Getting paid when you do the computer crossmatch procedure

A member of the e-network forum reported that his laboratory implemented a computerized system that is capable of performing a computer crossmatch. However, before administrative approval is granted to implement the computer crossmatch, his administration is curious to know if other hospitals have successfully implemented a **reimbursement process** for the computer crossmatch.

The following replies were received in response to the above query:

1. One blood banker reported that his facility implemented a computer crossmatch procedure, but has **not been able to charge**. He reports that his facility has substituted a 'type confirmation charge', but he did not mention if payments were received according to this alternative billing approach.
2. Another blood banker reported that he and others have attempted in the past several years to add a CPT code specifically for the computer crossmatch. This has been **denied by AMA and CMS** as there already exists a code to be used when the computer manages patient data (99090-Analysis of clinical data stored in computers). This is the only code that is available for use when an electronic crossmatch is performed and the prospect of a new code looks poor. **CPT 99090 is a non-covered service for outpatients, but would be included as line item of DRG**. Thus, it is not easy to determine if payment is made for each line item, which is why the responding blood banker supports a "special" computer crossmatch code to go with 39X RC for reimbursement analysis and completeness. The responding blood banker concludes by reporting that this is a topic for the next meeting with CMS on blood issues.

ADDENDA Mar. 27, 2002

3. A blood banker wrote that the **lack of replies regarding the reimbursment for the performance of the computer crossmatch was quite interesting**. His facility, too, finds itself in the midst of such a dilemma as the administration has halted efforts to implement the procedure, citing a significant future loss of generated revenues. The blood banker submitting this addendum wants to learn if **anyone** has any information to assist in the pursuit of the implementation of the procedure?

ADDENDA April 3, 2002

4. **A Canadian blood banker** is curious to learn how big a population base the ~2% of U.S. laboratories who perform a computer-assisted crossmatch serve, compared to the roughly 50% who use an immediate spin crossmatch and the roughly 48% who presumably continue to perform an antiglobulin crossmatch for patients without detectable alloantibodies. Perhaps the ~2% that use the computer crossmatch are larger facilities that serve a relatively huge population base. As an example, to use fictitious numbers, perhaps the 2% who use the computer crossmatch do the testing for 30% of the US population and the 48% that do the AHG crossmatch serve less than 10% of the population. Does any one know if any study has ever looked at pretransfusion testing practices from this perspective?

ADDENDA April 6, 2002

5. **A blood banker from Michigan** is of the opinion that larger hospitals have tended to adopt the immediate spin crossmatch and smaller hospitals have not. This opinion is based on a paper by Maffei LM et al. (Transfusion 1998). The Michigan blood banker continues by reporting that 7% of their electronic crossmatching is performed for patients who are outpatients. Consequently, they lose the crossmatch fee but gain an ABO confirmation fee for the unit since they had been failing to bill for that previously. For 90% of their patients who are DRG or contract reimbursed, it does not matter if they add a charge for a crossmatch or not. They receive the same reimbursement regardless of the cost to provide the care.
6. **Another blood banker from Michigan** wrote that as he recalls, Ira Shulman, MD in collaboration with Maffei, Johnson, and Steiner, published the very data that the Canadian correspondent is

seeking (same reference as in 5., above). In Table 7 of their paper the number of institutions performing an IS crossmatch is shown relative to bed size. When you calculate the number as a percentage of hospitals in each bed size group there is a clear indication that larger hospitals are more progressive than smaller facilities. Only 29% of small hospitals (bed size 1-99) do an immediate spin crossmatch, whereas an immediate spin crossmatch is done in 80% of hospitals with a bed size >500. The Michigan blood banker comments that the data regarding electronic crossmatching are too small to be significant, but he strongly suspects there is an association with bed size.

Editor's note: The data mentioned above which were published in Transfusion are now more than FOUR years old, and the FDA has relaxed the rules to implement the computer crossmatch. I agree that it is likely that the largest facilities will probably favor implementing an electronic crossmatch (unless they will lose money doing so), and anticipate that the College of American Pathologists (CAP) will repeat a survey to collect current data on the use of the electronic crossmatch, the immediate spin crossmatch and the antiglobulin crossmatch.

Please submit comments to the e-Network Forum.

Ira A. Shulman, MD
CBBS e-Network Forum Editor & Moderator

Posted: February 10, 2002

Addenda: Mar. 27, April 3 & 6, 2002

Links Updated: June 18, 2002, Jan. 29 & Nov. 15, 2003

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Reimbursement for the computer crossmatch procedure - revisited

A blood banker from Missouri reports that her institution is considering implementation of an electronic crossmatch, but concerns over lost revenue are pushing the process backwards. Her hospital uses Cerner as their Lab Information System. She wonders if any colleague has successfully implemented the electronic crossmatch procedure and begun billing for it.

In response to the above, the Editor suggests reading the earlier e-Network discussion on this issue.

The following comments have been received.

ADDENDA Nov. 7, 2002

1. **The Editor** has learned that use of the electronic crossmatch is common in some parts of **Canada**. Unfortunately, use of the electronic crossmatch does not seem to be as common in the United States, mainly because reimbursement for the electronic crossmatch is difficult. **Colleagues in the US who have been successful in getting reimbursement are requested to please share their strategy**.

ADDENDA Apr. 20, 2005

2. **A colleague in the state of Georgia** (whose 300-bed hospital transfuses 4000-6000 red cell units per year) reports that they have a C:T ratio of 1.4 and wastage of less than 2% of their blood stocks due to expired or discarded blood components. He reports that they are considering implementing an electronic crossmatch. He is aware that less than 3% of US hospitals currently employ an electronic crossmatch, possibly due to issues that need to be reconciled such as reimbursement (affected by DRGs), actual hospital collectible percentages, and the mix of inpatient/outpatient crossmatches done. He wonders if some of the hospitals that have implemented the electronic crossmatch would be willing to share their strategies used for justifying this conversion?

ADDENDA Apr. 22, 2005

3. **William B. Lockwood, PhD, MD**, (Chair of the AABB Coding & Reimbursement Committee - attribution used with permission), reports that a **request for a reimbursement code** for an electronic crossmatch was submitted to the AMA, and discussions indicate the possibility of a favorable ruling. If a CPT code is actually approved, the code might be available to use as soon as 2006. However, the allowed level of reimbursement is currently unknown.

4. **A blood banker in the Southwest USA** reports that the hospitals in their network use electronic crossmatching, and that a **major benefit of using the electronic crossmatch includes the ability to work more efficiently with limited staffing**. For example, when doing an electronic crossmatch, they do not need to perform an immediate spin crossmatch, which avoids "pulling" segments and making rbc suspensions. She reports that **if a hospital uses productivity measures based on billable tests per FTE, an electronic crossmatch will not be beneficial**, as the test is currently not reimbursable. She was encouraged to hear that Dr Lockwood (see addendum #3 above) thinks that a CPT code may be approved and available for use as soon as 2006, even if the allowed level of reimbursement is currently unknown.

ADDENDA Nov. 17, 2005

5. **The Editor and Moderator** reports that in the 2006 CPT Codes is a **code for the Electronic (Computer) Crossmatch**. The code number is **86923**. This is the first time a CPT Code for the Electronic Crossmatch has been published.

ADDENDA Nov. 21, 2005

6. **According to Suzanne H. Butch, MA, MT(ASCP)SBB at the Blood Bank & Transfusion Service at the University of Michigan** (attribution used with permission) once the new CPT code

for the electronic crossmatch (86923) becomes effective on 1-1-06, one can charge for an electronic crossmatch. However, it would **not be permissible to charge for both an electronic crossmatch and any other type of crossmatch on the donor unit at the same time** you are charging an electronic crossmatch. She acknowledges that if a facility plans to create a new code for an electronic crossmatch in its 'charge master', the facility should be able to include a charge for an electronic crossmatch, based on the actual costs for performing this service in the facility. Ms. Butch cautions that facilities that **had been billing for an ABO or ABO/Rh retyping** in lieu of the ability to charge for an electronic crossmatch **may wish to consider discontinuing this 'retyping' charge as it may be considered a "quality control" test**, and one cannot charge for quality control testing.

ADDENDA Jan. 24, 2006

7. ***Editor's note***: In addition to the new CPT code for the computer crossmatch, there are a few other changes in the CPT codes that might be of interest to those involved in Transfusion Medicine. See attached pdf table derived from the CPT 2006 Professional Edition.

ADDENDA Feb. 13, 2006

8. **A Technical Coordinator at a Blood Bank & Bone Marrow Transplant Lab in Illinois** wonders if it would be appropriate to use CPT (Current Procedural Terminology) **86923 (Electronic Crossmatch) to bill for ABO crossmatching of organs for transplantation**? He reports that their Blood Bank receives solid organs for transplantation (Liver, Kidney, Pancreas, Intestine and Heart) from UNOS (United Network for Organ Sharing) for ABO crossmatching/verification with the intended recipient before delivery to the operating room for transplantation. They **use the computer system** to verify the recipient's ABO (ABO on a current sample) against the ABO on the label of all organs a required by UNOS. A **transplant report form** is generated in the blood bank for each organ as well a **crossmatch tag that is affixed to the organ container** with the crossmatch result as "ABO compatible" or "ABO Incompatible" for transplant.

Please submit comments to the e-Network Forum.

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Ira A. Shulman, MD
CBBS e-Network Forum Editor & Moderator

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Posted: August 29, 2002

Addenda: Nov. 7, 2002; Apr. 20, 22, 25; Nov. 17 & 21, 2005: Jan. 24 & Feb. 13, 2006