

# Lab Focus

August 2003—monthly insert to 'Scope from Fairview Clinical Laboratories

## Sound bites. . . .

### New Plastic Coagulation Collection Tubes Replace Glass Citrate Tubes

New blue top plastic coagulation tubes will replace the blue top glass coagulation tubes system-wide. The new tubes:

- Look basically the same, except for a plastic insert which reduces the volume of blood needed.
- Have a yellow striped label stating the collection volume.
- Are available in two sizes, 2.7 mL as the standard tube and 1.8 mL for pediatric and hard to draw patients. This reduces blood loss for patients from the current glass tubes available in 4.5 mL and 1.8 mL.
- Have the same Matkon number so they are automatically substituted.

### New Rapid HIV-1 Antibody Test Available for Source Testing in Cases of Employee Exposure

Fairview Laboratories are changing to a new test kit for rapid HIV-1 Antibody. The Center for Biologics Evaluation and Research, Food and Drug Administration approved the new test kit for rapid HIV-1 Antibody in Nov. 2002. In clinical trials, the test demonstrated specificity of 100 (99.7-100.0) percent and sensitivity of 99.6 (98.5-99.9) percent. In an on-site evaluation, the new test demonstrated improved performance over the existing assay.

The test requires 1 mL, 0.3 mL minimum, of EDTA whole blood.

### Clinical Laboratory Results on Metro Clinic Patients are now Viewable in FCIS

Clinical laboratory results of Fairview Metro Clinic patients are now viewable in the Fairview Clinical Information System (FCIS), in addition to the EPIC system as previously. Anatomic Pathology and HLA laboratory results from Fairview Metro Clinic patients are not viewable in FCIS. Laboratory results from Northland and Lakes patients are also not viewable in FCIS at this time.

## 2002 FCIS Survey Summary

More than 80 percent of respondents to the latest Fairview Clinical Information System (FCIS) survey indicated that they use FCIS, and nearly 80 percent said their patients' clinical results are more readily available than through the paper system. Approximately 80 percent indicate that viewing patients' radiology and current medications online is important.

Responders also indicated a need for further support in using FCIS. In response, Information Management Services will pilot an FCIS physician-centric support model in third quarter.

Physicians completing the first FCIS survey in 2001 chose remote access as a top priority. IMS accordingly made access a priority for the FCIS work plan that year. As a result, the provider portal is available to all Fairview-credentialed physicians requesting access.

Twenty-eight of 100 physicians contacted responded to the survey sent in December 2002. A summary of the results follows:

- 83 percent use FCIS. This is an increase of 13 percent over the 2001 survey.
- 48 percent use FCIS daily while 34 percent use FCIS several times a week.
- 78 percent agree that their patients' clinical results are available in FCIS.

- Almost half agree that the system is easy to use.
- 78 percent agree that compared to the paper chart, clinical results are more readily available.
- More than half agree that compared to one year ago, Fairview is making progress with clinical systems.
- Most prefer to be notified of system changes by email.
- 79 percent rated viewing patients' current radiology images online as important.
- 81 percent rated viewing patients' current medication list online as important.

Complete results from each hospital site are available through the physician site leads.

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# Newborn Screening: Changes in MDH Results Notification

Effective August 4, the Minnesota Department of Health (MDH) Newborn Screening Program will implement the following changes in its results reporting practices:

- The number of disease/disorder categories for which results will be reported will increase from five to seven. The disorder categories of amino acidemias, fatty acid oxidation disorders, and organic acidemias will be added to the roster of disease/disorder categories.
- Phenylketonuria (PKU) is a constituent disorder of the amino acidemia disorder category. Because of this, there will no longer be a line on the results mailer dedicated exclusively to PKU results. PKU results will be reported within the amino acidemia category on the new mailer.

Therefore, if a newborn screening result is negative for a particular disorder (e.g., PKU), the results mailer will indicate negative for the corresponding disease/disorder category. However, if the result is abnormal or presumptively positive, then MDH will send a faxed report that clearly describes individual disease/disorders (e.g., PKU).

## MDH Newborn Screening Program Panel of 35 Disorders Currently Screened

### Amino Acidemias

Arginemia  
Argininosuccinic Aciduria (ASA Lyase Deficiency)  
Citrullinemia (ASA Synthetase Deficiency)  
Hypermethioninemia  
Homocystinuria (Cystathione Synthase Deficiency)  
Hyperornithinemia, Hyperammoninemia, Hyperhomocitrullinuria (HHH Syndrome)  
Maple Syrup Urine Disease (MSUD)  
Phenylketonuria (PKU)  
    Classic PKU  
    Hyperphenylalaninemia  
    Biotin Cofactor Deficiencies  
Tyrosinemia  
    Transient Neonatal Tyrosinemia (Type I)  
    Tyrosinemia Type II (Tyr II)  
    Tyrosinemia Type III (Tyr III)

### Congenital Adrenal Hyperplasia

### Congenital Hypothyroidism

### Fatty Acid Oxidation Disorders

Short Chain Acyl-CoA Dehydrogenase Deficiency (SCAD) (Ethylmalonic acidemia)  
Medium Chain Acyl-CoA Dehydrogenase Deficiency (MCAD)  
Medium Chain 3-Ketoacyl-CoA Thiolase Deficiency (MCKAT)  
Multiple Acyl-CoA Dehydrogenase Deficiency (MADD or Glutaric Acidemia-Type II)  
Carnitine Transport Defect  
Carnitine Palmitoyl Transferase Deficiency-Type I (CPT-I)  
Neonatal Carnitine Palmitoyl Transferase Deficiency-Type II (CPT-II)  
Carnitine/Acylcarnitine Translocase Deficiency (CACT)  
Trifunctional Protein Deficiency (TFP)  
3-Hydroxy Long Chain Acyl-CoA Dehydrogenase Deficiency (LCHAD)  
Very Long Chain Acyl-CoA Dehydrogenase Deficiency (VLCAD)

### Galactosemia

Galactokinase Deficiency  
Galactose-1-Phosphate Uridyl Transferase Deficiency  
Galactose-4-Epimerase Deficiency

### Hemoglobinopathies

Sickle Cell Disorders and Thalassemias

### Organic Acidemias

2-Methylbutyryl-CoA Dehydrogenase Deficiency (2MBCD or SBCAD)  
3-Methylcrotonyl-CoA Carboxylase Deficiency (3MCC)  
3-Methylglutaconyl-CoA Hydratase Deficiency  
3-Hydroxy-3-Methylglutaryl-CoA Lyase Deficiency (HMG)  
Glutaric Acidemia-Type I (GA I)  
Isobutyryl-CoA Dehydrogenase Deficiency  
Isovaleric Acidemia (IVA)  
Methylmalonic Acidemia (MMA)  
    Methylmalonyl-CoA Mutase Deficiency 0  
    Methylmalonyl-CoA Mutase Deficiency +  
    Maternal Vitamin B<sub>12</sub> Deficiency  
    Some Adenosylcobalamin Synthesis Defects  
Mitochondrial Acetoacetyl-CoA Thiolase Deficiency (3-Ketothiolase Deficiency)  
Multiple CoA Carboxylase Deficiency  
Propionic Acidemia (PA)