FLUID & BLOOD SERVICE OF 12TH GENERAL HOSPITAL

Organization:

1. A central system handling all fluid, blood and plasma.
2. May be located in central supply area, operating area, laboratory or in a specific area as may seem indicated by equipment or necessity of the physical plant.
3. Basic requirements are:
   a. Speed and simplicity in handling blood and fluids.
   b. Ability to expand or contract as circumstances demand.
   c. A specific unit that may be placed in any part of the hospital and operate efficiently.
   d. Must not handle contaminated apparatus or be near any source of bacterial contamination.

4. Divisions of departments:
   a. Storage:
      Function: To keep an orderly store of all fluids, blood or plasma available for immediate use.
      Equipment: Shelves.
      Ice box (if we have fresh plasma or blood). Daily inventory records.

   b. Receiving:
      Function: Keep a list of donors with their type and serology.
      File records of cases receiving blood, plasma, or fluids.
      Handle counter for dispensing fluids, etc., and keep track of apparatus that is out.
      Equipment: Files.

   c. Sterilization department:
      Function: Keep all tubing, needles, bottles, etc., physiologically clean.
      Sterilize gowns, gloves and apparatus necessary for drawing blood.
      Prepare solutions for I.V. or subcutaneous use.
      Prepare citrate solution and transfusion bottles.
      Prepare sets for "cutting down" vessels.
      Equipment: Bottles or flasks with rubber 2-hole stoppers.
      Soft rubber tubing.
      Needles: 1/2 in. - 16 to 22 gage for I.V.
      3 in. - 22 to 27 gage for subcutaneous use
      Hypo = for novocaine solution when cutting down on veins.
      Cannula = for cutting down on veins.

Gowns, caps, rubber gloves and folders, masks, towels, tables and wooden boards for wrapping tubing. To sterilize medicine glasses, scalpels, etc. Scissors, curved Kelly hemostats, needle holders, curved cutting, and round needles. 2 cc. syringes, small towel clips.

5. Large funnel - glass
   Filter paper.
   Berkefeld filters if available.
   Triple distillation apparatus.
Autoclave - in department or immediately available.

Brushes for tubing and other glassware.

Running water - hot and cold.

d. Laboratory Department:

Function: To do typing, cross matching and serology.

Prepare plasma from blood.

Section for drawing blood:

Function: Draw blood for indirect transfusions, and for preparation of plasma.

Equipment: Simple operating table, sterile equipment, sterile arm boards, sterile tubing and clamp, sterile tubes, saline, and citrate solution (sterile).

Note: Direct transfusion will be scheduled and done in O.R. as any other operation by medical officer.

5. Personnel:

One enlisted man with 500 rating to be in charge and run the entire department, including typing, serology and drawing and storing blood. Preferably with primary training in laboratory.

One enlisted assistant, preferably with primary training in operating room.

Supervisory committee of officers:

1. Appointed from surgery - one
2. Appointed from medical - one
3. Appointed from laboratory - one

6. Fluid and transfusion record and operation of department:

13TH GENERAL HOSPITAL

FLUID AND TRANSFUSION RECORD

Date: 12/11/1915

Recipient's name: [illegible]

Diagnosis of case: [illegible]

ASN: [illegible]

Rank: [illegible]

Co. Reg. A - Type: [illegible]

500 cc. = 1 unit. Designate fluid in unit.

Whole bld. Citrated bld. Plasma

Isocitrinate 5% glucose in saline

5% glucose sol. 10% glucose sol. has saline

Miscellaneous, describe: [illegible]

Reaction: [illegible]

Officer Requesting: [illegible]

If transfusion fill in this section: [illegible]

Type of recipient Type of donor: [illegible]

Cross typing result: [illegible]

History of allergy: [illegible]
The above record is initiated by person requesting fluid, plasma, or blood for patient and signed immediately by M.O. if for transfusion or plasma. Signature of nurse on ward will suffice if other fluids are drawn.

On seventh day after plasma or blood transfusion, the fluid depot will check the charts of the patients for delayed reactions.

WARD RULES FOR FLUIDS AND TRANSFUSIONS

1. All fluids, plasma and blood (with exception of direct transfusion) will be obtained from central fluid service depot with proper form.

2. Direct transfusions will be scheduled as operative procedures in the Operating Room in the usual manner.

3. All patients receiving blood or plasma will be under constant observation of a designated ward attendant until the transfusion is completed. The shock ward may make an exception to this rule.

4. Fluids and blood or plasma transfusions will always be ordered over the signature of the Ward Officer.

5. Unless otherwise ordered in writing by the Ward Officer, fluids, plasma or blood will not be run faster than 100 cc/minute or slower than 30 cc/minute.

6. Unless otherwise ordered by Ward Officer, fluids and plasma will be given at room temperature.

7. Not over one flask of 1000 cc. of saline solution will be given in each 24 hour period unless specifically ordered by the Ward Officer.

8. It is preferable that an 18 or 19 gage needle be used when plasma or blood is given intravenously or it is possible that it will immediately follow the other fluids already started.
9. An arm board or other device for immobilization will be used when the fluid is run into a vein immediately overlying a joint.

10. Veins will be used in the following preferable sequence depending upon their availability: forearm, dorsum of hand, cubital fossa, anterior to medial malleolus. If unsuccessful in these, the ward officer will start the fluids.

11. If unsuccessful in two attempts to start fluid, the ward attendant or nurse will refer the case to the ward officer and get equipment for "cutting down" if it seems necessary.

12. All equipment for giving fluids, plasma or blood will be returned immediately to the fluid service depot with the properly completed form immediately after the flask is empty.

13. Subcutaneous fluids will be given by the ward medical officer. Necessary equipment will come from fluid service depot.

14. Subcutaneous fluids will only be initiated by order of ward officer.

15. Subcutaneous fluids will not be run so fast that a swollen, hard, ischemic area develops underlying the needle.

This is a typed document on a typewriter. The text is legible and contains instructions for administering fluids and plasma. The document is titled "Subcutaneous Fluid Administration."