Changes to Lab Results Display in INFORMM and IPR

Effective Saturday, December 7, 2002, the INFORMM function "RETRIEVE LABORATORY RESULTS", the daily R229 LABORATORY RESULTS report, the IPR function "Lab Results" and all other IPR lab displays will be changed so that related tests are grouped together. This change was requested and approved by the UIHC Diagnostic Services Subcommittee (DSS), Klaus Bielefeldt, M.D., and chair.

The DSS, working with staff from the Department of Pathology and receiving input from many UIHC clinicians, has classified most commonly used laboratory tests into medically logical groups. All computer displays and reports will use these groups for tests performed on the same specimen.

For example, the current IPR display might appear as:

![Current IPR display]

Tests are shown separately and in order of the time they were resulted. A header line containing ordering information accompanies each test line. Related tests may be separated by unrelated tests.

The new display will appear as:

![New IPR display]

![New IPR display]
Related tests are displayed in groups (such as Electrolyte/BUN/CRT) and the order information lines are not repeated, resulting in a more readable, compact display.

Similarly, the current INFORMM display appears as follows:

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Date</th>
<th>Time</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM, SERUM</td>
<td>02-078-0012</td>
<td>03/19/02</td>
<td>10:38</td>
<td>KEMP, J</td>
</tr>
<tr>
<td>SODIUM</td>
<td>140.0 MG/DL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LACTIC ACID DEHYDROGENASE</td>
<td>03/19/02</td>
<td>10:38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LACTIC ACID DEHYDROGENASE</td>
<td>223 U/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO2</td>
<td>02-078-0012</td>
<td>03/19/02</td>
<td>10:38</td>
<td>KEMP, J</td>
</tr>
<tr>
<td>CO2</td>
<td>25 MEQ/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHOSPHORUS SERUM</td>
<td>02-078-0012</td>
<td>03/19/02</td>
<td>10:38</td>
<td>KEMP, J</td>
</tr>
<tr>
<td>PHOSPHORUS SERUM</td>
<td>5.0 MG/DL</td>
<td></td>
<td>(2.5 – 4.5)</td>
<td></td>
</tr>
<tr>
<td>CHLORIDE SERUM</td>
<td>02-078-0012</td>
<td>03/19/02</td>
<td>10:38</td>
<td>KEMP, J</td>
</tr>
<tr>
<td>CHLORIDE SERUM</td>
<td>4.0 MEQ/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POTASSIUM SERUM</td>
<td>02-078-0012</td>
<td>03/19/02</td>
<td>10:38</td>
<td>KEMP, J</td>
</tr>
<tr>
<td>POTASSIUM SERUM</td>
<td>4.0 MEQ/L</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This will now appear as:

<table>
<thead>
<tr>
<th>Group</th>
<th>Test</th>
<th>Value</th>
<th>Date</th>
<th>Time</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTROLYTE/BUN/CRT</td>
<td>SODIUM</td>
<td>140 MEQ/L</td>
<td>03/19/02</td>
<td>10:38</td>
<td>KEMP, J</td>
</tr>
<tr>
<td></td>
<td>POTASSIUM SERUM</td>
<td>4.0 MEQ/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHLORIDE SERUM</td>
<td>100 MEQ/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO2</td>
<td>25 MEQ/L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RENAL/CALCIUM</td>
<td>CALCIUM, SERUM</td>
<td>9.0 MG/DL</td>
<td>03/19/02</td>
<td>10:38</td>
<td>KEMP, J</td>
</tr>
<tr>
<td></td>
<td>+ PHOSPHORUS SERUM</td>
<td>5.0 MG/DL</td>
<td></td>
<td>(2.5 – 4.5)</td>
<td></td>
</tr>
</tbody>
</table>

The groups that have been defined at this time are:

- ELECTROLYTE/BUN/CRT
- GLUCOSE METABOLISM
- GLUCOSE TOLERANCE TEST
- INSULIN METABOLISM
- AMYLASE/LIPASE
- ESR/CRP
- HEMOGRAM (CBC) AND BLOOD SMEAR
- WBC DIFFERENTIAL
- RENAL/CALCIUM
- LIVER FUNCTION
- COAGULATION
- HEPARIN DEPENDENT ANTIBODIES
- LUPUS ANTICOAGULANT WORKUP
- THYROID FUNCTION
- LIPID TESTING
- CARDIAC ENZYMES
- ARTERIAL BLOOD GASES
- VENOUS BLOOD GASES
- FINGERSTICK BLOOD GASES
- ENDOCRINE/THEORYING
- ENDOCRINE, URINE TESTS
- IMMUNOLOGY TESTING I
- IMMUNOLOGY TESTING II
- MULTIPLE SCLEROSIS SCREEN
- IRON
- URINALYSIS
- URINE MICROSCOPIC
- RANDOM URINE TESTS
- 24 HOUR/TIMED URINE STUDIES
- ANTICONVULSANT DRUGS
- ANTIARRHYTHMIC DRUGS
- ANTIBIOTICS
- IMMUNOSUPPRESSIVE DRUGS
- THERAPEUTIC DRUG, OTHER
- CHRONIC HEPATITIS STUDIES
- ACUTE HEPATITIS
- VITAMINS
- TUMOR MARKERS
- CRITICAL CARE LAB TESTS
- CSF ANALYSES
- FLUIDS, OTHERS
- BLOOD BANK-TRANSFUSION
- OTHER TESTS
The group "OTHER TESTS" serves as a catchall for tests that have not been included in any other group. All cancelled tests will fall in a group called “CANCELLED TESTS”.

The contents of each group will be available in the Pathology Web Handbook. [http://www.medicine.uiowa.edu/path_handbook/index.html](http://www.medicine.uiowa.edu/path_handbook/index.html)

New groups may be added to the system as needed. Requests for new groups should be submitted to Sue Dane via e-mail at susan-dane@uiowa.edu.

**INFORMM function "RETRIEVE LABORATORY RESULTS":**

The INFORMM function will now work somewhat more similarly to the IPR lab display in that both the start and end dates may be changed. The date range line

```
Start Date ( 01 / 01 / 1900 )     End Date ( 11 / 11 / 2002 )
```

will appear near the bottom of the screen and the dates may be changed as desired. Results will still display in reverse chronological order, starting at the end date and working backwards to the start date.

As the system reads and groups the tests, users of the INFORMM function will experience a longer delay before the first page of results is displayed. All subsequent pages will have little or no delay. This may be particularly pronounced for patients with large amounts of data, but the decision was made to accept this trade-off in return for grouping the tests. IPR response time will be unchanged unless very large amounts of data are requested.

**IPR Profile and Result Tips**

IPR contains the same predefined Global Profiles as INFORMM.

New profiles can be viewed or created by selecting the Profiles button in the toolbar at the top of the screen.

IPR remembers the last presentation view selected (Graphical or Tabular) by the user. The Tabular view has a faster response.

Lab selection may be visit date specific, which tends to be a shorter date span hence, improves response time.

Links to help are located by selecting the Clinical Help button in the toolbar at the top of the screen. This link goes directly to the UIHC Pathology Handbook. Selecting Help button links directly to the IPR Tutorials home page.