the file "PrescriberFax_Enhanced.mdb" (the MDB container file for ScribeFax distributed with CP ListMaker v7.5 and beyond).
- Click the "Import ScribeFax" button in the form that appears.
- Close PrescriberFax_Enhanced.mdb.
- Open CPListMaker.mdb.

If you have both a ScribeFax subscription and a CarePrecise Gold or Platinum subscription, you may request the ScribeFax MDB file option for your deliveries, and eliminate the need for these steps. You must have CP ListMaker version 7.5 or later to incorporate ScribeFax or ScriptFax data.

ScriptFax does not require the *ScribeFax* import steps. Because ScriptFax is distributed as an MDB file (unlike ScribeFax), incorporating ScriptFax with CP ListMaker v7.5+ only requires copying the ScriptFax file named "PharmacyFax_Enhanced.mdb" into your CarePrecise Folder. See CP ListMaker version information.

Linking to an External Data Source

You may want to bring in data from other sources, from CarePrecise or other source. It's really easy to do.

>> *It's never a good idea to "Import" a data file directly into CP ListMaker, as the application has the usual Microsoft Access size limitations, and at very least, you will make your CP ListMaker app run less effectively. Unless you are importing an email file as described just above, "link" the data into CP ListMaker instead, which uses almost no "space" in the CP ListMaker file.*

Link to an Excel File (.xls format)

Copy your new Excel data file into your CarePrecise folder, where all of your data files should be located, along with the CP ListMaker.mdb file.

>> *Note that if you've purchased an Email Address file from CarePrecise, you will receive both an Excel file and a CSV format file.*

Linking an Excel file is very easy, so we recommend this method if you want to integrate outside data into CP ListMaker.

1. Copy your new Excel (.xlsx) data file into your CarePrecise folder as a .xls file (the earlier Excel format compatible with CP ListMaker, or convert your CPListMaker.mdb file to CPListMaker.accdb), where all of your data files should be located, along with the CP ListMaker app file.

2. When you're in CP ListMaker, click the "Show Database Window" button at the bottom of the CP ListMaker main window to reveal the Access Navigation Pane, so you'll be ready to use the new data source in a query. In the Access ribbon, select the External Data tab, and in the Import & Link section, click **New Data Source | From File | Excel**.

3. When the "Get External Data- Excel Spreadsheet" window appears, use the browse button to browse to your CarePrecise folder. Select the file, and when its path and file name appears in the File Name box in the Get External Data window, look down and find the "Link to the data source by creating a linked table" radio button, and select it, and click the "OK" button.

4. The next step appears, showing you some of the data in the file. Checkmark the box beside "First Row Contains Column Headings (which it will if the file came from CarePrecise), and click Next. Then you'll see the name of the table that will be created, and you can change it as you like. For email address files from CarePrecise, we recommend a naming convention like "Email Purchase 20210115", where the number block represents a date (this example block is 2021 for the year, 01 for the month, and 15 for the day); this way you can link subsequent purchases that will appear in alphabetical order in the Database Window (Navigation Pane).

5. Click Finish, and your new table appears at or near the bottom of the Tables section of the Database Window.

Link to a Text File (.csv or .txt format)

1. Copy your new CSV data file into your CarePrecise folder, where all of your data files should be located, along with the CP ListMaker.mdb file. Make sure your data source is saved in CSV format (comma separated values - a standard format), or .txt format. If you've been working with the data in Excel, use the File | Save As feature, and select CSV as the file type.

2. When you're in CP ListMaker, click the "Show Database Window" button at the bottom of the CP ListMaker main window to reveal the Access Navigation Pane, so you'll be ready to use the new data source in a query. In the Access ribbon, select the External Data tab, and in the Import & Link section, click **New Data Source | From File | Text File**.

3. When the "Get External Data- Text File" window appears, use the browse button to browse to your CarePrecise folder. Select the file, and when its path and file name appears in the File Name box in the

Get External Data window, look down and find the "Link to the data source by creating a linked table" radio button, and select it, and click the "OK" button.

4. When the Link Text Wizard appears, make sure the "Delimited" radio button is checked, and click Next. Select the field delimiter (it will always be Comma for a text file, such as email addresses, you receive from CarePrecise). Set the Text Qualifier to the double quotation mark. Checkmark the box beside First Row Contains Field Names (which it must). If you are linking a .csv file, select Comma as the delimiter. A .txt file may use the Tab as delimiter. See that the columns appear correctly in the import wizard window. Click Next.

5. When you see the Fields Options step appear, set all fields to Data Type "Short Text" by clicking on the data column and selecting the Data Type. When all fields have been set to Short Text, Click Next. Then you'll see the name of the table that will be created, and you can change it as you like. For email address files from CarePrecise, we recommend a naming convention like "Email Purchase 20210815", where the number block represents a date (this example block is 2021 for the year, 08 for the month, and 15 for the day); this way you can link subsequent purchases that will appear in alphabetical order in the Database Window (Navigation Pane).

6. Click Finish, and your new table appears at or near the bottom of the Tables section of the Database Window.

Utilities and Upgrade Tools

Compact/Repair CarePrecise NPPES Databases

To access the Utilities window, click the Utilities button on the main window. The 'Compact/Repair CarePrecise NPPES Databases' button only Compacts/Repairs the primary CarePrecise Access Complete databases, not the CP ListMaker database. THIS SHOULD NEVER BE NECESSARY, unless CarePrecise Support requests that you compact and repair these. CP ListMaker is delivered with the "Compact/Repair on Exit" option enabled. Unless you have changed this option, CP ListMaker will Compact/Repair automatically each time you exit the application.
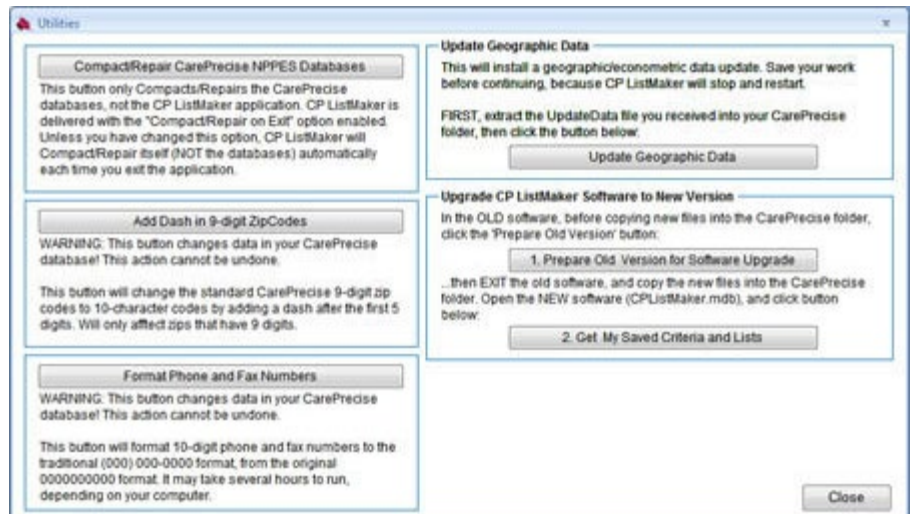
Add Dash in 9-digit Zip Codes

To access the Utilities window, click the Utilities button on the main window. The Add Dash in 9-digit Zip Codes button will change the standard CarePrecise 9-digit zip codes to 10-character codes by adding a dash after the first 5 digits. Will only affect zips that have 9 digits.

WARNING: This button changes data in your CarePrecise database. This action cannot be undone.

Format Phone and Fax Numbers

CarePrecise phone and fax numbers are shipped in the format 0000000000. Clicking this button will; reformat the numbers to the typical (000) 000-0000 format.

WARNING: *This button changes data in your CarePrecise database. This action cannot be undone.*

Update Geographic Data Utility

Use this feature to update the geographic data (zip codes, latitude/longitude, econometric data) when you receive a CP ListMaker Geo Data Update package. These periodic updates are free to current database subscribers.

Upgrade Utility

The two-step upgrade utility makes it easy to upgrade CP ListMaker while keeping your saved Criteria Sets and Lists from earlier versions. Version upgrades are free to current database subscribers.

For users who have already installed CarePrecise Access data CP ListMaker, and are upgrading to a new version of CP ListMaker:

First, **back up everything** by copying the folder in which you keep your CarePrecise files! In order to preserve your stored Criteria Sets and Lists, you will need to prepare the old version of CP ListMaker for the upgrade BEFORE extracting any of the new files to the CarePrecise folder. Open the OLD version of CP ListMaker, and on the main window click the Utilities button. Click the Step 1 button in the upgrade box to prepare for the upgrade. After the preparation process runs, close the OLD CP ListMaker and extract the NEW files to the CarePrecise folder, overwriting the old ones. Then, before using CP ListMaker, Open the NEW CP ListMaker and in the main window, click the Utilities button. Click the Step 2 button in the upgrade box. Once this process has completed, your upgrade is finished. Follow the step by step instructions above.

If you have built sub-queries under your Custom Queries, or other queries with names that do not begin with "CUSTOM_", or other objects such as Reports that you have created in Access, you will have to import those after the upgrade, using the ACCESS import objects process.

The Navigation Pane: Hide Database Window or Show Database Window

Because CP ListMaker is an open source Microsoft Access application, you can view the Navigation Pane (called the Database Window in earlier versions of Access). Here you will see every data table used by CP ListMaker. One of particular interest if the tZips table, which lists zip codes and their longitude and latitude. To hide or show the Database Window in the main CP ListMaker window, click the button that reads either 'Hide Database Window' or 'Show Database Window', depending on the current status of the window. You will find all of the CarePrecise tables, plus all of the CP ListMaker tables, queries, forms and code modules in the Database Window. Refer to Help in your version of Microsoft Access for instructions on displaying and sorting individual object types.

WARNING: *Do not delete or change any of the CP ListMaker objects in the Database Window, except for your own Cloned (custom) queries (CP ListMaker prefixes the names of these queries with the characters "CUSTOM_" so that they will appear together alphabetically in the Database Window.*

>> Access 2007+ users: The Database Window is called the Navigation Pane in Access 2007 and beyond.

Information about your version of CP ListMaker

Click the 'About' button at the top right of the CP ListMaker main window to view the version installed on your computer. You will receive free version upgrades for one year following your purchase.

CP ListMaker Help Buttons

?

CP ListMaker screens provides numerous help buttons, each related to the function it appears beside. In-window help screens appear with quick information about common CP ListMaker operations. A help button at the top right of the CP ListMaker main window will open this web-based documentation page in your default web browser.

Power User Example

By combining the many features of CP ListMaker you can really fine tune a list. There are so many different combinations that we could scarcely begin to define them all, but the following example, from one of our users, shows how CP ListMaker has done some truly amazing things.

The Problem: We need to find a group of providers with a very specific profile for a research study. Here are the parameters:

- Addresses, credentials, state license numbers, phone and fax numbers for:
- Female family practice physicians who do *not* also practice pediatrics,
- With practices located in urban and suburban areas within four selected metro areas, *outside* of dense urban centers, but *not* in rural areas,
- Who serve an average income and above patient base,
- Can order DME (durable medical equipment) and have it billed to Medicare,
- Have started their practice within the past 12 to 18 months,
- And we need to send each a formal letter, so we need properly cased name and address information, and a good, personalized salutation (like "Dear Dr. Chowdry").

The Solution: We used CarePrecise Gold [the CarePrecise Access Complete/CP ListMaker bundle] to pull the list and prep it for mailing. Here were the steps (roughly):

1. Created an 8-mile geographic radius Criteria Set for each of the four metro areas we had selected for our study. Named them for each of the metros, "Houston," "Atlanta," etc.
2. Created a 1-mile geographic radius Criteria Set for each of the metros, then subtracted these zips [Remove from Criteria] from the named metro Criteria Sets. Now we have our "donuts" *around* the urban centers, leaving out the urban centers and rural areas. (You can also specify fractional miles, i.e., 2.5 miles.) Looking at the illustration at right, this shows how we cut out the "donut hole" to remove inner city practices.
3. To remove rural practices, we created a Criteria Set containing all of the states' rural zip codes using the Urban and Other zip filter, and removed it from our criteria using the Remove from Criteria tool.
4. To remove low income service areas, we used the Wealth filter to eliminate

Donut hole: Inner city zips removed
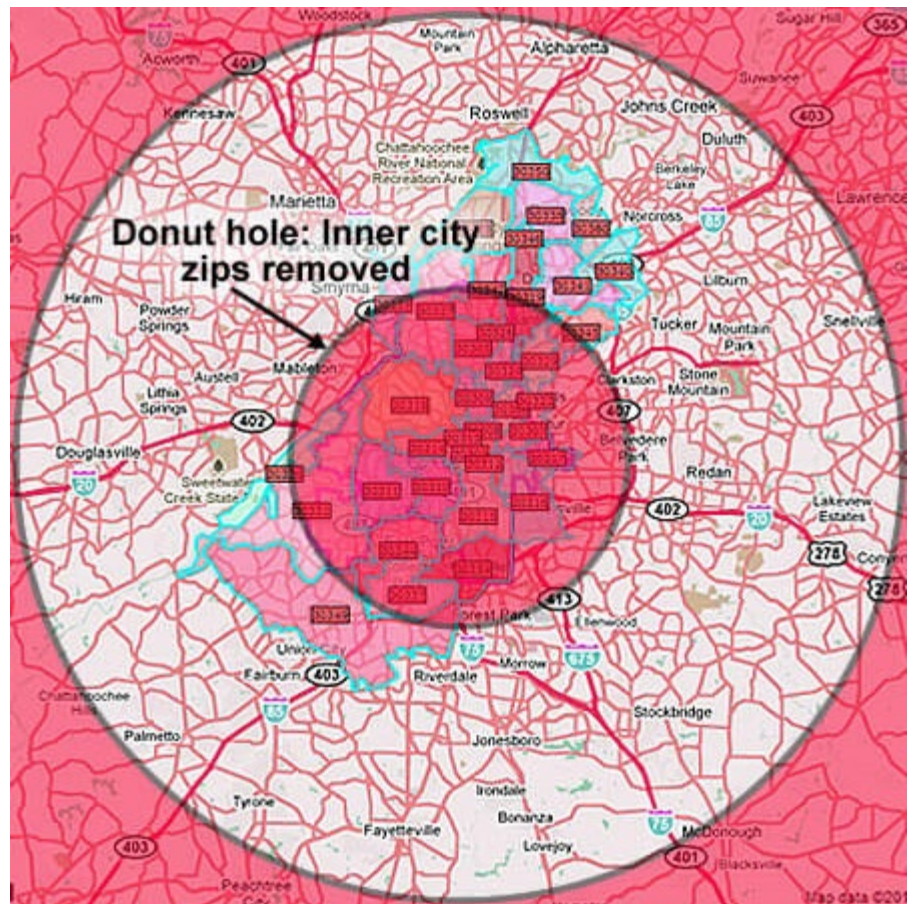
zones with incomes at 200% of the Federal Poverty Level or below, in the same way as in step 3.

5. Created a "general" taxonomy Criteria Set, containing providers with the taxonomy codes identifying family practice physicians. Named it "FamPrac."
6. Combined the above Criteria Sets into one. Named it "First Cut." Found the matching providers and made a Saved List called "Our Targets"
7. Created a Criteria Set of all providers with a taxonomy code identifying the practice of pediatrics, saved the matching providers as a Saved List named "Pedia."
8. Used the Remove from List tool to cut the Pedia list out of the Our Targets list, leaving only those family practice docs who *do not* also practice pediatrics.
9. Used the Gender and PECOS filters to select only females who are enrolled to accept Medicare, the Warning filter to remove any providers who are currently barred from billing Medicare, the Type filter to select only individuals (eliminating duplicative "organization" listings that would have picked up the physicians' corporate entities), and the Added Since Date filter to select only those who "signed up" in the federal National Provider Identifier database more recently than 18 months ago.
10. Processed the list using SharpMail to output good name and address fields with a salutation, all properly cased and ready to print as mailing labels (all done from within CP ListMaker), and import into Excel for telephone follow-up.
11. Later we decided to remove providers who were in practice groups larger than 9 members, so we used the practice groups tools to identify them and remove them from our output. Since we had saved the List on the Find Matches tab, we were able to simply pull up the earlier list, return to the Output Lists tab, View SharpMail, and

CP ListMaker comes with 30 days of free technical support, and we'll be glad to help you through the learning curve. If you can define your "problem" as well as this user was able to, it will help us arrive at the solution very quickly.

CP ListMaker is an Open Source MS Access Database

CP ListMaker was built in an open (unlocked) Microsoft Access database. As such, it can be customized by any user with Access VBA programming skill. Source code of all functions and routines are open for viewing, and you can customize how it works to suit your own specific needs. "Open source" does *not* mean that you are licensed to use the code outside of CP ListMaker in products you distribute, or to redistribute the code. Review the CP ListMaker End User License Agreement. Special licensing is available on a use-specific basis. Contact Sales at **877-782-2294** for information.

If you need assistance in customizing your CP ListMaker software beyond the limits of our normal technical support options, paid advanced support is available. Please contact Sales at **877-782-2294**.

Getting Technical Support

CP ListMaker comes with 30 days of free limited technical support, available **here**. Longer term support is available through a paid support plan. Please refer to our **Support page** for details and information on extended and advanced technical support plans. Additional customization and integration with your in-house systems is available through our consulting services; for more information on consulting, contact Sales at **877-782-2294**.

Click here for CP Complete, CP Advanced, APD, and AHD dataset documentation...

Click here to learn more about CP ListMaker...

Click here to learn about CarePrecise Platinum, our bundle of CP ListMaker and the CP Advanced dataset...

About CP ListMaker Versions

The current version of CP ListMaker is 7.5 and if you have an earlier version you can upgrade in order to have the new features, you may request it by contacting CarePrecise Sales. The upgrade is free if you purchased CP ListMaker within the past 60 days or have a current subscription to data updates in force. You may purchase and download the most recent version at this link. Be sure to follow the instructions for upgrading CP ListMaker.

* No warranty is expressed or implied regarding processing time on any specific computer or computing environment.