

**Interoperability Physician Reporting Workgroup
North American Association of Central Cancer Registries (NAACCR)**

**Counting Individual Physicians and Physician Groups
Reporting Planning Document**

May 2, 2013

Background

Preparing for national implementation of physician cancer reporting via electronic health record records (EHR) requires developing a thorough understanding of the number and types of physician's in your registry catchment area. This can be a challenge, due to the large number of physicians and specialties.

It may also be helpful to identify physicians at the organizational/group or practice level, physicians who are already reporting their cancer cases through existing reporting sources (e.g., hospitals), or which and/or how many physicians are participating in Stage 1 Meaningful Use. Understanding the number of physicians and/or their associated organizational groups/practices is also critical for developing adequate performance measures related to achieving a successful physician cancer reporting initiative.

Counting physicians for cancer surveillance is not an exact science, and this document is intended to be a general guide. For additional assistance, registries may also want to review the "***CDC National Program of Cancer Registries (NPCR) Physician Reporting Guidance***" document.

Data Sources

The North American Association of Central Cancer Registries (NAACCR) External Partnerships Physician Reporting workgroup identified the following data sources for use in counting the number of physicians and/or physician practices, critical to achieving successful physician EHR reporting for both overall reporting and Stage 2 Meaningful Use.

Primary Sources

- **State-level physician licensing boards**—the agencies responsible for licensing and regulating physicians. These agencies can often provide a data set that includes all licensed physicians for a state, and include information, such as their name, address, license number, National Provider Identification (NPI) number, and practice.

- **Commercial databases**—with detailed physician information, examples include *WishList* or *Thompson Reuters* (see example). Physician data may be obtained from these purchased databases that offer more detailed longitudinal individual record level physician data from state physician licensure boards. These data are typically updated on a quarterly basis.
- **National Plan and Provider Enumeration System (NPPES)**—the administrative simplification provisions of the *Health Insurance Portability and Accountability Act of 1996 (HIPAA)* mandated the adoption of standard unique identifiers for health care providers and health plans. The purpose of these provisions is to improve the efficiency and effectiveness of the electronic transmission of health information. Subsequently, the Centers for Medicare & Medicaid Services (CMS) developed the [National Plan and Provider Enumeration System \(NPPES\)](#) to assign these unique identifiers for physicians in an NPI Registry. The NPI Registry enables you to search for a provider's NPPES information and data are updated daily. You may run simple queries to retrieve this read-only data. For example, users may search for a provider by the NPI or Legal Business Name. There is no charge to use the NPI Registry.

Secondary Sources

- **Regional Extension Centers (RECs)**—are a local-level resource that help physicians with implementing certified EHR systems for Meaningful Use (MU) related activities.
- **Medicaid**—obtain license numbers and breakdown by specialty from state Medicaid for physicians who have already enrolled and/or attested for Stage 1 MU.
- **Medicare**—the CMS page pasted below, specifically '*Meaningful Use Data: Public Use Files*' and '*Recipients of Medicare EHR Incentive Program Payments Files*' may be useful for obtaining Eligible Professional (EP) data:
<http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/DataAndReports.html>
- **Other HIT Entities**—other programs in your registry catchment area that participate in Meaningful Use-related activities, such as your MU/State Health Information Technology (HIT) Coordinator, other types of registries (e.g., immunizations), all-payers/claims databases and Health Information Exchanges (HIEs), that could provide lists of physicians that are already participating in Meaningful Use reporting activities.

- **EHR Vendors**—could provide lists of physicians using products certified for Meaningful Use cancer reporting.

Data Analysis Strategies

In order to develop a more precise and relevant denominator than just the total number of licensed physicians and/or their practices, registries may choose to review physician licensure data and make several adjustments and/or exclusions. These decisions should be based on situation and/or population in your state.

Possible Exclusions

- Physicians with an address outside of the registry catchment area (e.g., another state) mailing address, non-active license, invalid address, or who are no longer in practice can be removed. However, for states with large rural or medically underserved areas and cities that border other states, a registry may want to still include these.
- Physicians who are primarily non-clinical (e.g., working in an administrative capacity, teaching and/or medical school, or conducting research)
- Physicians that are coded as “hospital-based only,” and are therefore likely to perform 90% or more of their services in an inpatient or emergency room hospital setting and not qualify for Medicaid or Medicare incentives (also more likely have someone else already reporting their cancer cases)

Other Strategies and Considerations

- Capture all license and identification numbers possible to facilitate data linkages (e.g., state licensure, NPI, Medicare/Medicaid IDs, and individual and group IDs).
- Group physicians based on address to identify practices when a group/practice NPI or other group-identifying indicator is not available.
- Compare state license numbers with Medicaid/Medicare licenses to determine the number of physicians taking Medicare/Medicaid.
- Merge licensure and NPPES taxonomy codes to develop physician list by specialty. However, when counting by specialty remember that often more than one specialty may be listed for each physician.
- Update at minimum once per year to capture changing physician status (e.g., active/non-active, newly licensed, retired, etc.)

- Use multiple categories of physician counts—individual by main cancer reporting specialty, Medicaid/Medicare, estimate of eligible physicians for EHR Incentive Program (Stage 2 Meaningful Use), counts by physician group for estimate of registry resources to test and onboard
- For physicians that may practice at multiple locations, consider having them pick a single primary location during registration; however this could create difficulties in counting their patients.
- Conduct analyses on Medicaid and/or Medicare claims data, based on reportable ICD-9 CM codes to identify physicians likely to participate in Stage 2 MU. If a registry cannot access individual physician data, consider estimating the total number of physicians by extrapolating national specialty proportions to the physician population in your registry catchment area.
- <http://truvenhealth.com/> formerly managed under Thomson Reuter—the Market Planner Plus database is very detailed by specialty in terms of physician projections. However, the cost of the database could be prohibitive.
- <https://www.aamc.org/data/workforce/interactive/313992/2011physician.html> Association of American Medical Colleges—this database is interactive and provides a state summary to assist with the physician projections by respective state. However, the information is not detailed by physician specialty.

Example #1: Texas Cancer Registry

NUMBER OF TX PHYSICIANS WITH ACTIVE LICENSES[†] by Texas Cancer Registry-defined specialty categories

	# Removed	Running Total
Number of physicians in October 2012 Wishlist physician list	---	111,967
Removed those with non-active license	43,076	68,891
Removed those with non-Texas practice address	15,789	53,102
Removed those not in practice	397	52,705
Removed those teaching/working at a medical school	4,485	48,220
Removed those working in administrative capacity	810	47,410
Removed researchers	246	47,164
RESULT: # TX physicians currently providing direct patient care		47,164

[†] Derived from October 2012 physician lists purchased by Texas Cancer Registry from Wishlist (<http://www.wishlistdirect.com>). Wishlist obtains these data from the Texas State Medical Examiner's Board. Physicians were selected based on variables included in the Wishlist dataset, which are listed FYI in this Excel file in the worksheet titled "Wishlist_variables".

Category of Primary Specialty*	ALL PHYSICIANS			Non-hospital-based Physicians Only			Hospital-based Physicians Only		
	#	% of TOTAL	cumulative % within priority specialty category	#	% of TOTAL	cumulative % within priority specialty category	#	% of TOTAL	cumulative % within priority specialty category
CANCER SPECIALTIES									
1. Dermatology	767	1.6%	1.6%	728	2.0%	2.0%	39	0.4%	0.4%
2. Urology	620	1.3%	2.9%	583	1.6%	3.6%	37	0.3%	0.7%
3. Gastroenterology	726	1.5%	4.5%	678	1.9%	5.5%	48	0.4%	1.1%
4. Hematology	272	0.6%	5.1%	203	0.6%	6.0%	69	0.6%	1.8%
5. Medical oncology	574	1.2%	6.3%	407	1.1%	7.2%	167	1.5%	3.3%
6. Radiation oncology	181	0.4%	6.7%	126	0.3%	7.5%	55	0.5%	3.8%
Subtotal (cancer specialties)	3,140	6.7%		2,725	7.5%		415	3.8%	
OTHER RELEVANT SPECIALTIES									
7. Pediatrics	4,438	9.4%	9.4%	3,372	9.3%	9.3%	1,066	9.8%	9.8%
8. Family Medicine	6,790	14.4%	23.8%	6,174	17.0%	26.3%	616	5.6%	15.4%
9. Internal Medicine	5,922	12.6%	36.4%	4,244	11.7%	38.0%	1,678	15.4%	30.8%
Subtotal (other relevant specialties)	17,150	36.4%		13,790	38.0%		3,360	30.8%	
10. SPECIALTIES NOT INCLUDED ABOVE	26,874	57.0%	57.0%	19,744	54.5%	54.5%	7,130	65.4%	65.4%
TOTAL (all active TX physicians providing direct patient care)	47,164	100.0%		36,259	100.0%		10,905	100.0%	

* Physicians are classified into only one category (e.g., Cancer, Other Relevant) for purposes of this table. For example, PEDIATRIC HEMATOLOGY/ONCOLOGY specialists are counted only as cancer physicians and not also as immunizations physicians.

Detailed specialty listing for each category of primary specialty
1. DERMATOLOGIC SURGERY, DERMATOPATHOLOGY, DERMATOLOGY
2. UROGYNECOLOGY, UROLOGIC SURGERY, UROLOGY
3. GASTROENTEROLOGY, HEPATOLOGY

4. HEMATOLOGY - INTERNAL MEDICINE, HEMATOLOGY/ONCOLOGY, HEMATOLOGY (PATHOLOGY), PEDIATRIC HEMATOLOGY/ONCOLOGY
5. GYNECOLOGIC ONCOLOGY, ONCOLOGY, SURGICAL BREAST ONCOLOGY, SURGICAL ONCOLOGY, UROLOGIC ONCOLOGY, BREAST ONCOLOGY, NEURO-ONCOLOGY
6. RADIATION ONCOLOGY
7. DEVELOPMENTAL-BEHAVIORAL PEDIA; INTERNAL MED - PEDS; PEDIATRICS; PEDIATRICS, ALLERGY; PEDIATRICS, ALLERGY & IMMUNOLO; PEDIATRICS, CARDIOLOGY; SPORTS MEDICINE- PEDS; any specialty with the word 'PEDIATRIC' followed by any of the following: ANESTHESIOLOGY (PEDS, CARDIOTHORACIC SURGE, CRITICAL CARE MEDICI, DERMATOLOGY, EMERGENCY MEDICINE (, ENDOCRINOLOGY, GASTROENTEROLOGY, INFECTIOUS DISEASE, INTENSIVE CARE, NEPHROLOGY, NEUROLOGY, OPHTHALMOLOGY, ORTHOPEDICS, OTOLARYNGOLOGY, PATHOLOGY, PSYCHIATRY, PULMONOLOGY, RADIOLOGY, REHABILITATION MEDIC, RHEUMATOLOGY, SURGERY, SURGERY (NEUROLOGY), UROLOGY
8. FAMILY MEDICINE, FAMILY PRACTICE, FAMILY PRACTICE - EMERGENCY ME, FAMILY PRACTICE/OMM, FAMILY PRACTICE/PSYCHIATRY, GERIATRIC MEDICINE (FAMILY PRA, SPORTS MEDICINE (FAMILY PRACTI, URGENCY CARE - FAMILY PRACTICE
9. INTERNAL MEDICINE (note: this category alone includes 5447 physicians; the remaining categories together have only 20 physicians together); GERIATRICS MEDICINE (INTERNAL M; GERIATRICS - INTERNAL MEDICINE; INTERNAL MED - EMERGENCY MED; INTERNAL MED - PREV MED; INTERNAL MED - PSYCHIATRY;
10. There are 184 other specialties representing 26,836 physicians included in this category, plus 38 physicians missing primary specialty. See worksheet in this Excel file titled "Freqs_other_specialties" to see a frequency listing of these specialties.

Example #2: Florida Cancer Data System (FCDS)

FCDS Methods for Linking state DOH Licensure File with NPPES NPI File*

For Medical Oncology, Urology, Hematology

- There were pre/post filtering before/after match.
- The best method was to get the largest initial sets, then match, then filter for tax or DOH cert.
- Only a few hundred were only an NPI record, or only DOH record.
- For those records we searched on name where DOH retired/dead/inactive or NPI license codes out of state.

Pre Processing for Florida DOH Licensure File

ACTIVE/CLEAR status and FL mailing address and pro_cde = 1501:Medical Doctor, 1901:Osteopathic Physician

Pre Processing for NPI File

Individuals with any kind of FL license code (up to 15)

Matching primarily based on license numbers

Match each of the NPI license codes 1-15 with DOH file, getting first match.

Take unmatched, match again by NPI codes 1-15 but only the number parts of license as many in NPI had 12345 instead of ME12345.

Take remaining unmatched, match again with NPI records that had only 1 record per name.

Post Match Processing

For matched records:

Keep only those records that had at least 1 (of 10) DOH certs in this list:

'U - UROLOGY',

'UROLOGY NURSING',

'IM - HEMATOLOGY',

'IM - HEMATOLOGY AND ONCOLOGY',

'PTH - HEMATOLOGY',

'PTH - HEMATOPATHOLOGY',

'ADVANCED ONCOLOGY CERTIFIED CLINICAL NURSE SPECIALIST (AOCNS)', 'ADVANCED ONCOLOGY CERTIFIED NURSE PRACTITIONER', 'IM - ONCOLOGY', 'ONCOLOGY NURSING', 'ORS - MUSCULOSKELETAL ONCOLOGY', 'RO - RADIATION ONCOLOGY'

For NPI only (non-matched):

Only those with FL Business location and one of these taxonomy codes (they can have 15):

'208800000X:Urology'

'207RH0003X:Hematology & Oncology'

'207RX0202X:Medical Oncology'

Summary of the linked file

Merge Type: Florida Licensure Database and NPPES Database	Count	%	Description
In both (by FL_Licence_number and rank_cde+Lic_nbr)	1425	77.40%	
In both (by lic_nbr)	103	5.60%	This field does not have the leading ME designation. Some records in the NPI file did not have ME so we stripped out and matched to numeric only.
In both (by name)	60	3.30%	For records that didn't match on license number
Only DOH	144	7.80%	No match
Only NPI	109	5.90%	No match
Total	1841	100%	

Has Florida DOH Urology/Oncology Certification	Count	%
Yes	1732	94%
No	109	6%

mhernandez5:

We utilized the Urology/Oncology certification field in FL DOH file as primary identifier for mailings.

NPI has Specific Taxonomy	Count	%
Yes	1158	62.9
No	539	29.3
Blank	144	7.8

mhernandez5:

For NPI records without a match to the FL DOH file we then applied taxonomy codes listed above to identify remaining physicians.

These records are FL DOH records

Summary of Certifications for Field 1	Count	%
Hematology/Oncology	289	16
Oncology	388	21
Urology	616	33
Radiation Oncology	282	15
Other	266	14
Total	1,841	100

mhernandez5:

There were up to 10 fields for certifications. We checked against all 10.

includes Pediatrics, pathology, Internal Medicine, Geriatrics

Summary of Taxonomy Codes for Field 1	Count	%
'208800000X:Urology'	559	30.4%
'207RH0003X:Hematology & Oncology'	426	23.1%
'207RX0202X:Medical Oncology'	97	5.3%
Other	759	41.2%
Total	1841	100

mhernandez5:

There are 15 taxonomy code fields.

* The taxonomy codes in this example from Florida are the same ones used in the CDA reports (the use of this code system is not required). The official name is the National Uniform Claim Committee (NUCC) Health Care Provider Taxonomy.