ANALYSIS OF LABORATORY REQUISITION
AND CHARGE PROCEDURE

# 327 - 67

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COMMUNITY SYSTEMS FOUNDATION
January 18, 1967

Mr. Chester M. Warman
Controller and Assistant Treasurer
Methodist Hospital
1604 North Capitol Avenue
Indianapolis, Indiana

Dear Mr. Warman:

The following report has been prepared as a documentation of the various paper work procedures relating to the Laboratory Department.

This report summarizes the laboratory's present system and recommends further courses of action to be taken for the interim centralized computer system.

I would like to acknowledge the complete cooperation from many members of the Methodist staff; particularly Mrs. Taflinger, Laboratory Office Manager.

Respectfully submitted,

[Signature]

Richard D. Altman
Project Engineer

Approved:

[Signature]

LeRoy F. Anderson
Managing Director
RDA/w

cc: Jack A. L. Hahn
    Lester H. Hoyt, M.D.
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PRESENT SYSTEM

The doctor writes his orders on the patient's order sheet. The ward clerk then copies the doctor's order verbatim onto a requisition (Exhibit A) which has been imprinted with the addressograph plate of the patient. The ward clerk pulls, and files the third copy of the requisition in a floor file. This floor file is used for reference purposes only. The requisition is then sent to the laboratory office via the Lamson Tube.

In the laboratory office the requisition is clocked in and a lab clerk selects the proper lab ticket to be used for the tests. The lab ticket (Exhibit B) is then marked for each individual test to be performed. The requisition and the marked lab tickets are then sent to a lab typist who enters patient name, hospital number, room number, etc., onto the lab tickets.

At this point, the requisition is given to the lab billing clerk who prices the services, sends the white copy of the requisition to the controller, and files the yellow copy in a numeric lab file (Hospital Number). This yellow copy is filed behind the large patient ditto card (Exhibit C) sent to the laboratory office by admitting.

The lab ticket is then sent to the lab whereupon a technician will go to the floor and draw the specimen. The last copy (Number 4 in most cases) is left on the floor as proof that the specimen has been drawn.
After the tests have been performed in the lab and the results noted on the lab tickets, the tickets are sent to the laboratory office. In the laboratory office, the lab tickets are filed as follows:

Copy No. 1  (Gum Stick) - Floor and Room Number slotted file.
Copy No. 2  (Charge Copy) - Lab Bookkeeper file by day in no specific order.
Copy No. 3  Alphabetic Patient File

Laboratory Files

Floor and Room Number Slotted File:

At various times during the day, laboratory runners collect copy No. 1 of the lab tickets from the floor and room number file, and go to the respective nursing stations. At the nursing stations, the lab ticket is placed on the patient's chart by the runner. If the chart is missing for some reason, the lab ticket is brought back down to the laboratory office and placed back into the slotted file.

Day File:

The charge copy (No. 2) of the lab ticket is used for statistics. Each day certain tests, such as blood counts and urines, are counted and noted on a tally sheet. See Exhibit D. After a two week period this copy is discarded.

Alphabetic Patient File:

This file consists of two type forms: the small patient ditto card (Exhibit E) sent to the laboratory office by admitting, and the third copy of
lab ticket. This file represents the current working In-House-File.

Every morning a list of dismissals for the day comes to the laboratory office. Based on this list, the small patient ditto card and all the lab tickets that are filed behind it are selected from the file. The lab tickets are checked to see if they are all for the same patient and then sent to Medical Records. The small patient ditto card is clocked out, then filed alpha by patient by month. This alpha patient file is kept for a six month period for references.

Note:

Medical Records receives the third copy of the lab ticket from the laboratory office. The lab ticket falls into two basic categories:

1. Patient dismissed and lab ticket (Copy No. 1) on patient chart.

2. Patient dismissed and lab ticket (Copy No. 1) not on patient chart.

In the first case, the lab ticket is sent to those doctors who have requested them. Miss Peacher estimates 80% are thrown away by the medical records clerk because the doctor's name is not on the request list.

In the second case, the lab ticket is sent to all doctors because the patient's chart was not complete at the time of dismissal.
IDEAS OF CONSIDERATION

In order to speed the patient billing operation and management reporting procedure for the interim computer system, the following ideas were considered:

1. Complete forms revision to a requisition lab result sheet set. This would mean that at each nursing station, 12 to 15 individual requisition lab result sheet sets would be housed in a file. Upon a request by a doctor, the nurse or ward clerk would select the proper set or sets of requisition lab result sheets and check mark the desired tests to be performed. The set or sets would also be imprinted with the addressograph plate of the patient.

Problems --

1. The doctor's orders would only appear on the order sheet and not on the requisition lab result sheet.

2. Nurses or ward clerks would have to search for the correct requisition or requisitions and check mark the proper tests.

3. Reducing the lab result sheets to 12 to 15 in number, presents a logistics problem for the lab. This would mean that different tests performed in different labs might be on the same requisition lab result sheet.
II. A copy of the lab ticket would be sent to the data center. After the lab ticket has been check marked and the necessary heading information typed, the charge copy would be sent to the data center. This copy would have assigned computer service codes adjacent to the checked boxes.

Problems --

The keypunch operator would have to rely on the accuracy of the typed information on the lab ticket. A partial analysis of the accuracy of hospital numbers typed on lab tickets from the imprint of the addressograph plate has shown many errors.

III. Service codes would be written on the controller's copy of the requisition.

Problems --

This would necessitate the lab bookkeeper looking up each test in a service code listing and transferring that number onto the requisition. This method would not save time nor help accuracy.

IV. Modification of the present lab ticket and system flow.

An extra copy of the lab ticket would be included in the lab ticket set. This copy would be printed with the heading
information (name, hospital no., etc.,) and assigned computer service codes adjacent to the check boxes. See Exhibit "F". The lab ticket would be filled out in the same manner as it is presently. The service code copy would be pulled and stapled to the controller's copy of the requisition to be sent to the data center.

Problems --

A filing problem may exist since the lab ticket would be stapled to the requisition copy. The file would bulge as a result of the extra thickness of the forms and staple.
RECOMMENDATIONS

After careful consideration of the objectives for the interim computer system, it is recommended that modification of the present lab ticket and system flow be implemented. This would mean printing an extra copy of each lab ticket set with the assigned computer service codes adjacent to the check boxes.

This system would give us accuracy for patient billing, time saving for the billing clerk and the least amount of changes in conversion to electronic data processing.
APPENDIX
### LAB REQUISITION FORM

<table>
<thead>
<tr>
<th>LAB REQUISITION FORM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: 3:05 LAB</td>
</tr>
<tr>
<td>タイム</td>
</tr>
</tbody>
</table>

### REQUIREMENTS

**Three Part Form**
EXHIBIT B

USE BALL POINT PRESS FIRMLY

NAME________________________
HOSP. NO.______________________ ROOM_________
DOCTOR______________________ Per_________
DATE OF REQUEST________________________
DATE & TIME DESIRED_________________

Date of Test __________________

☐ Creatinine ______ MGM % Normal 1-2 MGM %
☐ Folinic acid (Quant.) ______ MGM % Normal 200-400
☐ Folinic acid (Fibrindex) ______
☐ Glucose (Folin) ______ Normal 70-100 MGM %
☐ Folin Wu ______ Normal 90-120 MGM %
☐ Serum Bound Iron Normal Men = 45-185 MGM
  Women = 50-140 MGM
☐ Total Iron Binding Capacity Normal Men and Women
  240 - 420 MGM
☐ % Iron Saturation Normal Men = 15 to 55%
  Women 15 to 55%
☐ NPN ______ MGM % Normal 25-35 MGM %
☐ Urea Nitrogen (BUN) ______ MGM % Normal 9-15
☐ Uric Acid (Serum) ______ Normal 2-6
☐ Other (Specify) __________________________

By ____________________________

CHARGE _______________________

LAB TICKET SET

FOUR PART FORM
<table>
<thead>
<tr>
<th>ITEM</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLOOD COUNTS</td>
<td></td>
</tr>
<tr>
<td>SED. W.</td>
<td></td>
</tr>
<tr>
<td>HTO</td>
<td></td>
</tr>
<tr>
<td>UREA</td>
<td></td>
</tr>
<tr>
<td>ACETONE</td>
<td></td>
</tr>
<tr>
<td>URC</td>
<td></td>
</tr>
<tr>
<td>DIACETIC ACID</td>
<td></td>
</tr>
<tr>
<td>COAG.</td>
<td></td>
</tr>
<tr>
<td>ALBUMIN</td>
<td></td>
</tr>
<tr>
<td>BILE</td>
<td></td>
</tr>
<tr>
<td>SBE</td>
<td></td>
</tr>
<tr>
<td>SGAL. SBE</td>
<td></td>
</tr>
<tr>
<td>SPEC. GRAV.</td>
<td></td>
</tr>
<tr>
<td>BLOOD SUGAR</td>
<td></td>
</tr>
<tr>
<td>POST TRANS.</td>
<td></td>
</tr>
<tr>
<td>RBC</td>
<td></td>
</tr>
<tr>
<td>MCV</td>
<td></td>
</tr>
</tbody>
</table>

INITIAL: [Signature]
SMALL PATIENT DITTO CARD
SENT TO LAB OFFICE BY ADMITTING