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| **Project: New Haven Urgent Care Team# 8** | |
|  | **Test Date: 12/9/2021** |
| **Test Case ID#: 19** | **Name(s) of Tester(s): Kevin Le** |
| **Test Description (What are you testing? – you must be specific):**   * **I am testing two foreign keys (FK) for the cardinality numbers that are on the design document. We want to be able to determine whether the relations are capturing the max number of the cardinality.** * **The first foreign key/relationship I will be testing is between the ‘Child’ and ‘Guardian’ tables. Their relationship should have a cardinality of M:N (a child may have multiple guardians, and a guardian may have multiple children).** |  |
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**NOTE: The following information must be provided to be given credit for any test.**

**Test Data (Provide the file name of the script used to insert data, provide a screen capture to reflect data, or provide script here):**

**File name: Data/base.sql, Data/TC19data.sql**

**SQL Query(s) used for testing:**

/\*\*

 \* Expected Result: 2 Records

 \* Actual Result: 2 Records

 \*/

SELECT \*

FROM C4707F21U8.Child c, C4707F21U8.Guardian g

WHERE c.GuardianId = g.GuardianId

    AND g.GuardianId = 1901;

/\*\*

 \* Expected Result: 2 Records

 \* Actual Result: 1 Records

 \*/

SELECT \*

FROM C4707F21U8.Child c, C4707F21U8.Guardian g

WHERE c.GuardianId = g.GuardianId

    AND c.PatientId = 1901;

Discussion/Explanation:

The return value for the first SQL query test passed but the return value for the second did not. In the second SQL query, we expect that there will be two records to return as we attempted to insert two Guardians for a single child.

However, in our design, we had mistakenly implemented the relationship as a 1:N cardinality. This means that a single Guardian is able to be referenced by various Child records, but a single Child record can only reference a single Guardian record, which is not what we want.

In future iterations, we would change the implementation to be an M:N cardinality. This is covered in more detail in the Synopsis document.