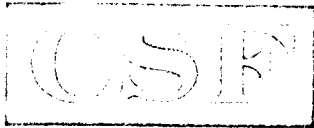


CSF

CHARGE TICKET FORMS
PROCEDURE AND SYSTEM

361 - 67

AUTHOR: G. WHITLOCK



COMMUNITY SYSTEMS FOUNDATION

ANN ARBOR • BALTIMORE • INDIANAPOLIS

REGIONAL OFFICE
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Towson, Maryland 21204
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June 1, 1967

Sister Timothy Marie, O.S.F.
Financial Manager
St. Joseph Hospital
7620 York Road
Baltimore, Md. 21204

Dear Sister Timothy Marie,

This report represents a study done by Community Systems Foundation to streamline the charge ticket procedure and system at St. Joseph. The proposal Forms, Procedure and System were designed to serve the Hospital in its existing facilities as well as in anticipated expansion, and to be compatible with future In-Patient - Out-Patient Systems.

I would like to thank Mr. William Donahoe, Controller for his help in the development of this report. In addition, I would like to express my gratitude to Sister John Elizabeth and Sister Felicine Marie for their cooperation and invaluable assistance.

Sincerely,

George F. Whitlock, Jr.
George F. Whitlock, Jr.
Project Director

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Figure #1

List of Departments Interviewed

Department	Review by:
1. EKG	Miss Flaccomio
2. Radioisotope	Mrs. Norico
3. Telephone	Mrs. McShane
4. Delivery Room	Mrs. Jaworski
5. Out Patient	Mrs. Anderson
6. X-Ray	Sr. Felicine Marie
7. Dietary	Sr. Clare Joseph
8. Pharmacy	Sr. St. Henry
9. Nursery	Mrs. Zeller
10. Physiotherapy	Mr. Neels
11. Laboratory	Mr. Lowes
12. Operating Room and Recovery Room	Sr. John Elizabeth
13. Medical and Surgical Supplies	Sr. Marie Ernestine
14. Inhalation Therapy	Miss Seck
14. Business Office	Mrs. Gingrich

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I. SCOPE

The objectives of the project were to streamline the charge ticket systems and to reduce the problems encountered in the Business Office due to the present design and use of the charge tickets.

The Initial approach used in the study was to analyze the charge tickets from every Ancillary Area for the purpose of Documenting the flow of the charge tickets of each area and the respective problems they present to the Business Office.

In the process of this analysis it was realized that the care with which medical reports were processed was not the same care taken in processing the charge tickets. This was quite easily understood in that the patient and his welfare are the first concerns of the Hospital and this is as it should be. However, if this same care could be given the charge document, some of the problems encountered in processing the Charge Tickets in the Business Office would be eliminated. To take advantage of this concept, the medical document and the charge ticket were designed to be a duplicate of one another. This would insure that the information placed upon the medical document would in turn be the same as that on the charge ticket where it was applicable.

Each Ancillary Area was contacted and Flow charts were made to depict the method of processing the charge ticket; and notations were made as to the problems created in the Business Office by this area's tickets and the reason for each problem. In some areas these problems could not be solved unless a change in the present system was made. In these areas, therefore, slight modifications were designed into

the present system to make the solution of the problem possible. The _____ newly designed charge tickets and request forms were reviewed with the responsible individual in each Department and Ancillary Area affected by proposed charges. (Figure #1 lists the Departments and Ancillary Areas involved and the person contacted in each.)

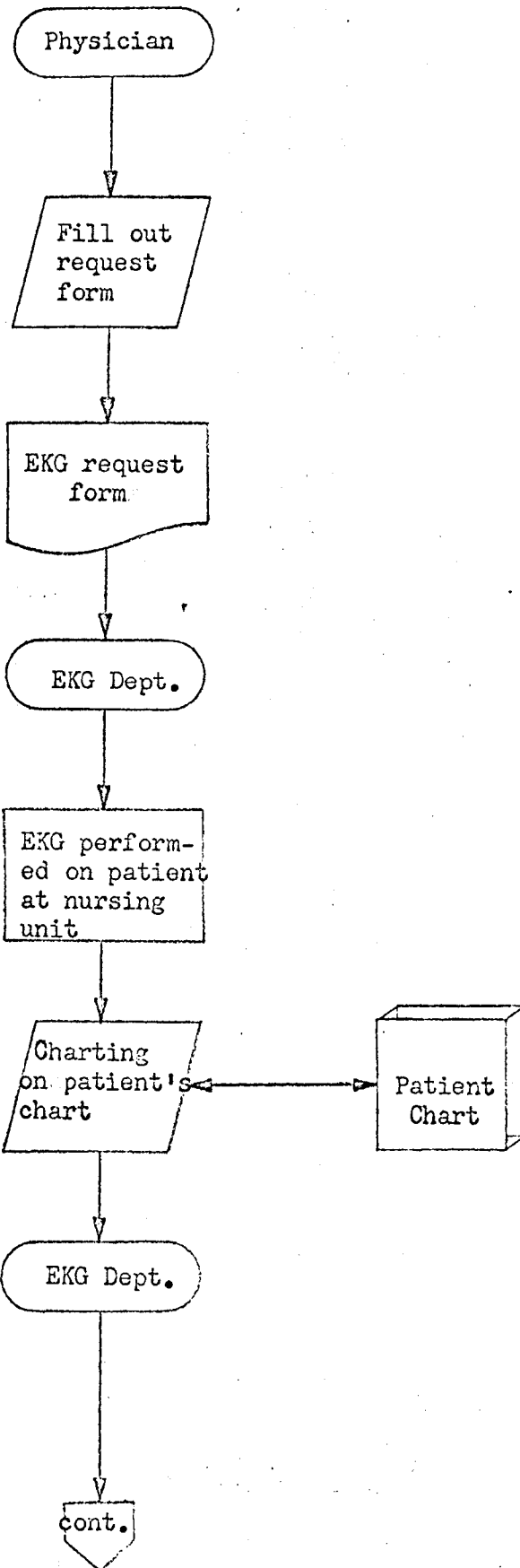
The following represents the results of the study for each department and includes: Summary of Problems; Modifications to Present Systems; Sample of Proposed Charge Tickets; and Flow Diagram of proposed system.

II. EKG

In the EKG department, the request form (Figure #3) for an EKG is sent down to the EKG department is not always accompanied by the addressograph-plate-stamped-charge ticket. In about 95% of the cases, the Patient information in the upper right hand corner had to be handwritten and was not always legible.

To overcome this problem, the Request Form and the Charge ticket were combined with the top copy being the request form and the bottom or second copy being the charge ticket. (See Figure #2) By making this combination, nothing would be changed in the present procedure in the EKG Department other than making the Request Form the same size as the charge ticket and having them accompany one other.

Flow Diagram For EKG



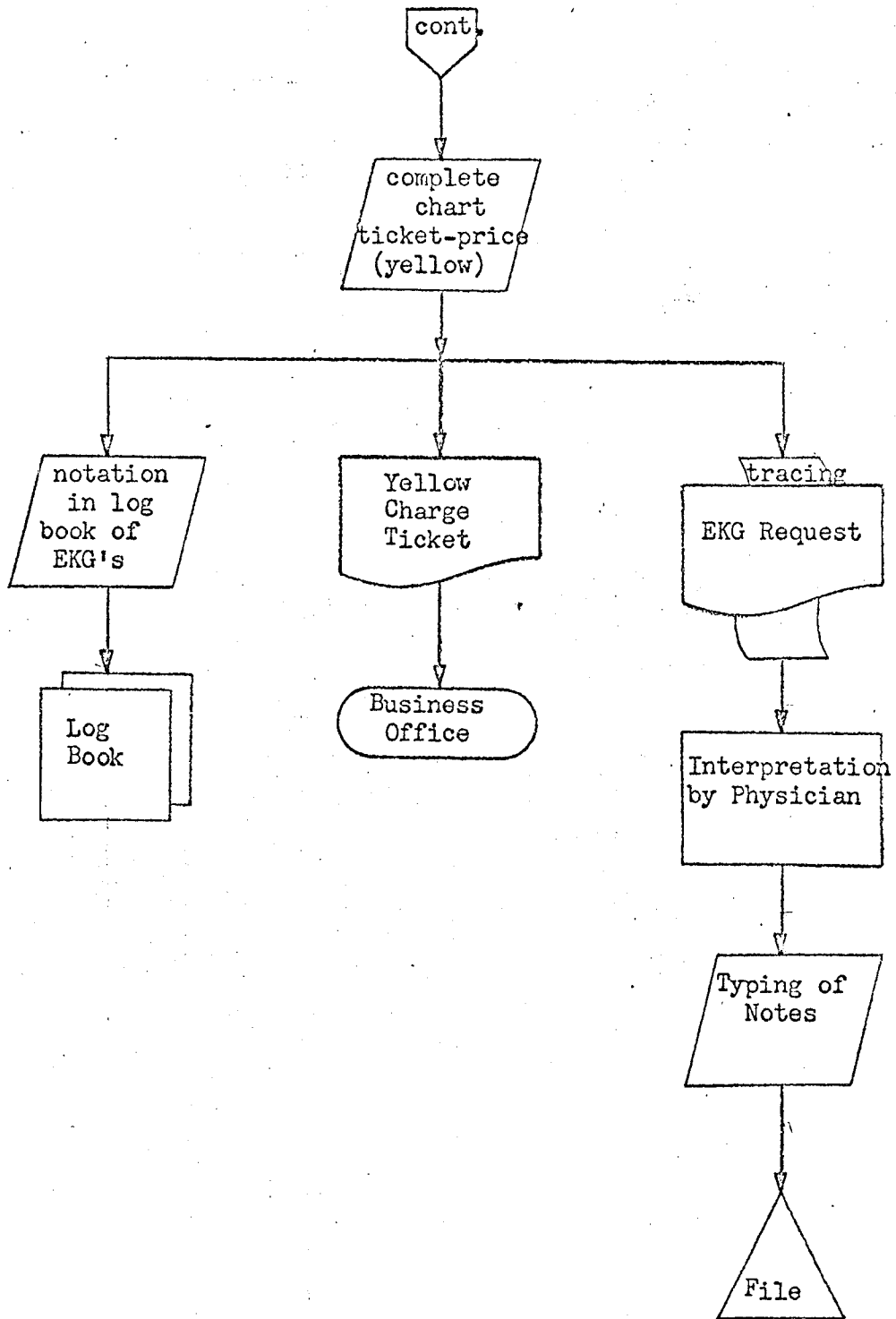


FIGURE #2

EKG REQUISITION - DEPT. OF ELECTROCARDIOGRAPHY	EKG: <input type="checkbox"/>	ADDRESSOGRAPH PLATE
	OTHER <input type="checkbox"/>	
	CARDIAC DIAGNOSIS _____ _____ _____	
	NON-CARDIAC DIAGNOSIS _____ _____ _____	
	PREVIOUS EKG-ST. JOSEPH HOSPITAL No <input type="checkbox"/> Yes <input type="checkbox"/>	
	BLOOD PRESSURE: _____ DATE: _____	
RECENT INFARCTION SUSPECTED Yes <input type="checkbox"/> No <input type="checkbox"/>	AMBULATORY: <input type="checkbox"/> PORTABLE <input type="checkbox"/> EMERGENCY <input type="checkbox"/>	
DIGITALIS. No <input type="checkbox"/> Yes <input type="checkbox"/> AMOUNT: _____	REMARKS _____ _____ _____	
OTHER CARDIAC DRUGS: _____	(SIGN) _____ M.D.	
	TOTAL \$ 000.00	

FIGURE #3

St. Joseph Hospital
Baltimore, Maryland

REQUISITION
Department of Electrocardiography

EKG:

OTHER:

CARDIAC DIAGNOSIS:

.....

NON-CARDIAC DIAGNOSIS:

.....

RECENT INFARCTION SUSPECTED: YES NO

DIGITALIS: NO YES AMOUNT:

OTHER CARDIAC DRUGS:

BLOOD PRESSURE:

PREVIOUS EKG - ST. JOSEPH HOSP. NO YES

DATE:

AMBULATORY: PORTABLE: EMERGENCY:

REMARKS:

.....

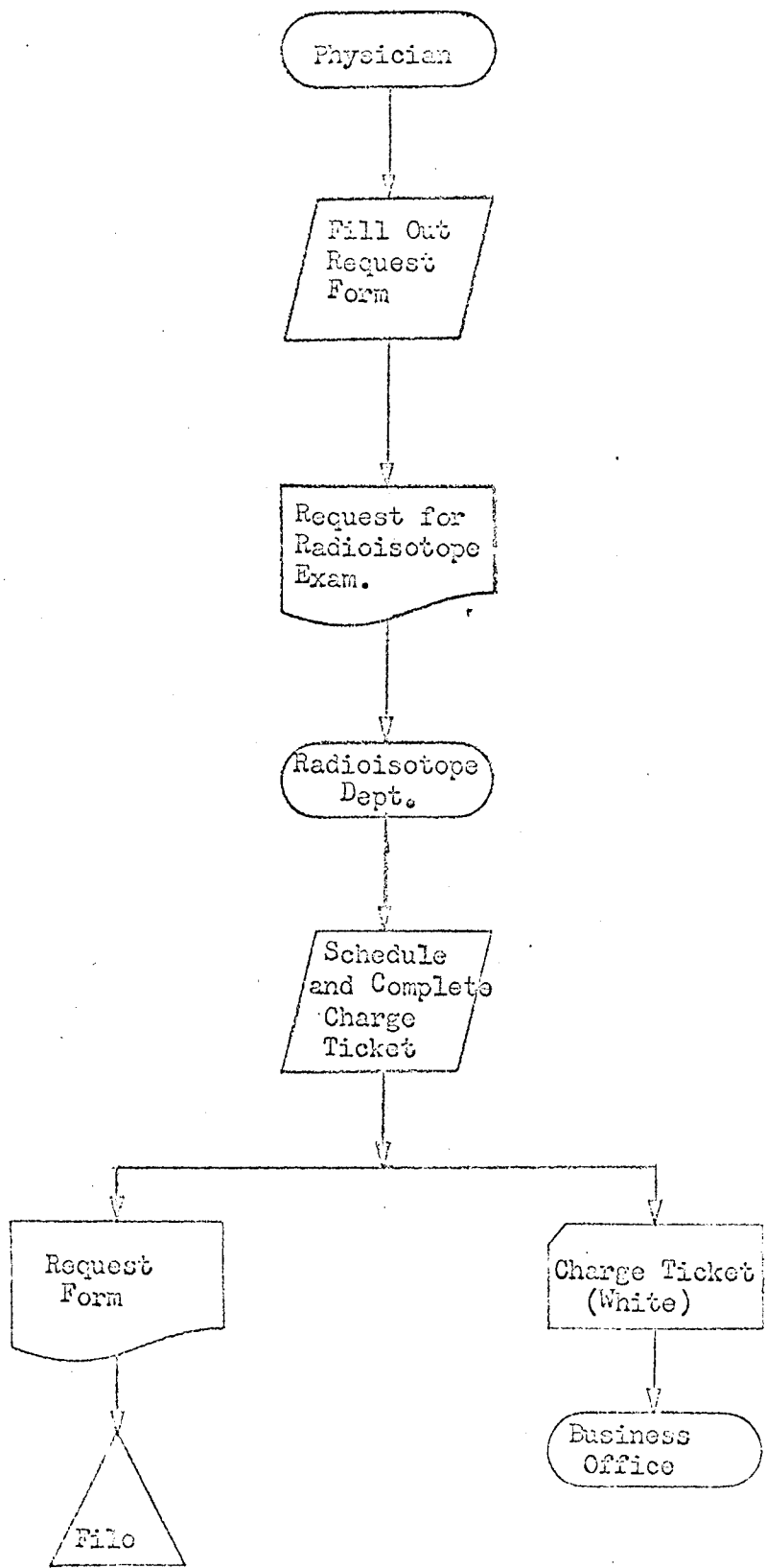
(sign)..... M.D.

DO NOT WRITE IN THIS SPACE

III. RADIOISOTOPE

+ In the Radioisotope Department the addressograph-plate-stamped charge ticket did not accompany the Request form, (Figure #5) resulting in the Radioisotope technician's having to type the Patient information onto the charge ticket. To eliminate this typing by the technician and guarantee the placement of correct information on the charge ticket the Radioisotope Request Form and the charge ticket were combined. (Figure #4) The proposed combination of these two forms will not change the presently existing procedure within the Radioisotope Department.

Flow Diagram For Radioisotope



RADIO-ISOTOPE EXAMINATION REQUEST

ST. JOSEPH
HOSPITAL

REQUEST
FOR
RADIO-ISOTOPE
EXAMINATION

RADIO-ISOTOPE EXAMINATION CHECK REQUESTED BY	RADIOISOTOPE PLATE								
	BONE MARROW								
	TIBIA BONE SCAN								
	BILIRUBIN SCANNING								
	GALLBLADDER SCANNING								
	PANCREAS SCAN								
	RED CELL SCANNING								DATE:
	T-24 BONE STUDY								OTHER:
	T-27 BONE								
	THYROID SCANS								
	BRAIN SCAN								
	KIDNEY SCAN								
	LIVER SCAN								
	PERICARDIUM SCAN								
	THYROID SCAN								ORDERED BY:
BLADDER SCAN								TOTAL:	
LUNG SCAN									

NAME _____
FIRST MIDDLE LAST

ADDRESS _____
STREET CITY COUNTY STATE

DATE _____ LOCATION _____ AGE _____ SEX _____ RACE _____ DOCTOR _____

CLINICAL HISTORY AND PROVISIONAL DIAGNOSIS (PLEASE FILL IN COMPLETELY)

FIGURE #4

ST. JOSEPH HOSPITAL

REQUEST FOR RADIO-ISOTOPE EXAMINATION

Clinical History and Provisional Diagnosis

(Please fill in completely)

DATE		LOCATION
NAME		
ADDRESS		
AGE	SEX	RACE
DOCTOR		

Circle Examination Requested

- BLOOD VOLUME
- FAT ABSORPTION STUDY
- PLACENTA LOCALIZATION
- RED CELL MASS
- SCHILLING'S TEST
- T-3 RESIN STUDY
- THYROID UPTAKE
- BRAIN SCAN
- KIDNEY SCAN
- LIVER SCAN
- PERICARDIUM SCAN
- SPLEEN SCAN
- THYROID SCAN
- OTHER _____

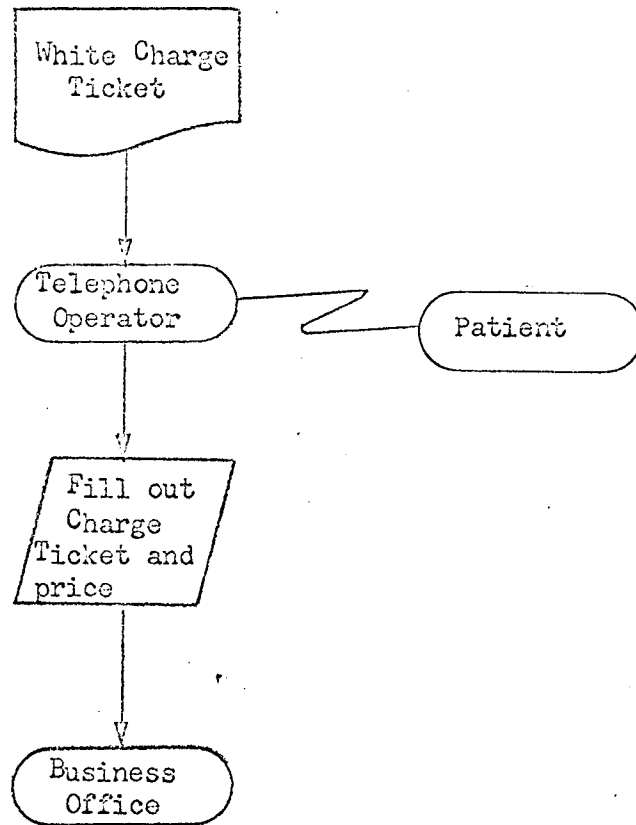
(Please specify)

Requested by _____

IV. TELEPHONE

In this area no modification to the present procedure is recommended even though all charge tickets will have hand-written patient information on them. The decision to make no changes is due to the low volume of charges generated from this area and the presently-enforced administrator's policy of reversing all calls when possible. The newly designed general charge ticket (Figure #6) will be used to handle these charges.

Flow Diagram For Telephone Section



This is only performed on special conditions where it is impossible to reverse charges or charge to their home phone.

FIGURE #6

GENERAL CHARGE TICKET	<input type="checkbox"/> DIETARY	<input type="checkbox"/> TELEPHONE	ADDRESSOGRAPH PLATE	
	<input type="checkbox"/> PHARMACY	<input type="checkbox"/>		
	<input type="checkbox"/> MED. - SURG. SUPPLIES	<input type="checkbox"/>		
	<input type="checkbox"/> OXYGEN	<input type="checkbox"/>		
	<input type="checkbox"/> PHYSIO-THERAPY	<input type="checkbox"/> OTHER.....		
	EXPLANATION: _____			

SIGNED BY: _____		DATE: _____	TOTAL \$ _____	

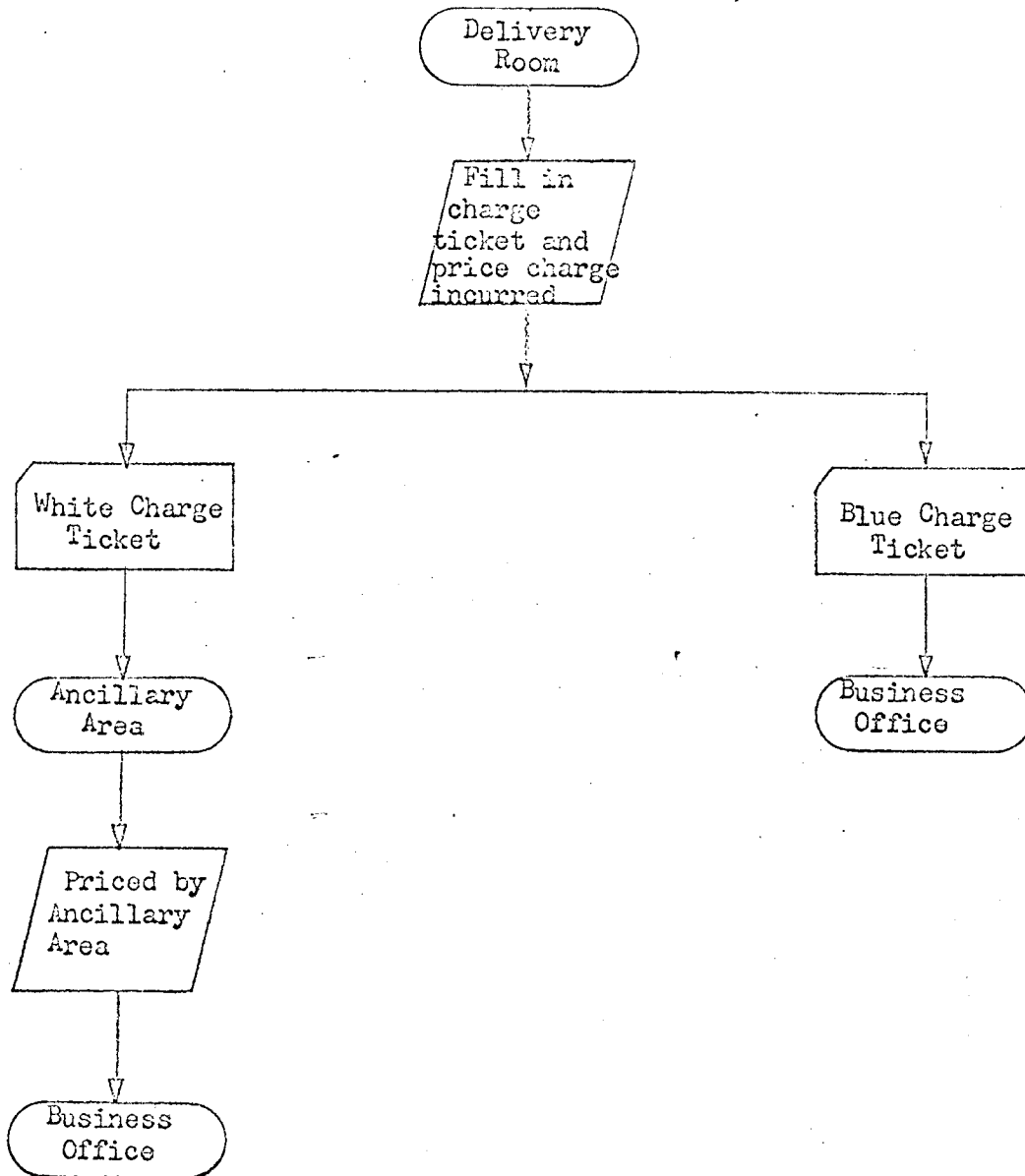
V. DELIVERY ROOM

In reviewing this area, it was found that the stamping of addressograph-plate information was not the problem, but rather there was a problem in pricing the services performed. There seems to be some confusion as to who is to do the pricing of supplies used and services rendered in the Delivery Room, The Business Office or The Delivery Room. If the Business Office is to perform this function, there will arise a problem of determining whether a Normal Delivery or a Caesarean Section took place. In addition there is a great deal of non-Business Office information written upon the charge tickets, that being: Type of Anesthesia, Name of Physician who gave Anesthesia, and sex of child. In reviewing this with the Business Office Manager, it was determined that she did not generate any statistics from this information and it was not totaled by the Business Office.

To eliminate the above-stated problem, it is felt that the Delivery Room personnel should be supplied with a list of charges and that they should do all pricing of charges incurred in the Delivery Room. This would serve to eliminate the placing of a wrong charge by the Business Office on Normal and Caesarean Section deliveries, and specify responsibility as to who is accountable for pricing of charges incurred.

A Review and determination of what medical information is requested on the Delivery Room Charge ticket should be made so as to eliminate the notation of non-pertinent details.

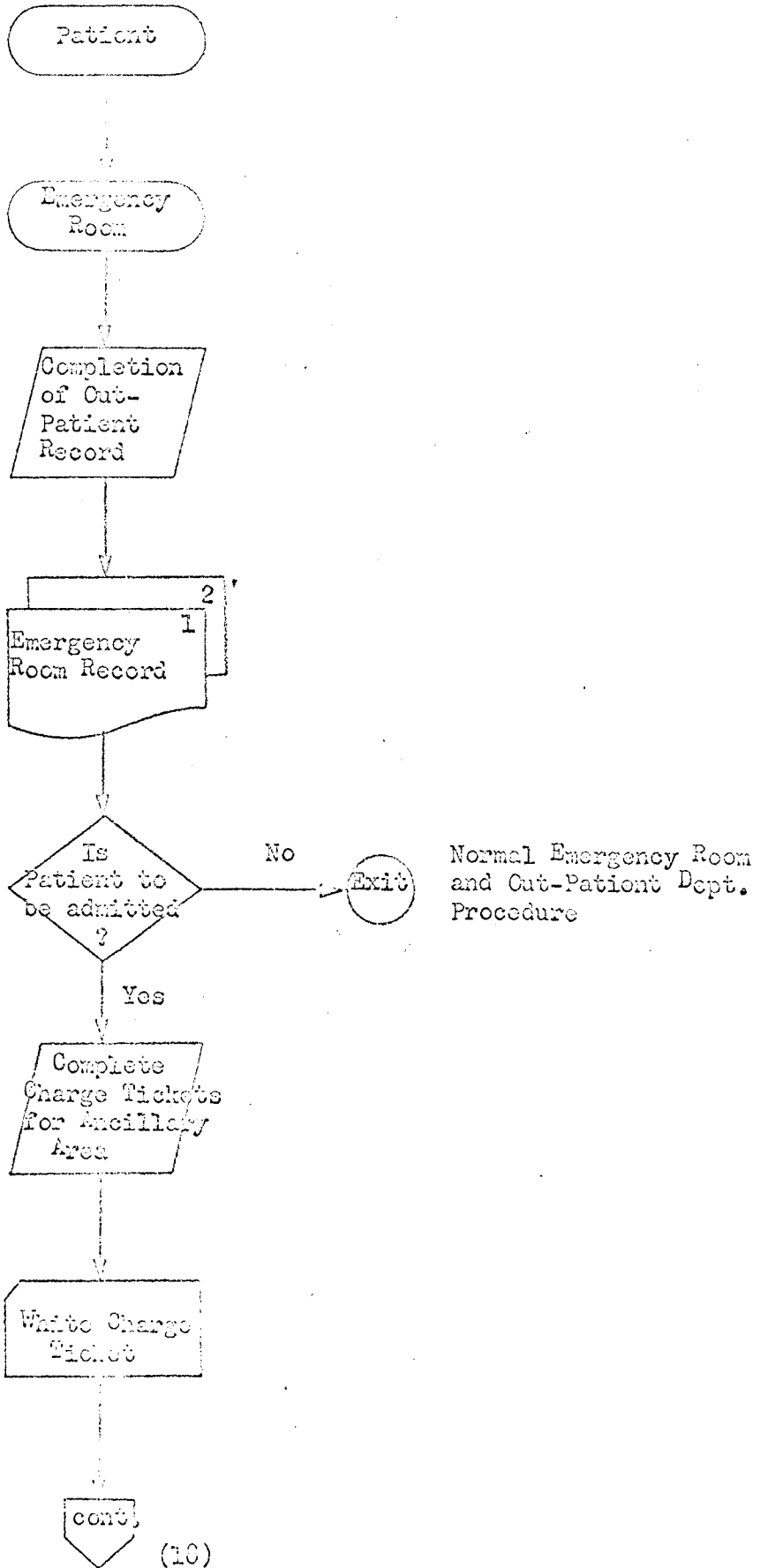
Flow Diagram For Delivery Room

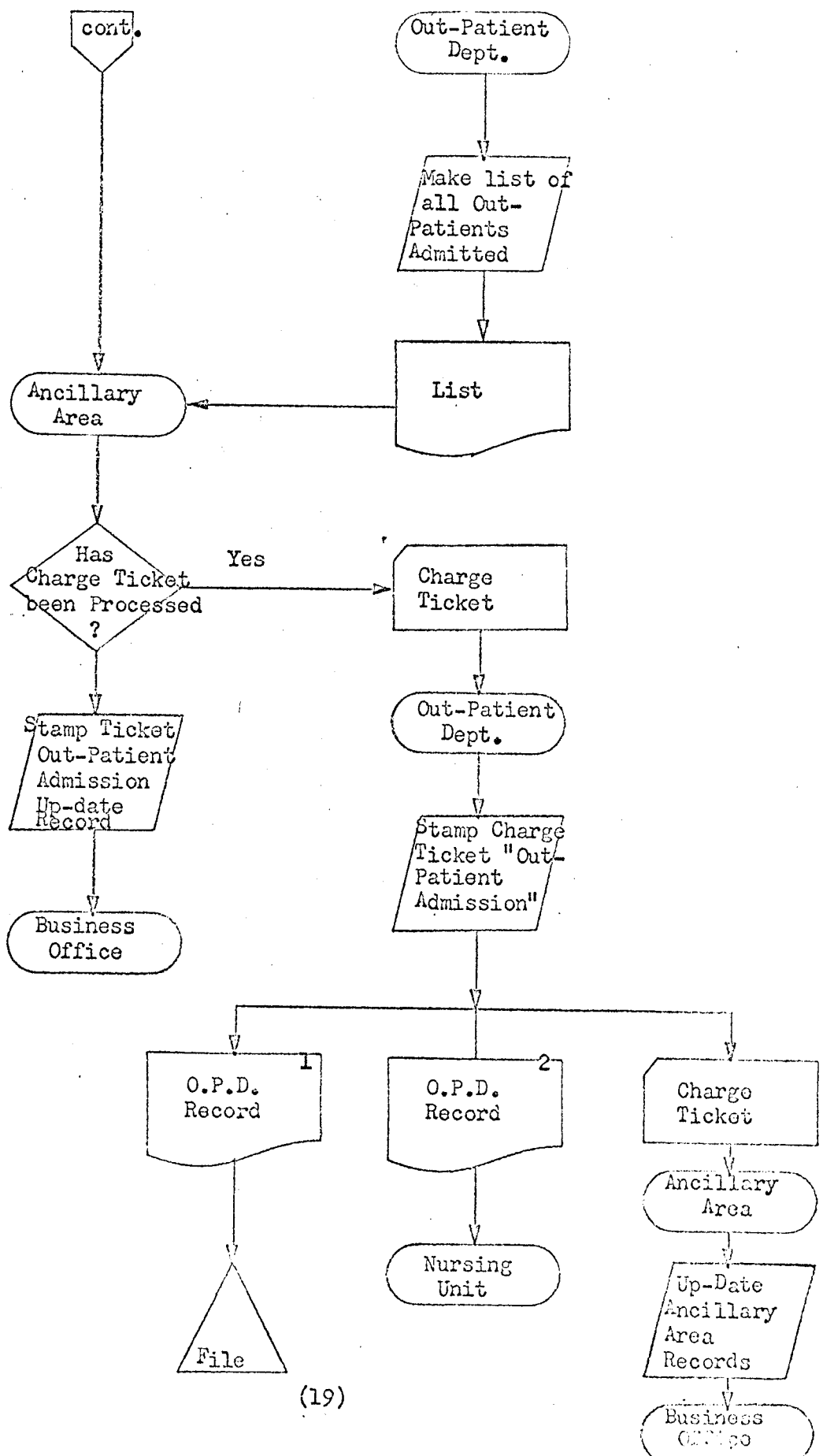


VI. OUT PATIENT DEPARTMENT

The difficulties encountered in the Business Office on charges originated by the Out Patient Department were for those patients who were admitted where the Patient information was hand-written on the charge tickets, and where the placing of many ancillary department charges was done on one charge ticket. The hand-written information cannot be overcome due to the fact that an addressograph plate is not available at this time. However, the combining of Ancillary charges into one charge ticket can be avoided by restatement of policy that only the charges incurred in one Ancillary Area are to be placed on that Department's charge ticket.

Flow Diagram For Out-Patient Dept.





VII. X-RAY

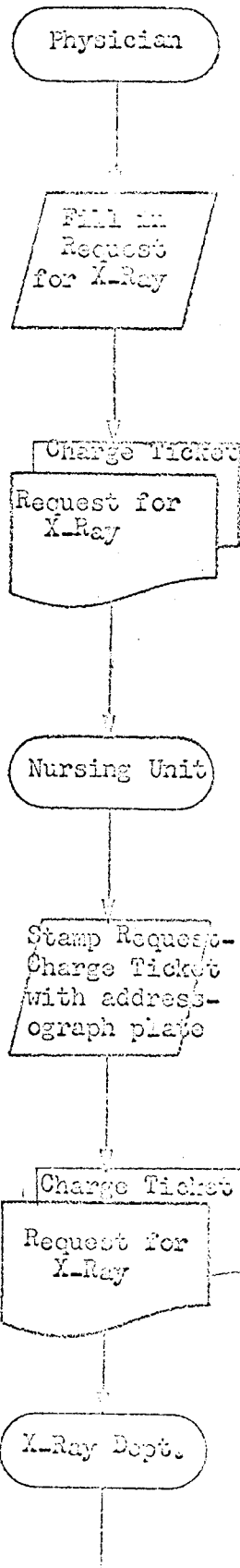
When the X-Ray request forms (Figure #8) are sent down from the nursing unit, approximately 20% are not accompanied by the addressograph-plate-stamped charge ticket. In addition, the various types of special procedures that are presently available in the X-Ray Department are not always written legibly or known to the requesting physician.

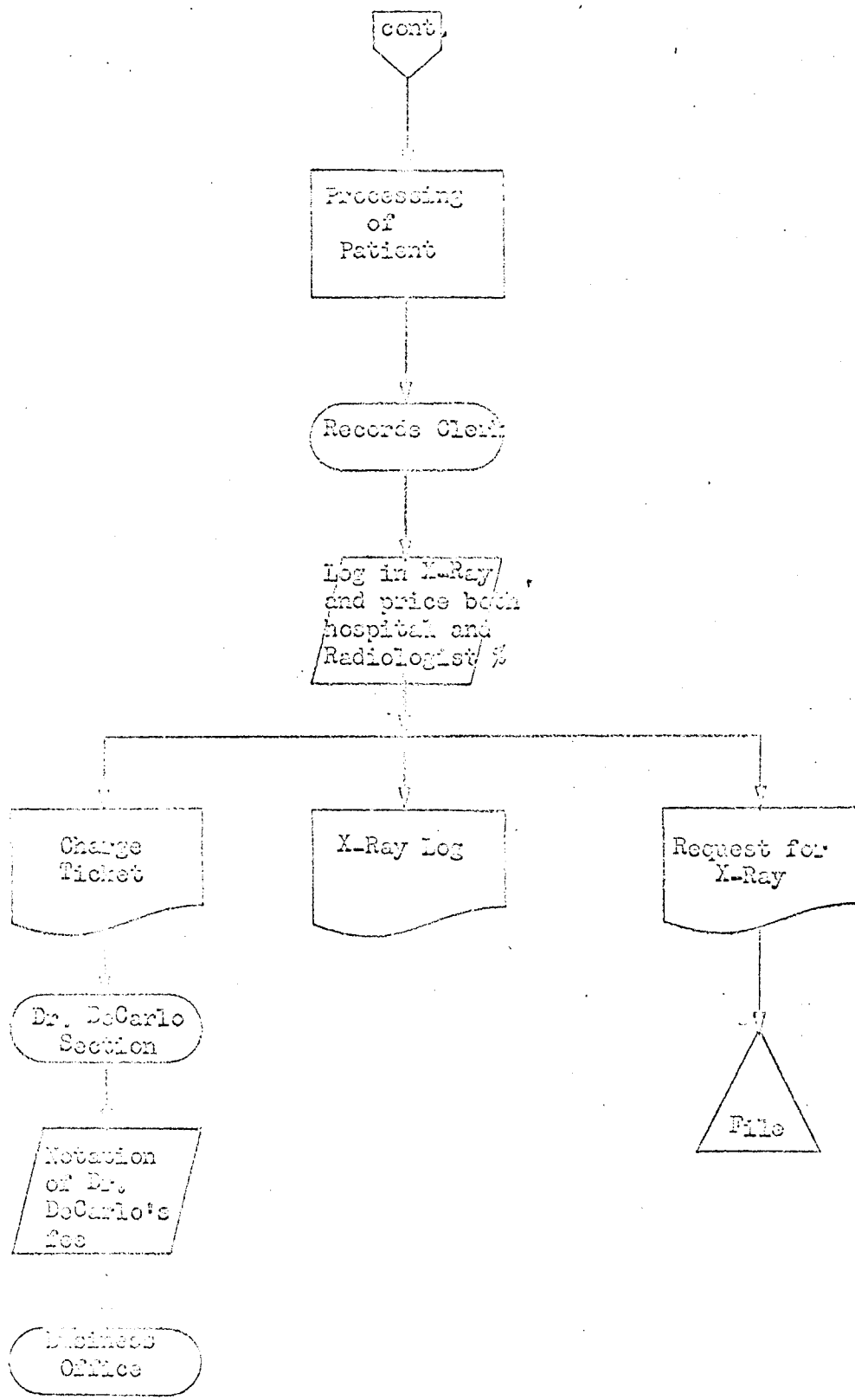
To eliminate the need for interpretations by the Business Office of patient information and the X-Ray Department of the X-Ray Procedure desired, a combined request form and charge ticket (Figure #7) was designed.

The new request form includes all the previously specified X-Ray examinations while also incorporating the following Special Procedures: Aortogram (ABD); Aortogram (Thoracic); Arteriogram (Carotid); Arteriogram (Brachial); Arteriogram (Femoral); Cystogram; Hysterogram; Mammogram; Myelogram; Pelvimetry; Pneumoencephalogram; Tomogram; and Venogram. It is hoped that by specifying these special examinations, the X-Ray Department will make known to the physician what is available and at the same time make faster processing in the X-Ray Department and Business Office a reality.

The only procedure change that will have to take place will be the elimination of stamping a charge ticket by the nursing unit since the stamping of the X-Ray request also causes the charge ticket to be stamped at the same time.

Flow Diagram For X-Ray





X-RAY EXAMINATION REQUEST

FIGURE #7

ST. JOSEPH
HOSPITAL

REQUEST
FOR
X-RAY

CHECK APPROPRIATE X-RAY PROCEDURES	<input checked="" type="checkbox"/> ABDOMEN		<input type="checkbox"/> KNEE	
	<input type="checkbox"/> ANKLE		<input type="checkbox"/> LUMBAL SPINE	
	<input type="checkbox"/> BARIUM ENEMA		<input type="checkbox"/> MASTOIDS	
	<input type="checkbox"/> BRACHIOGRAM		<input type="checkbox"/> PELVIS	
	<input type="checkbox"/> CERVICAL SPINE		<input type="checkbox"/> RIBS	
	<input type="checkbox"/> CHEST		<input type="checkbox"/> SHOULDER	
	<input type="checkbox"/> CROWN		<input type="checkbox"/> SINUSES	
	<input type="checkbox"/> FACIAL BONES		<input type="checkbox"/> SKULL	
	<input type="checkbox"/> FEMUR		<input type="checkbox"/> THORACIC SPINE	
	<input type="checkbox"/> FOOT		<input type="checkbox"/> TIBIA	
	<input type="checkbox"/> FINGER		<input type="checkbox"/> TOES	
	<input type="checkbox"/> GASTROINTESTINAL		<input type="checkbox"/> WRIST	
	<input type="checkbox"/> HAND			
	<input type="checkbox"/> HIP			
	<input type="checkbox"/> I.V. GALLBLADDER			
	<input type="checkbox"/> I.V. PYELOGRAM			

DATE: _____

<input type="checkbox"/> RIGHT	<input type="checkbox"/> OBLIQUE
<input type="checkbox"/> LEFT	<input type="checkbox"/> LATERAL
<input type="checkbox"/> AP	<input type="checkbox"/> SUPINE
<input type="checkbox"/> PA	<input type="checkbox"/> UPRIGHT

ORDERED BY: _____

TOTAL 000.00

CLINICAL REPORT AND PROVISIONAL DIAGNOSIS:

_____ CODE: _____

NP _____ OC _____ YEAR: _____

DATE: _____ CL.# _____

LOCATION _____

NAME _____

ADDRESS _____

AGE _____ SEX _____ RACE _____

DOCTOR _____

REQUESTING PHYSICIAN _____

PHYSICIAN'S COMMENTS

SPECIAL PROCEDURES: INDICATE PROCEDURE NUMBER ABOVE IN SECTION MARKED "OTHER"

- | | |
|--|---|
| <ul style="list-style-type: none"> 1. AORTOGRAM (ABD) 2. AORTOGRAM (THORACIC) 3. ARTERIOGRAM (CAROTID) 4. ARTERIOGRAM (BRACHIAL) 5. ARTERIOGRAM (FEMORAL) 6. CYSTOGRAM 7. HYSTEROGRAM | <ul style="list-style-type: none"> 8. MAMMOGRAM 9. MYELOGRAM 10. PELVIMETRY 11. PNEUMOENCEPHALOGRAPH 12. TOMOGRAM 13. VENOGRAM 14. |
|--|---|

NUMBER OF FILMS

14 x 17 _____

11 x 14 _____

10 x 12 _____

8 x 10 _____

TECHNICIAN: _____

SEE OTHER SIDE FOR PREPARATION
(23)

ST. JOSEPH HOSPITAL
REQUEST FOR X-RAY EXAMINATION

FIGURE #8

CODE:

NP OC Year:

DATE CL. #

CLINICAL REPORT AND PROVISIONAL DIAGNOSIS

LOCATION

NAME

ADDRESS

AGE SEX RACE

DOCTOR

CIRCLE OR WRITE SPECIFICALLY EXAM(S) AND VIEW(S) REQUESTED

I.V. PYELOGRAM	MASTOIDS	KNEE	RIGHT	LEFT		
CHOLECYSTOGRAM	CERVICAL SPINE	ANKLE	AP	PA	OBLIQUE	LATERAL
I.V. GALLBLADDER	THORACIC SPINE	FOOT	SUPINE	UPRIGHT		
BARIUM ENEMA	LUMBAR SPINE	ABDOMEN	<u>OTHER:</u>			
GASTRODUODENAL	SHOULDER	FEMUR				
CHEST	ELBOW	RIBS				
BRONCHOGRAM	WRIST	TIBIA				
SKULL	HAND	HIP				
SINUSES	PELVIS	FACIAL BONES				
FINGER	TOES	REQUESTING PHYSICIAN _____				

PART	PROJ.	CMS.	KV	MAS	DIST.	GRID	# OF FILMS
							14 x 17
							11 x 14
							10 x 12
							8 x 10

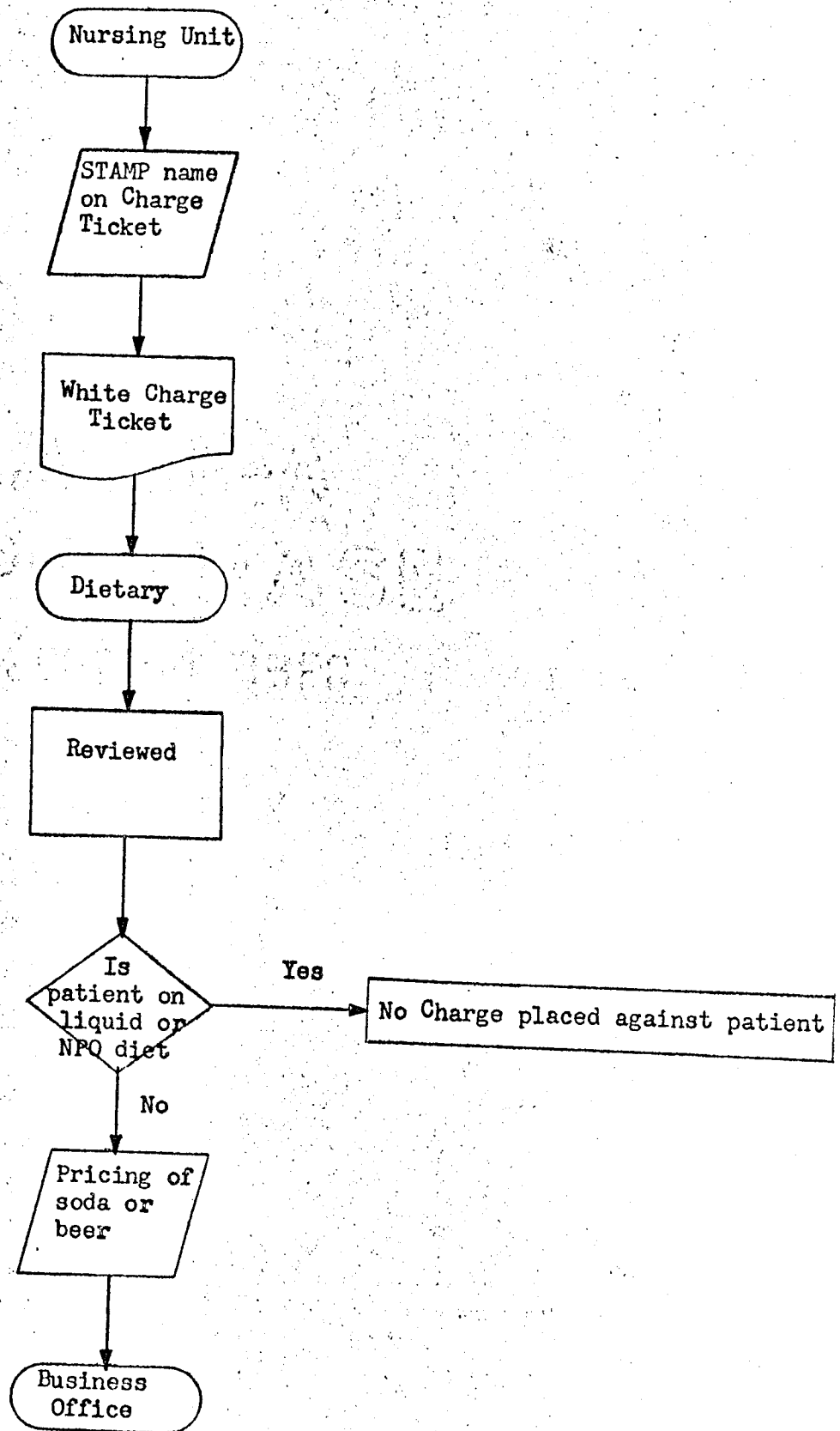
(SEE OTHER SIDE FOR PREPARATION)

TECHNICIAN

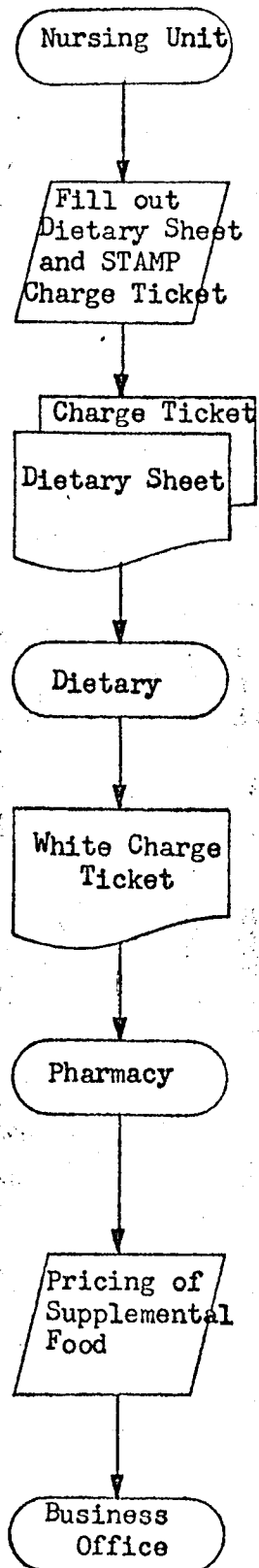
VIII. DIETARY

In review of the Dietary Department charge tickets generated (Beer, soda and supplemental food) the only problem created is with the hand-written Patient Information on charge tickets for Supplement Food (Meretine etc.). This could be avoided by having the Nursing Units send down an addressograph-plate-stamped charge ticket (Figure #6) with the Dietary Change sheets which indicate a supplemental food of Meretine or similar products.

Flow Diagram For Dietary (Beer & Soda)

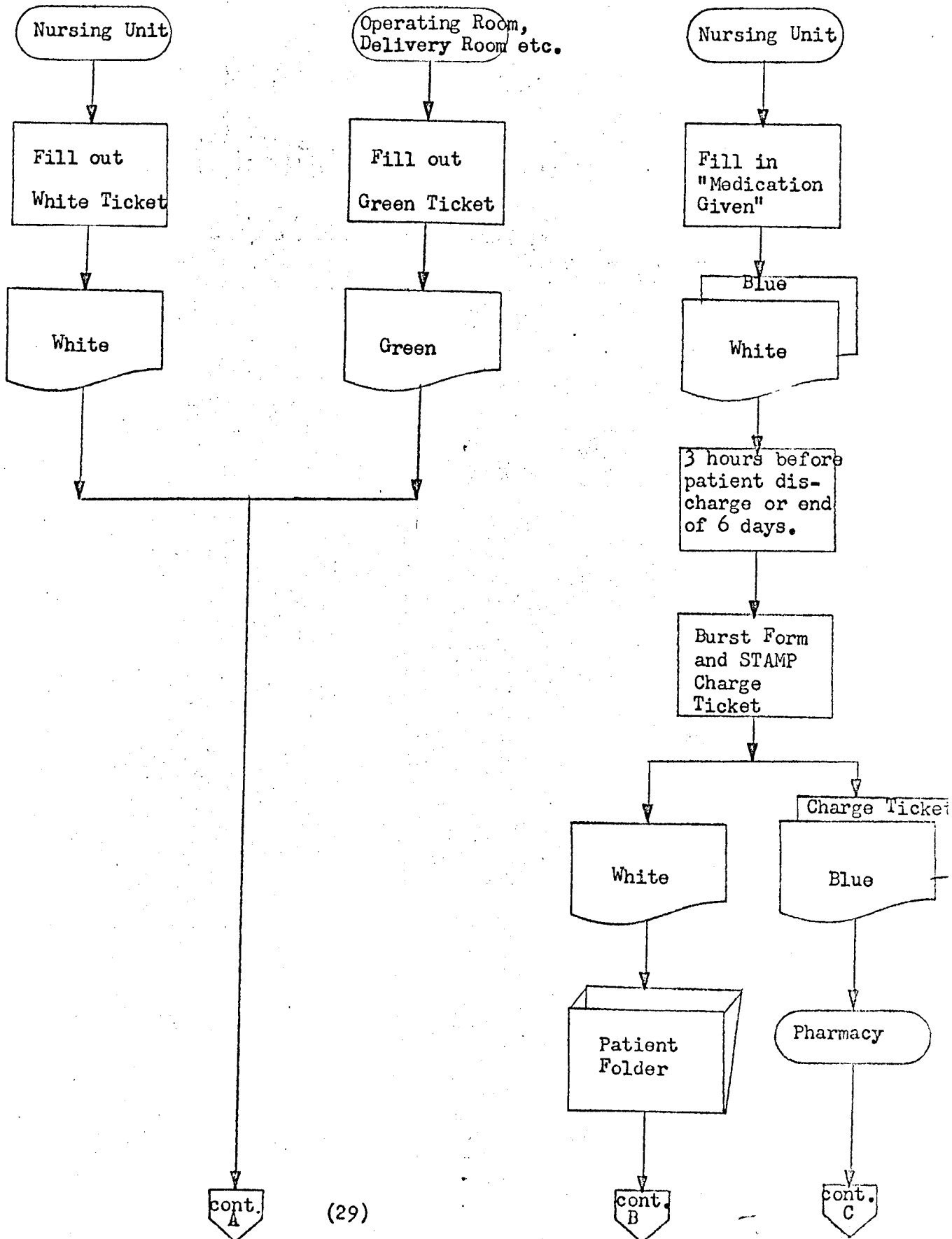


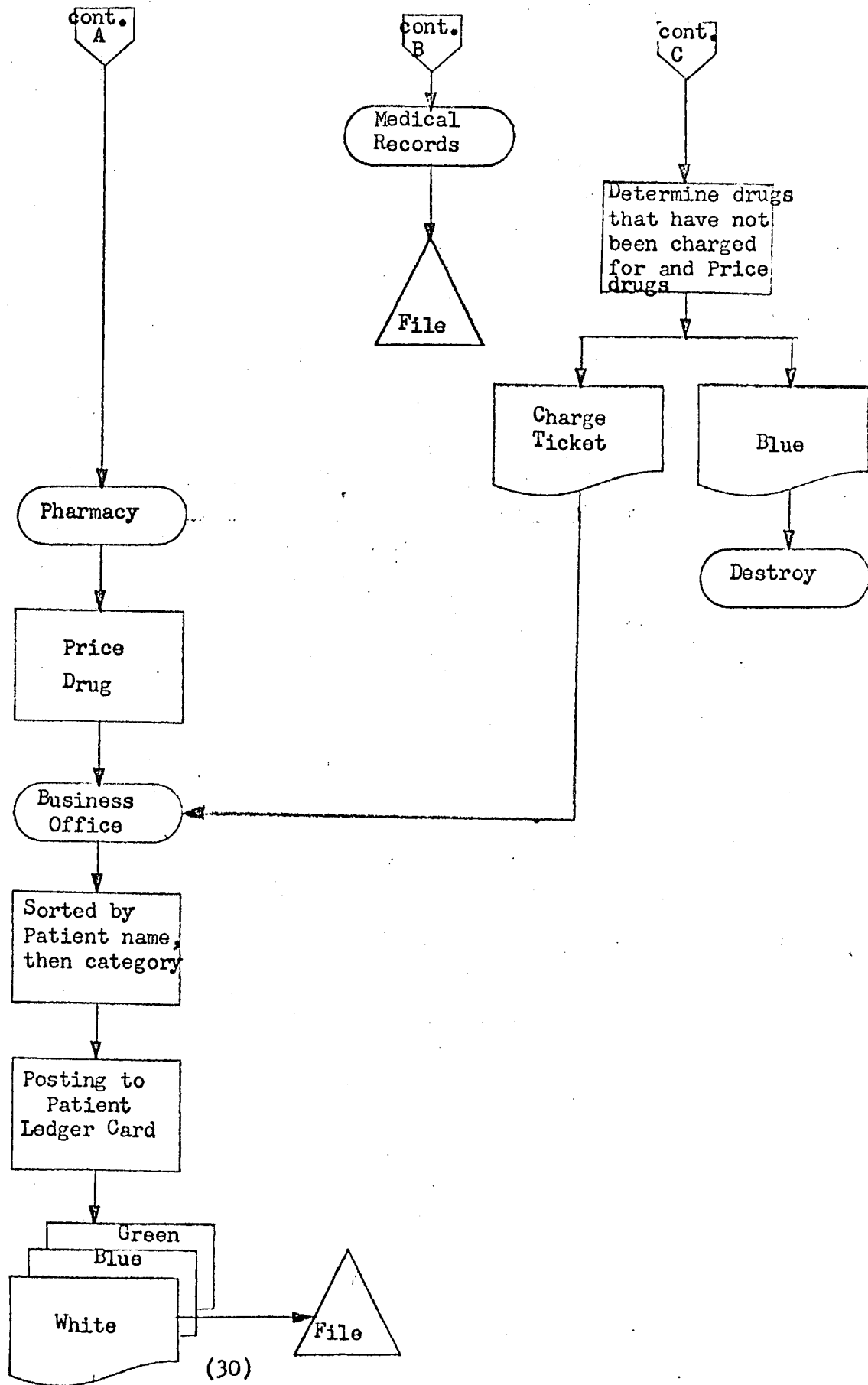
Flow Diagram For Dietary (Supplemental Food)



IX. PHARMACY

The charge tickets generated for use by the Pharmacy are originated in many areas, the largest volume of which come from the Nursing Units, Operating Room, and the Pharmacy. There is no problem with the Nursing Units or Operating Room in that these charge tickets are stamped with the addressograph plate. However, the third area, Pharmacy, is presently using the bottom section of the Blue Copy of the Medication sheet (Figure #9) which has all medications given to a patient. From this the Pharmacy determines Drugs for which charges have not been made and determines a charge to the patients, at which time the bottom part is torn off and sent to the Business Office for processing. It is recommended that this procedure be modified so that when this sheet is sent down from the Nursing Unit, a general use charge ticket (Figure #6) be stamped and sent along for notation of total charges by the Pharmacy and processing in Business Office. This will lend itself to the proposed standardization of forms and will result in more efficient processing within the Business Office.





X. NURSERY

The difficulty encountered in the Business Office as a result of charges originated in the Nursery is that the new born babies do not have an addressograph-plate made up for them. Therefore any charges incurred by the new born would be hand-written and lead to possible problems in the Business Office. Since charges incurred by new borns are placed on the mother's ledger card, insufficient charge ticket information could produce a problem of associating the charges incurred with the proper Mother's ledger card.

Another problem is the incorrect charging by the Business Office if after the Baby is placed in the premature Nursery, and the Business Office is not notified of this condition.

These above-stated problems are further compounded if the Baby remains after the mother is discharged since at the time the Baby becomes an inpatient; and all charges are hand-written as generated by the Baby and posted to its ledger card. The proposed solution to these problems is the issuance by the Nursery of the New Born Nursery Form (Figure #10), to the Business Office and to the Admitting Department to notify them of the arrival of the new borns and have addressograph-plates made up for the Baby with the following information to be used on all charge tickets generated by the Baby. This will eliminate all misinterpretation by the Business Office and at the same time alert them to the presence of a Baby that should be discharged with the mother. If the baby remains after the

mother is discharged, they would create a ledger card for the baby and all charges would be generated using the baby's addressograph-plate.

Flow Diagram For New Born Nursery Form

