Policy Title: ABO Blood Type/Vital Data Verification and Organ Recovery/Receipt Policy

Policy Summary: It is the policy of Maine Medical Center (MMC) and the Maine Transplant Program to ensure the safety and compatibility of our transplant donors and recipients by verifying and documenting blood type at multiple and defined points in the donation and transplantation continuum.

Policy: In accordance with Centers for Medicare and Medicaid Services (CMS) Conditions of Participation and the United Network for Organ Sharing (UNOS) Policies, ABO and other vital information will be verified during candidate and living donor registration, prior to living donor organ recovery, prior to organ receipt in the operating room (if recipient surgery begins prior to organ receipt in the operating room), and upon organ receipt in the operating room. All verification and documentation will be completed electronically in the patient's medical record. As such, electronic entry in the medical record will be performed via protected password with entry serving as electronic signature of the physician and other qualified or licensed health care professionals where needed.

Definitions:

- Qualified Health Care Professional - a Registered Nurse Coordinator who has completed training and orientation in the process of ABO Determination and Reporting
- Licensed Health Care Professional- a RN, NP, PA, CRNA, or Physician
- Source Document - an original record of results, or a photocopy or digital copy of results
- OPTN- Organ Procurement and Transplantation Network (national)
- Intended Incompatible- donor and candidate primary blood types that are biologically incompatible, but transplantation is permissible according to OPTN Policy

Procedures:

1. **<u>Candidate and Living Donor Blood Type Determination and Reporting</u>**

    a. As part of the evaluation process for candidates or living donors, a Maine Transplant Program physician orders two independent blood tests that are drawn on separate occasions, have different collection times, and are submitted as separate samples. Samples may be sent to two different laboratories for testing.
    b. All blood types are determined by a tube testing method. ABO blood grouping is performed by both a forward and reverse typing methodology. The forward and reverse blood type results need to be consistent in order to report the final blood type. If there is a discrepancy between the forward and the reverse blood type results, the cause of discrepancy will be determined prior to reporting a final blood type.

c. Resolution of indeterminate results will require review of forward and reverse typing results, review of transfusion history if applicable, and any medical conditions that may affect results.
d. If the discrepancy cannot be resolved, the Director of the Blood Bank will be consulted for further direction.
e. Two different Qualified Health Care Professionals will independently review results and verify ABO blood type for the candidate or donor. Both reviewers will use all known available blood type determination source documents in the medical record to verify that the documents contain blood type results for the candidate or donor, indicate the same ABO on the test results, and match the result reported to the OPTN contractor. Source documents utilized may include a scanned copy of the original lab results report. If the results are conflicting or indeterminate, the process outlined above will be followed.
f. Qualified Health Care Professionals will be considered competent to complete the ABO Determination and Reporting process upon completion of their RN Coordinator orientation on this process. Although blood subtype is not routinely used for ensuring compatibility, if it is used for living donors, the same process used for blood type determination and reporting will be followed. If subtyping is performed and pre-red blood cell transfusions samples are available, subtyping will be completed in accordance with UNOS Policy 14.5.B. All subtypes reported must be from two separate tests indicating the same result. If there are conflicting subtype results, the results would not be reported to OPTN and compatibility would be based on primary blood type.
g. Living donor ABO determination is completed prior to the generation of the UNOS living donor ID. Candidate ABO determination is completed prior to registration on the UNOS Waiting List.
h. The Qualified Health Professional will document in the patient medical record that ABO determination and reporting was completed according to the program's policy and UNOS requirements. If subtyping is used, the Qualified Health Professional will document that subtyping was completed according to the same requirements.

2. <u>Organ Check In</u>

a. An organ check in will be completed any time an organ is recovered outside of the MMC. This check in will be completed at the Operating Room Front Desk upon arrival of the organ and prior to opening of the external transport container. The UNOS TransNet system will be utilized to perform Organ Check In.
b. The on call RN Coordinator will alert the Operating Room prior to organ arrival of specific information related to the organ arriving: Donor ID, organ type, and laterality.
c. Operating Room RNs and Unit Secretaries are authorized to check in organs arriving from outside of MMC.
d. The OPTN external organ label will be used to confirm that the label contains the expected donor ID, organ type, and laterality. **IF ANY INFORMATION CONFLICTS WITH THE INFORMATION PROVIDED BY THE ON CALL RN COORDINATOR, THE OPERATING ROOM RN**

OR UNIT SECRETARY CHECKING IN THE ORGAN WILL CONTACT THE RN COORDINATOR ON CALL IMMEDIATELY. After business hours, the RN Coordinator on call can be reached via the After Hours Call Service by calling the main Transplant Clinic number, 207-662-7180 and requesting to speak to the Transplant Coordinator on call.

e. The RN Coordinator will contact the New England Donor Services and Surgeon on call within one hour to determine a course of action.
f. Documentation of the organ check in will be completed and available within the TransNet system.
g. Operating Room RNs and Unit Secretaries will be trained and a checklist maintained in the Operating Room regarding the use of TransNet and process for organ check in.

3. **Deceased and Living Donor Transplants: Recipient Pre –Transplant Verification upon Organ Receipt in the Operating Room**

a. The ABO determination of the deceased donor is the responsibility of the host OPO and completed in accordance with UNOS Policy 2.6. Deceased donor blood samples are analyzed at the NorDx HLA Laboratory where ABO typing and crossmatching are completed in accordance with the *Joint Operating Policy for the Maine Transplant Program and NorDx HLA Laboratory*.
b. The results of this testing are documented on the *Transplant Final Deceased Donor Crossmatch Results Report* which is emailed as a PDF document to the Surgeon and RN Coordinator on call immediately upon completion. These results are utilized with other source documents to verify blood type of the donor and compatibility.
c. At the time of organ receipt in the operating room from either a deceased or living donor, pre transplant verification is performed. This verification is completed by both the Transplant Surgeon and another Licensed Healthcare Professional and documented in the EMR
d. The intended recipient must be present in the Operating Room for the verification to occur. The verification will occur after the organ arrives in the Operating Room, but prior to anastomosis. The recipient arrival in the operating room, organ arrival, and anastomosis times are documented in the EMR by the circulating RN.

The pre transplant verification will include the following:

- Donor ID for deceased donor organs will be verified using the external and internal organ package labels
- Donor ID for living donor organs will be verified using the UNOS Living Donor Feedback Form which will accompany the organ to the recipient operating room
- Organ and laterality will be verified by the organ received

- Donor blood type and subtype (if used for allocation) for deceased donor organs will be verified using the documents in the organ container and the HLA Transplant Final Deceased Donor Crossmatch Results Report document
- Donor blood type and subtype (if used for allocation) for living donor organs will be verified using the UNOS Living Donor Feedback Form which will accompany the organ to the recipient operating room
- Recipient unique identifier will be verified using the MRN on the recipient identification band
- Recipient blood type will be verified using the recipient medical record source documentation: the Blood Bank ABO Report in the EMR.
- Verification that the donor and recipient are compatible will be completed using the HLA Transplant Final Deceased Donor Crossmatch Results Report Document and the recipient medical record (Blood Bank ABO Report) for deceased donor organs. For living donor organs, verification of compatibility will be completed using the UNOS Living Donor Feedback form and recipient medical record (Blood Bank ABO Report). The surgeon will attest compatibility in the medical record following verification of all of the above.
- The surgeon will attest that the correct organ has been identified for the correct recipient in the medical record following verification of donor ID, organ, and recipient unique identifier.
- The surgeon will document in the medical record that this verification was completed according to hospital protocol and UNOS requirements.

4. <u>Living Donor Transplants: Pre-Transplant Verification of the Recipient Prior to Organ Receipt</u>

   a. If the recipient surgery will begin prior to the organ recipient in the recipient operating room, a pre-transplant verification is performed. This verification is documented in the EMR by two licensed health care professionals, the Transplant Surgeon and another Licensed Healthcare Professional.
   b. The intended recipient must be present in the operating room for the verification to occur. The verification will occur either prior to induction of general anesthesia **or** prior to incision if the recipient has been receiving continuous sedation. The recipient arrival in the operating room and incision time will be documented in the EMR by the circulating RN. General anesthesia induction time will be recorded by Anesthesia in the anesthesia record; the induction time may be different than the anesthesia start time.

The pre-transplant verification will include the following:

- Expected donor ID will be verified using the OPTN: Living Donor Feedback Form
- Expected organ and laterality will be verified using the OPTN: Living Donor Feedback Form
- Expected donor blood type and subtype (if used for allocation) will be verified using the OPTN: Living Donor Feedback Form
- Recipient unique identifier will be verified using the MRN on the recipient identification band

- Recipient blood type will be verified using the recipient medical record source documentation: Blood Bank ABO Report
- Verification that the donor and recipient are compatible will be completed using the OPTN information (Living Donor Feedback Form), and the recipient medical record (Blood Bank ABO Report). The surgeon will attest compatibility in the medical record following verification of donor and recipient blood types. .
- The surgeon will document in the medical record that this verification was completed according to hospital protocol and UNOS requirements.

5. **<u>Living Donor Transplants: Living Donor Pre-Recovery Verification</u>**

   a. Prior to organ recovery from the living donor, a pre-recovery ABO verification will be performed. This verification is completed by both the recovery Surgeon and another licensed healthcare professional and documented in the EMR.
   b. The verification will be performed prior to the induction of general anesthesia on the day of the living donor recovery. General anesthesia induction time will be recorded by Anesthesia in the anesthesia record; the induction time may be different than the anesthesia start time.

The pre-recovery verification will include the following:

- Donor ID will be verified using the donor name and MRN on the donor identification band and the OPTN Living Donor Feedback Form.
- Organ type and laterality will be verified using the OPTN: Living Donor Feedback Form
- Donor blood type and subtype (if used) will be verified using source documents in the donor medical record: Blood Bank ABO Report.
- Intended recipient unique identifier will be verified using the recipient medical record/medical record number
- Intended recipient blood type will be verified using the recipient medical record: Blood Bank ABO Report
- Verification that the donor and intended recipient are compatible will be completed using the OPTN (Living Donor Feedback Form), and the recipient medical record (Blood Bank ABO Report). The surgeon will attest compatibility in the medical record following verification of both sources of information.
- The surgeon will attest that the correct donor organ has been identified for the correct intended recipient in the medical record following verification of donor ID, organ, and recipient unique identifier.
- The surgeon will document in the medical record that this verification was completed according to hospital protocol and UNOS requirements.

Reference:

Policy 1: Administrative Rules and Definitions

Policy 2: Deceased Donor Organ Procurement

Policy 3: Candidate Registrations, Modifications, and Removals

Policy 5: Organ Offers, Acceptance, and verification

Policy 14: Living Donation

CMS 482.92 Condition of Participation: Organ Recovery and Receipt

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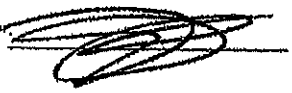
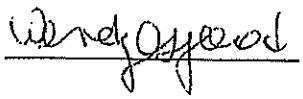
Sponsoring Director:  Date: 1/4/21

VP/SVP Approval:  Date: 1/21/21