

DiaTrends®

Version 3.1.29 Enhancements

May 2006



We are pleased to announce another major new version of DiaTrends (3.1.29), released in May 2006. Once again, many of its helpful new features were first suggested by our users.

Highlights:

- Added "Estimated GFR (Glomerular Filtration Rate)" row in the Renal screen data grid; and added Estimated GFR graphing and reporting. The National Kidney Foundation, the National Institute of Diabetes and Diseases of the Kidney, and the American Society of Nephrology now recommend routinely estimating GFR using the 4-variable MDRD (Modification of Diet in Renal Disease) Study equation. This equation uses serum creatinine in combination with age, sex and race to estimate GFR and therefore improves upon several limitations with the use of serum creatinine alone to assess kidney function. The MDRD Study equation is:

$$\begin{aligned} \text{Estimated GFR} \\ = 186 \times (S_{Cr})^{-1.154} \times (\text{age})^{-0.203} \times (0.742 \text{ if female}) \times (1.210 \text{ if black}) \end{aligned}$$

The calculated result is displayed for each date that all 4 of the data elements (including race/ethnicity) are available. The formula uses the patient's age as of the date of each serum creatinine.

For further details on this equation, see the DiaTrends Renal screen "Help" file and/or <http://www.kidney.org/professionals/KLS/gfr.cfm>.

Note that this Estimated GFR formula replaces the former "Estimated CrCl" (creatinine clearance) row in the Renal screen data grid, which used the older and less accurate Cockcroft-Gault equation.

- Added Report Generator reports related to the above "Estimated GFR (Glomerular Filtration Rate):"
 - The "Estimated GFR: Average" Report displays the average of the most recent estimated GFR values (using the MDRD Study equation) of all active patients meeting the selection criteria you pick.
 - The "Estimated GFR: Range" Report provides the number and percent of all active patients (meeting the selection criteria you pick) whose most recent estimated GFR (using the MDRD Study equation) were between, above, or below the level(s) you specify.
 - The "Estimated GFR: Range (& List)" Report provides the number, percent and list of all active patients (meeting the selection criteria you pick) whose most recent estimated GFR (using the MDRD Study equation) were between, above, or below the level(s) you specify.

- Added a color-coded serum creatinine flag on the Home Page and Renal screens, in accordance with the 2006 ADA guidelines which added: "...Serum creatinine should be measured at least annually in all adults with diabetes..." As with all the color-coded flags, a right mouse click on the flag opens a legend explaining the logic behind its color-coding. Note that the serum creatinine flag is disabled for patients under age 18 per ADA guidelines.
- Made the "User-Defined Fields" screen more intuitive by 1) automatically defaulting the "Select a User-Defined Field" dropdown list to the first item in the "User-Defined Fields Setup" screen; and 2) automatically setting cursor to the "Value" field when the "Add New Value" box opens (since auto-dating makes that field the fastest way to enter a value). With these changes, adding "User-Defined Fields" values is much easier and faster!
- Updated medication database through 3/23/2006; bringing the medication dropdown lists up to date by adding the new meds, new doses, etc. that have been released to the U.S. market since the last medication database update was distributed in 6/2005.
 - Specific medication changes include:
 - Changed "Diabetes Meds (Oral)" to "Diabetes Meds (Other)" which now includes all diabetes meds that are not insulins.
 - Changed "Diabetes Meds (Injectable)" to "Diabetes Meds (Insulin)."
 - Moved the non-insulin injectables (Byetta and Symlin) from the old "Diabetes Meds (Injectable)" group to the new "Diabetes Meds (Other)" group [and eliminated the false reminder to check diabetes type when a non-insulin treated type 2 patient is started on Byetta or Symlin injections].
 - Added Actoplus Met (pioglitazone/metformin), Avandaryl (rosiglitazone/glimepiride), Glumetza (metformin extended release), Levemir (insulin detemir), Exubera (insulin inhalation powder), Humalog Mix 50/50, Humulin R U-500, Triglide (fenofibrate), Omacor (omega-3-acid ethyl esters), fish oil (omega-3 fatty acids), and Midamor (amiloride).
 - Added new dosage forms where applicable.
 - Please remember, you should always try to specify the actual drug name (rather than selecting "Other..."), and change any medications previously entered as "Other..." to the actual drug name.
- Updated to the latest full-text clinical guidelines (the 2006 ADA Clinical Practice Recommendations and links to the 2002 AACE guidelines).
- Updated suggested website links.
- Updated embedded "Help" and support files.
- Revised the 126 slide annotated demo on the resource CD and online.
- Updated documentation (e.g. "Installation and Administration Guide," quick version upgrade guides, and other documents on the resource CD).
- And many more...

As always, please let us know of any ideas you might have to make DiaTrends even better!