

# Improving Physician Reporting of Hematopoietic Malignancies to the New York State Cancer Registry (NYSCR)

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**Background:** Increasing proportions of patients are diagnosed and treated for cancer within the confines of physicians' offices. To maintain a high level of data completeness, the NYSCR developed plans to ensure that private practitioners report the patients they diagnose and/or treat who are not seen in hospitals. Our plans are for targeted outreach to dermatologists, urologists, and hematologists because these specialists often care for cancer patients who do not require hospitalization at all or when first diagnosed.

**Objectives:** The NYSCR was selected for the "Improving the Reporting of Hematopoietic Diseases (RHD) by the NPCR-Funded Central Cancer Registries" project. The overall objective is to improve the reporting of polycythemia vera and other reportable hematopoietic diseases, excluding lymphomas, diagnosed in physician offices. While focusing on hematology practices, we implemented a broader approach for future use with all specialists. Presented are steps taken as we have moved forward with implementation and lessons learned along the way. Because this project is still in progress, only preliminary data on reporting are presented.

## Step 1: Physician Identification

### Methods:

1. Selected a 30-county study area accounting for ~ 25% of the NYS population.
2. Data sources used: New York State Education Department (NYSED), National Provider Identifier (NPI), and Internet resources to identify physicians for contact.
3. Consolidation of physician to practice level information, often confirmed by telephone.

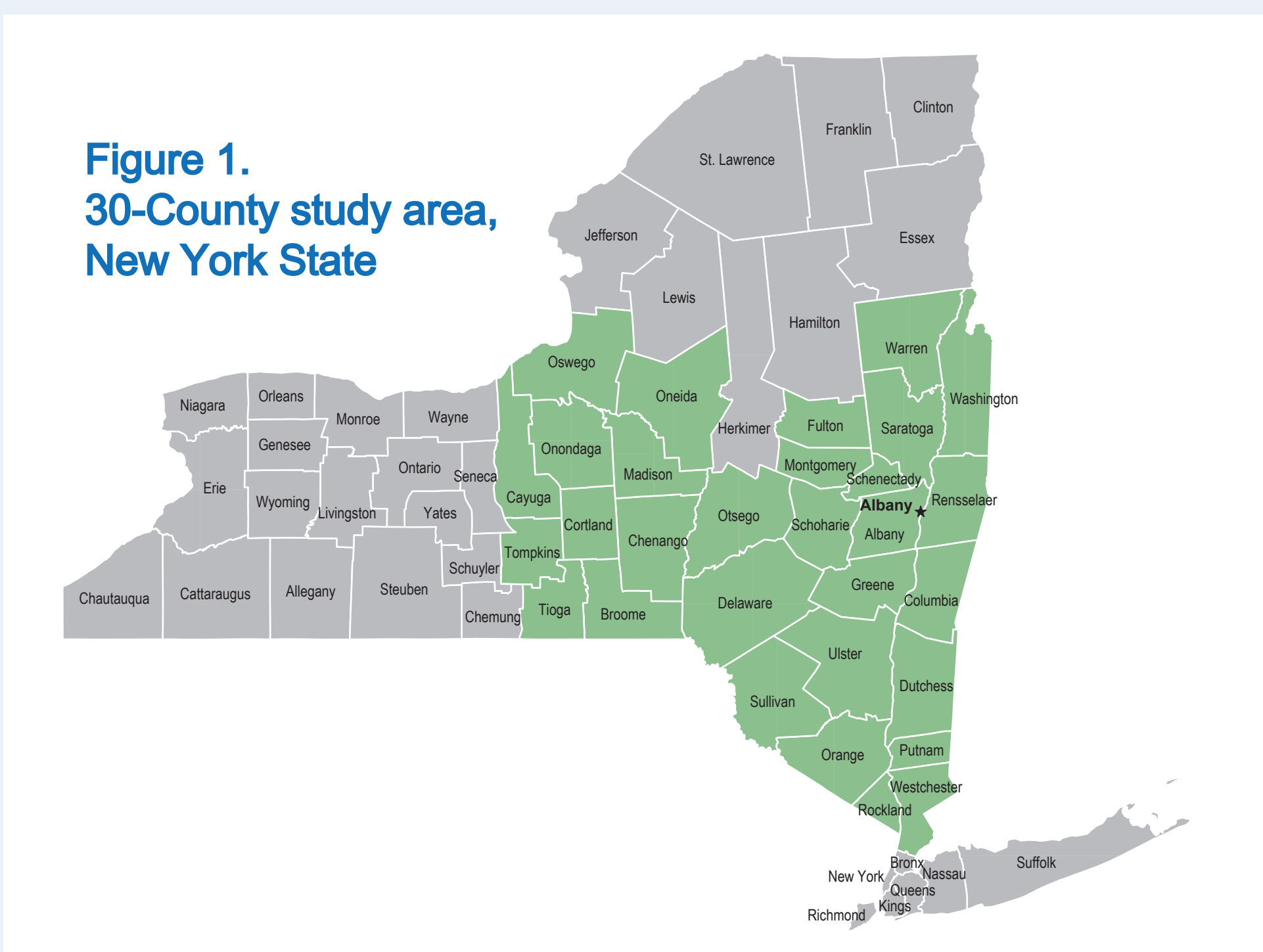


Table 1. Physician identification process:

	Physicians, N	Percent of Identified
Total hematologists originally identified	264	
Excluded	118	44.7
Retired/deceased	10	3.8
Could not locate current practice	32	12.1
Hospital-based	24	9.1
Out-of-study area/out-of-state	32	12.1
No current NYS medical license	8	3.0
Non-patient related work/service	9	3.4
Duplicate	3	1.1
Currently practicing	146	55.3
Reporting via radiation treatment center	46	17.4
Targeted for contact for reporting	100	37.9

### Lessons learned:

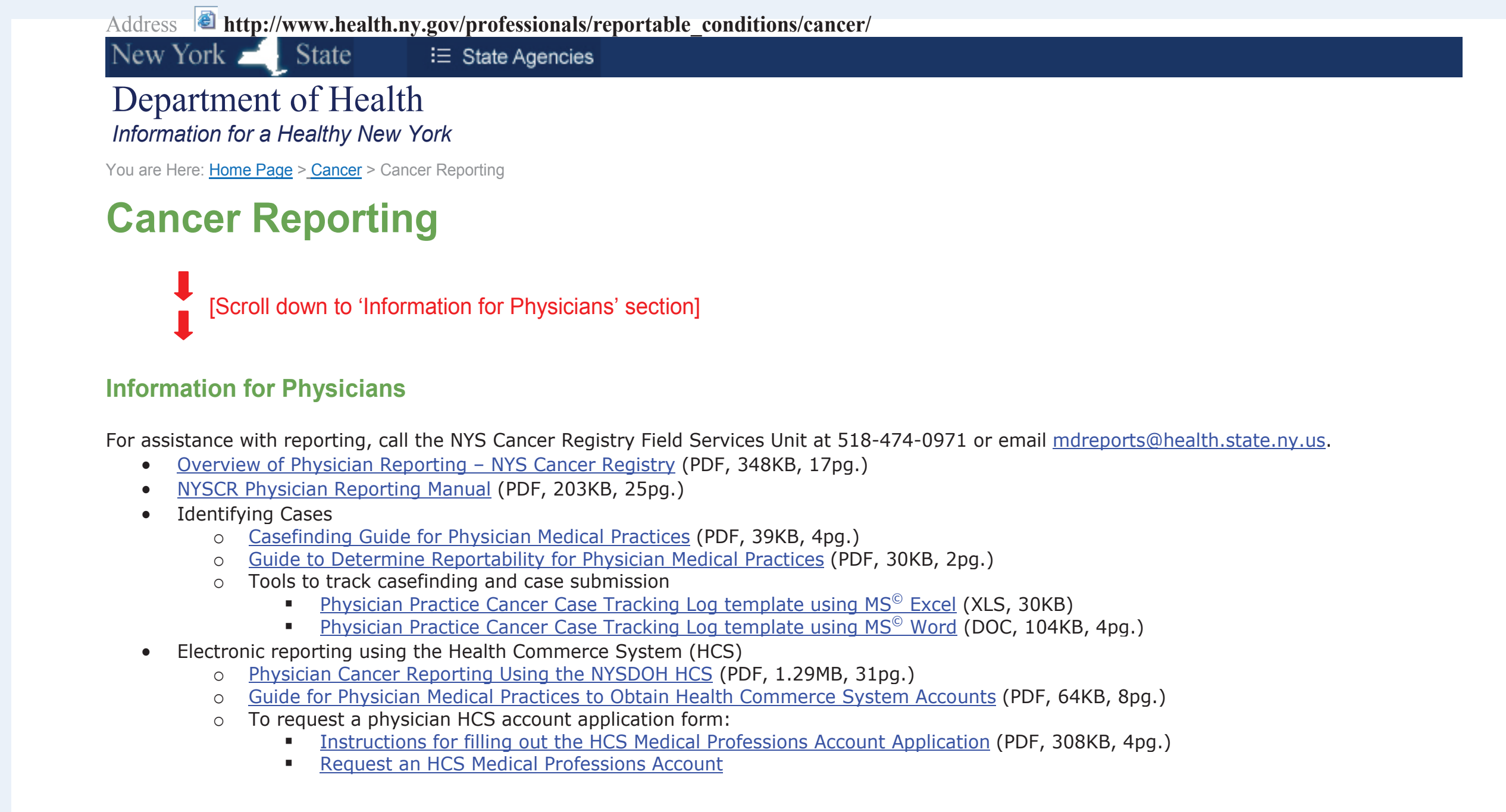
1. NYSED provides most complete, up-to-date information about NYS-licensed physicians; however, contact information is often the home address.
2. Not every physician has their own NPI or they may be included in an organizational NPI.
3. Internet resources contain practice information; however, they are only as accurate as the information they receive and may not be up-to-date.
4. Consolidating physicians to contact at practice level (rather than individual physicians) is a reasonable approach, but requires time and effort.

## Step 2: Development of Tools and Resources

### Methods:

1. Developed the following tools:
  - a. Web-based application located within the NYS Health Commerce System (HCS) with help tools for office staff to use with minimal assistance.
  - b. Database to include all targeted practices, their contact information, and a system to log all contacts made.
  - c. Survey to obtain practice-specific information regarding caseload, services provided, IT capabilities, and contact information.
  - d. Initial and subsequent contact letters to physicians and practice managers to describe NYS reporting law and to offer assistance to become compliant.
2. Developed physician resources:
  - a. Instructions for identifying cases to be reported and tools for tracking case-finding activities and data submissions.
  - b. Detailed Physician Manual about our program and extensive descriptions about the web-application.
  - c. Detailed instructions for obtaining physician and staff accounts for the HCS.
  - d. Step-by-step instructions for using the web-application for cancer reporting.

Figure 2. Physician resources posted on the NYS Department of Health website ([http://www.health.ny.gov/professionals/reportable\\_conditions/cancer/index.htm](http://www.health.ny.gov/professionals/reportable_conditions/cancer/index.htm))



### Lessons learned:

1. Web-application development required extensive planning and time, especially to allow flexibility for modifications such as changes to drop-down menus and help tools.
2. Development of physician resources requires initial time investment. However, we developed these from a broad perspective and they can be used by all physicians, regardless of specialty.
3. A database to log all contacts with practices is valuable for maintaining continued outreach with identified practices.
4. We are not convinced the surveys provided benefit, especially given the amount of effort required to encourage their return.

## Step 3: Recruitment and Training of Practices

### Methods:

1. Initial contact letters mailed on July 12, 2010.
2. Minimum weekly contact made by telephone or email.
3. All contacts logged: initiated and received telephone calls, emails, and faxes.

Table 2. Recruitment status of hematology or hematology/oncology practices (N = 42) as of May 15, 2011

Status	Practices, N
Continual contact with practice, no progress	3
Working with a hospital to report their cases	1
Setting up HCS accounts	4
Ready to report (one or more physicians have an HCS account)	16
Ready to report, but no cases to report	2
Reported at least one case electronically	16

Table 3. Contacts per practice for each goal, July 2010 – May 2011

Goal	Number of contacts	
	Mean	Range
Total contacts made (N = 1680)	21	1-63
First contact: introductory packets to physicians and practice managers	2	1-3
Survey returned	10	2-25
Ready to report (Have HCS accounts)	30	13-58
Reporting cases electronically	31	14-47

### Lessons learned:

1. Education is required regarding reporting laws and the extent of information needed for a complete case report.
2. Generally, there is willingness to report, but many practices express concern about staffing issues, and the time and cost to them to comply.
3. The HCS account application process, which includes signature notarization, tends to be a constraint; however, it is required by the Department of Health to use the secure, confidential web-based reporting system.
4. This level of contact is not feasible for outreach to dermatologists, urologists and the remaining hematologists.

## Step 4: Evaluation of Reporting to Date

### Methods:

1. Criteria for physician reporting for this project include diagnosis after January 1, 2010 and no hospitalization as an inpatient for cancer-directed treatment.
2. For non-physician reporters, medical records for 5 cases are reviewed for reporting accuracy and completeness.
3. Continual review of raw data submitted is performed to detect reporting problems and potential opportunities for feedback/education.
4. Compare the number of RHD cases reported by the targeted physicians to the rest of NYS reporting sources.

Table 4. All cases and RHD cases reported by 16 of the 42 targeted hematology or hematology/oncology practices by diagnosis year

	2010	Pre-2010, 2011	Total
All reports	265	159	424
RHD reports only	44	19	63
Polycythemia vera (PV) <sup>a</sup>	5	3	8
Other myeloproliferative	3	6	9
Myelodysplastic syndrome	7	2	9
Chronic lymphocytic leukemia (CLL)	15	5	20
Multiple myeloma	8	2	10
Other diagnoses	6	1	7

<sup>a</sup> JAK 2 mutation for polycythemia vera cases: 5 positive, 2 negative, 1 not tested

Table 5. Reporting source for polycythemia vera (PV) and chronic lymphocytic leukemia (CLL) by diagnosis year, comparing cases submitted by 16 private practices in the study area<sup>a</sup> with all of NYS reporting sources.

	2007		2008		2009		2010 <sup>b</sup>	
	PV	CLL	PV	CLL	PV	CLL	PV	CLL
Total cases	331	1193	310	1135	283	994		
Total reports	356	1587	345	1441	306	1116	114	609
Reporting sources:								
Private practitioner	0	0	0	0	0	0	5 <sup>a</sup>	15 <sup>a</sup>
Lab followback from private practitioner	3	72	2	59	c	c	c	c
Radiology/oncology center	21	107	15	105	17	96	10	52
Hospital	323	1306	316	1119	287	1000	99	542
Independent laboratory	6	85	4	138	0	1	b	b
Interstate agreement	3	17	8	20	2	19	b	b

<sup>b</sup> Based on raw data submissions through May 2011; 2010 data collection in process

<sup>c</sup> 2009 followbacks currently in progress; 2010 to be administered in future.

### Lessons learned:

1. The web-application was designed specifically for physician office staff who may have limited information about cancer reporting. It seems that once they begin using the application, there is little need for Registry involvement.
2. Feedback to reporters tended to be about diagnosis date, grade, behavior, or primary site (bone marrow versus blood for hematopoietic malignancies).

### Conclusions:

1. Because 2010 cases have not been processed, it is too early to evaluate the impact of physician reporting on the overall number of hematopoietic malignancies collected for NYS. However, it is reasonable to assume that diagnoses such as PV and CLL, often managed by physicians in private practice, may not be counted otherwise, unless ascertained from laboratories. We expect physician reporting to have an impact on timeliness of reporting.
2. Working with hematologists has provided us with insight into the potential time and effort required by Registry staff to implement physician reporting. Our experiences will guide future plans for outreach to other private practitioners across NYS.

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