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fastfacts
Resources for Nursing Home Professionals

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Physician Notification of Laboratory Results

Nursing homes must communicate abnormal laboratory results to the clinicians who order them, but nurses, physicians, and surveyors vary widely in their sense of "timely" lab test communication. In part this variation reflects the range of abnormality—from nearly normal to panic level—and the range of clinical situations in which the abnormalities occur. Notification guidelines can reduce the risk of communication failure, increase efficiency, enhance teamwork, and decrease nurse and physician frustration.

The notification framework below distinguishes two levels of abnormality requiring different response times (4 hours and 48 hours). It is based on experiences in an array of long-term care settings. The medical director, director of nursing, and quality committee should modify these suggestions as needed for their organization and develop efficient documentation procedures. They should encourage reports of communication difficulties and address them. There should be a backup plan for involvement of the medical director and director of nursing when necessary. The following tips can facilitate nurse communication with physicians.

- **Check the guidelines of your facility regularly.** Guidelines and procedures must be readily available, and there should be a process for alerting nurses of changes. Notification may be different on evening or weekend shifts, or even among physicians, so long as the written procedure offers adequate guidance to nursing staff.
- **Timeliness depends on results and clinical situation.** The urgency of physician notification should depend on the overall condition of the resident and not just on abnormal values. For example, tests ordered stat because of concern about a patient may need immediate notification even if they are normal.
- **Report other key clinical data with results.** Before reporting results, gather other key data, such as the diabetes medication regimen with a glucose result, warfarin dose with a PT/INR, or previous hemoglobin with a new hemoglobin. Clinicians receiving information may not always be familiar with the patient in question, and it helps to include information about pre-existing conditions when a 4-hour response range is triggered; e.g., renal failure when BUN and Cr are high or liver failure when LFTs are high. The resident's symptoms and physical assessment are often essential for good decision-making. Do the resident's medical record and previous lab results suggest a change in condition?
- **Ensure proper documentation of communications.** Quality care and risk management depend on proper documentation. Agreement on a facility-specific, efficient process can minimize charting time. Exceptions to standard procedure are often appropriate, but the reason should be noted.
- **Effective nurse/physician communication is essential.** Nurses need a way of knowing how best to communicate with the facility's physicians. Faxes for non-urgent lab results can save time. Standardized procedures and protocols for communications can also decrease calls to physicians and improve care. Nurses and physicians should recognize situations calling for direct communication. They should report communication difficulties to the medical director or director of nursing.

Clinical Laboratory Physician Notification Guidelines

Procedure

1. If values are within normal range, send results and assure receipt by mail, fax, or email within 14 days.
2. Use the table below to distinguish abnormal results requiring notification and acknowledgment within 4 hours versus within 48 hours.
3. Positive culture results should be sent and acknowledged within 4 hours.

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Physician Notification of Laboratory Results

Response Ranges

Test	4 Hours	48 Hours
Hematology		
Hemoglobin	<7 >20	<10 >18
Hematocrit	<20 >60	<30 >52
WBC	<2k >14k	<2.5k >12k
Platelets	<20k >1,000k	<100k >500k
ESR		>15
Coagulation (on Anticoagulant)		
Protime	>30 sec	>14 sec
INR ratio	>6.0	>3.5
aPTT	>90 sec	>38 sec
Medication Blood Levels		
Carbamazepine	>20	<4 >12
Digoxin	>3.5	<0.3 >2.5
Phenytoin	>40	<5 >20
Lithium	>2	<0.5 >1.5
NAPA	>25	<2 >6
Phenobarb	>60	<10 >40
Primidone	>24	>20
Procainamide	>15	<6 >12
Quinidine	>10	<2 >5
Salicylate	>50	>20
Tegretol	>12	<4 >9
Theophylline	>30	<5 >20
Valproic acid	>150	<30 >110
Urinalysis		
Specific gravity		>1.030
Albumin		Positive
Glucose		>2+
Ketones		>2+
Occult blood		>3+
RBC		>10
WBC		>10
Bacteria		>2+
Chemistries and Endocrine		
Albumin		<2.5 >6.0
Alkaline phosphatase		>150
Ammonia	>40	>33
Amylase	>200	>115
Bicarbonate (HCO_3)	<10 >40	>30
Bilirubin	>12	>4
BNP B-natruretic peptide		>50
BUN	>50	>30

Test	4 Hours	48 Hours
Calcium	<7.0 >13	<7.5 >12.0
Chloride	<85 >120	>115
Cholesterol		>500
Creatinine	>5.0	>2.5
CPK	>90*	>90
Ferritin		>400
GGTP	>200	>69
Glucose	<50 >400	>250
Glycohemoglobin		>10
Iron		<20 >250
LDH		>300
Magnesium	<1 >5	<1.7 >2.3
Potassium	<2.5 >6.0	<3.9 >5.3
Sodium	<120 >160	<125 >150
SGOT (ALT)	>400	>40
SGPT (AST)	>400	>40
Total protein		<5 >9
Uric acid		>11

* In the setting of new cardiac symptoms

More FastFacts available at **www.chcf.org/fastfacts.**

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