



Transfusion Reaction

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on behalf of the Agency for Healthcare Research and Quality





Background

- Transfusion reactions occur when antibodies in the patient's blood react to components in the transfused blood
- Can be life threatening or minor
- Types of transfusion reaction
 - Major types: ABO and Rh
 - Minor types: e.g. Kell, Duffy, Kidd, Lewis, E
- Minor antigens may cause serious or mild reactions, but are uncommon in the general population (major risk factor is prior transfusion therapy)



Preventing transfusion reaction

- Major antibodies (ABO/Rh) routinely screened through type and cross in non-emergent cases
- Minor antibodies are not screened, unless patient has a history of transfusion reaction to one of these minor antibodies
- Failure to screen or faulty screening for major antibodies before non-emergent transfusions is a serious medical error (usually occurs at POC)
 - National Quality Forum Serious Reportable Event
 - AHRQ Patient Safety Indicator
 - CMS Hospital Acquired Condition



Current Coding Structure

- 999.6 ABO incompatibility reaction
 - Index instructs coders to code minor specified blood group antigens (Duffy, E, Kell, Kidd, Lewis, M, N, P, S) to 999.6
- This code combines preventable ABO reactions with those generally considered nonpreventable in most patients
- Record review study (7 cases) by National Association of Children's Hospitals and Related Institutions (NACHRI) in 2008: 2 POA, 4 clearly nonpreventable, 1 uncertain



Proposed coding structure

- 999.6 ABO incompatibility reaction
 - Exclude minor blood group antigens
- Add new code
 - 999.87 “Other specified transfusion reaction”
- Revise 999.89
 - Unspecified transfusion reaction
- Permits tracking of ABO and minor incompatibility reactions separately
- Limits 999.6 to preventable reactions