Purpose
This document is a brief description of the implementation of this FOIA request.

Background
The following is an extract from the FOIA request:

My definition for referral is "An organization or provider participating in the delivery of health services to the same patient in up to 1 month period, after another organization or provider participated in providing health services to the same patient."

For instance, if a patient with a patient identifier of 111-22-3333 was listed on a claim with a "treatment association" by NPI 3333333333, and then also listed on a claim as being treated 12 days after that date with a "treatment association" by NPI 4444444444. Then 3333333333 would have "referred" the patient to 4444444444.

In order to protect the identity of patients, we would exclude from the report any referral that happened with less than 11 different patients over the course of the year.

What I am calling "treatment association" is any field in the claims database, other than referring NPI, or the NPI for suppliers of durable medical equipment. Essentially, those NPI records that could have participated in the delivery of healthcare services associated with a given claim. These include the following fields, outlined from the data dictionaries available from ResDAC.

Institutional included:
ORGNPINM Organization NPI Number
AT_NPI Claim Attending Physician NPI Number
OP_NPI Claim Operating Physician NPI Number
OT_NPI Claim Other Physician NPI Number

Non-institutional included:
CPO_NPI CPO Organization NPI Number
PRFNPI Carrier Line Performing NPI Number
PRGRPNPI Carrier Line Performing Group NPI Number
ORD_NPI DMERC Claim Ordering Physician NPI Number

Non-institutional excluded:
SUP_NPI DMERC Line Item Supplier NPI Number
RFR_NPI Carrier Claim Refering Physician NPI Number
In the case above if 33 3333333 was any of the non-excluded NPI types above, and then if 4444444444 was on a claim with the same patient identifier afterwards within the same month. And this occurred more than 11 times for different patients in 2010, then one line would be added to the data dump:

3333333333,4444444444

This is a very common way to study referral patterns.

Requirements
The technical requirements are described below.

1. The report will be produced from the Integrated Data Repository (IDR) database, which houses claims from the national Claims History (NCH) database.
2. The report will include claims for calendar year 2010.
3. The report will include these institutional claim types:
   • 10 Medicare HHA Claim
   • 20 Medicare Non-Swing Bed SNF Claim
   • 30 Medicare Swing Bed SNF Claim
   • 40 Medicare Outpatient Claim
   • 50 Medicare Hospice Claim
   • 60 Medicare Inpatient Claim
   • 61 Medicare Inpatient Full Encounter Claim
   • 63 Medicare Advantage (No-Pay) Claims
4. The report will include these non-institutional claim types:
   • 71 Medicare RIC 0 Local Carrier
   • 72 Medicare RIC 0 Local Carrier
   • 81 Medicare RIC M DMERC Non-DMEPOS Claim
   • 82 Medicare RIC M DMERC DMEPOS Claim
5. Institutional provider types will be mapped from NCH types as follows:

<table>
<thead>
<tr>
<th>NCH</th>
<th>IDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization NPI Number (ORGNPINM)</td>
<td>Facility, Payto, Billing</td>
</tr>
<tr>
<td>Claim Attending Physician NPI Number</td>
<td>Attending</td>
</tr>
<tr>
<td>(AT_NPI)</td>
<td></td>
</tr>
<tr>
<td>Claim Operating Physician NPI Number</td>
<td>Operating</td>
</tr>
<tr>
<td>(OP_NPI)</td>
<td></td>
</tr>
<tr>
<td>Claim Other Physician NPI Number</td>
<td>Other</td>
</tr>
<tr>
<td>(OT_NPI)</td>
<td></td>
</tr>
</tbody>
</table>
6. Non-institutional provider types will be mapped from NCH types as follows:

<table>
<thead>
<tr>
<th>NCH</th>
<th>IDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPO Organization NPI Number (CPO_NPI)</td>
<td>Facility, Payto, Billing</td>
</tr>
<tr>
<td>Carrier Line Performing NPI Number (PRFNPI)</td>
<td>Rendering</td>
</tr>
<tr>
<td>Carrier Line Performing Group NPI Number</td>
<td>Rendering</td>
</tr>
<tr>
<td>(PRGRPNPI)</td>
<td></td>
</tr>
<tr>
<td>DMERC Claim Ordering Physician NPI Number</td>
<td>Ordering</td>
</tr>
<tr>
<td>(ORD_NPI)</td>
<td></td>
</tr>
</tbody>
</table>

7. A provider will be counted only once per claim, even if it appears on multiple lines or in multiple roles.
8. A referral relationship is presumed from physician A to physician B when a claim for physician B follows a claim for physician A within 30 days and both claims are for the same beneficiary.
9. Presumed referral relationships based on same-day events will be assigned to the lesser of the two NPIs.
10. Presumed referral relationships based on claims for fewer than eleven distinct beneficiaries will be excluded from the report.
11. The report output will consist of a series of presumed referral relationships expressed as follows: Referring Physician NPI, Referred Physician NPI, Referral Count