

Cancer Registry Automation For Registrars





Identification of reportable cases typically represents just the first step in the overall cancer reporting workflow. Execution of regulatory, coding, reporting and care-planning data collection requirements necessitates hospital cancer registrars review, abstract and document from any given report what is often several hundred pertinent data elements relating to patient demographics, clinical history, tumor characterization, chemotherapy and treatment pathways. As the number of reports increases, the time-consuming manual sifting of records to surface these critical data elements fails to make best use of the highly-skilled cancer registrar's time and experience.

Benefits:

- Acceleration of incoming pathology report review, coding and eligibility verification processes.
- Elimination of time-consuming patient demographic data-entry requirements.
- Reduction in costly errors caused by missing data and human variation.
- Improved timeliness of pathology notifications.
- Immediate identification of relevant candidates for studies and trials.
- Greater institutional confidence in the quality of critical clinical datasets.

E-Path Plus

Utilizing artificial intelligence purpose-built for the interrogation of pathology reports and related documents (diagnostic imaging and visit reports) produced during the cancer patient pathway, E-Path Plus affords enormous time savings and significant improvements in the overall accuracy and consistency of how critical clinical data elements are surfaced and abstracted.

Safely accelerating the individual and collective throughput of an institution's cancer registrars, E-Path Plus enables the team to better adjudicate cases, quickly identify relevant candidates for studies and trials and fulfil the multitude of requests made of them for clinical or research datasets related to population health, clinical studies and registry reporting.

E-Path In Action

Inspirata's cancer registry automation solutions utilize Natural Language Processing (NLP) based artificial intelligence fine-tuned for cancer and disease reporting requirements. Removing any operator variability and far exceeding human performance, Inspirata's NLP engine is predicted on algorithms which has been proven to achieve sensitivity and specificity scores of **99%** and **98%** respectively in independent validation by the National Cancer Institute.

Registry	Hospital/Lab	Sensitivity	Specificity
Louisiana Tumor Registry	Our Lady of the Lake	0.989	0.991
Louisiana Tumor Registry	The Pathology Lab (TPL)	1.000	0.982
Louisiana Tumor Registry	Thibodaux	0.993	0.919
Louisiana Tumor Registry	HCSD	0.986	0.995
Louisiana Tumor Registry	Delta Pathology	0.993	0.989
Detroit	Oakwood Hospital	0.992	0.991
lowa	UnityPoint Des Moines	1.000	0.993
lowa	Mercy Iowa City	1.000	0.984
lowa	United Clinical Lab	0.991	0.992
lowa	Iowa Pathology Associates IPA Des Moines	0.988	0.994
Utah	Intermountain Medical Center	0.986	0.978
Utah	Huntsman Cancer Hospital/U of Utah	0.992	0.966
Utah	St. Mark's Hospital	1.000	0.974
Kentucky Tumor Registry	Norton	0.977	0.987
Kentucky Tumor Registry	Baptist	1.000	0.989
Kentucky Tumor Registry	University of Louisville	0.993	0.987
Hawaii Registry	Kuanani	1.000	1.000
Hawaii Registry	Clinical Labs of Hawaii	1.000	0.985
Hawaii Registry	Queens Medical labs	1.000	0.992
Hawaii Registry	Kaiser Moanala	1.000	0.929
New Mexico Cancer Registry	Presbyterian Healthcare System	1.000	0.986
New Mexico Cancer Registry	UNM Cancer Center	0.996	0.984
New Jersey State Cancer Registry	Virtua	1.000	0.991
New Jersey State Cancer Registry	RWJ - Hamilton	1.000	0.992
New Jersey State Cancer Registry	St Peter's	1.000	0.971
	Average	0.995	0.982



Why Inspirata?

- Over 100 institutions in the United States, Canada and Australia use our automated cancer identification and reporting.
- Established cancer reporting network and workflow within which we process >20M clinical reports/year to identify all reportable cancer cases.
- 99% accuracy in cancer case-finding as documented in NCI and other third party validation studies.
- Knowledge-driven capturing institutional and expert knowledge to enable continuous improvement.
- Designed for cancer Our NLP and AI tools are developed and continuously updated by clinical cancer experts and validated by state and federal cancer registries worldwide.
- · Algorithms developed by oncology experts proven to reduce 80% of manual abstraction effort.

"Inspirata's solutions accurately identify eligible cancer pathology reports missed by previous notification methods with a high degree of sensitivity and specificity. We now receive 60 percent more reportable pathology notifications than we did prior to implementation, including those for ancillary studies. This has greatly improved our case-finding completeness and contributed to more accurate and precise diagnosis and cancer classification."

Dr. Catherine Shang, Ph.D., Deputy Director of the Victorian Cancer Registry, Australia



How Can NLP Solve Data Challenges in Healthcare?

http://inspirata.link/NLPWebinar-NA

Explore how natural language processing can be applied for cancer-registry purposes by replaying our recent webinar on NLP Applications in Healthcare.



Make Every Moment Matter

Inspirata helps patients—and the clinicians they trust—make every moment matter in their fight against cancer. Our comprehensive cancer informatics solutions bring disparate data together from across the entire cancer care journey. We combine leading digital pathology solutions with automated cancer registry solutions, comprehensive cancer informatics, and advanced patient engagement tools to afford healthcare providers the broadest oncology informatics platform available.

