

Overview

- Cancer care is often distributed among multiple facilities which makes it difficult to develop a comprehensive description of treatment use.
- The purpose of this study was to examine the completeness of treatment information found in the records of patients seen at a Midwestern academic medical center.**

Cohort

- The cohort comprised 1,071 Iowa residents diagnosed with a cancer of the breast, colorectum, lung, pancreas, or prostate in 2017 or 2018 with an abstract from the academic medical center (see Table 1).
- Only patients with a single primary tumor were included. Patients were also required to have at least one abstract other than the one that the academic medical center submitted to the state central registry.

Comparison

- Patient-level, summary treatment variables from NAACCR-formatted records from the medical center’s tumor registry were compared to consolidated records from the state’s central registry.
- Using these variables, we examined treatment/no treatment concordance between the medical center abstracts and the consolidated state central registry abstracts.** This was done for surgery of the primary site (Item 1290), chemotherapy (Item 1390) , radiation therapy (Items 1360 & 1430), immunotherapy (Item 1410), and hormone therapy (Item 1400).

Table 1. Cohort characteristics

	Cancer Site				
	Breast	Colorectum	Lung	Pancreas	Prostate
Diagnosis Age					
0-49 years	87 (34%)	53 (28%)	24 (8%)	5 (4%)	9 (5%)
50-59 years	63 (24%)	52 (28%)	72 (24%)	35 (25%)	46 (25%)
60-69 years	72 (28%)	54 (29%)	101 (33%)	52 (38%)	93 (51%)
70-79 years	30 (12%)	19 (10%)	88 (29%)	32 (23%)	31 (17%)
80+ years	6 (2%)	11 (6%)	17 (6%)	14 (10%)	5 (3%)
Sex					
Female	>253 (>98%)	89 (47%)	142 (47%)	68 (49%)	0 (0%)
Male	<5 (<2%)	100 (53%)	160 (53%)	70 (51%)	184 (100%)
Race					
White	245 (95%)	180 (95%)	287 (95%)	133 (96%)	173 (94%)
Other/Unknown	13 (5%)	9 (5%)	15 (5%)	5 (4%)	11 (6%)
Rurality					
Urban Commuting Area	115 (45%)	86 (46%)	139 (46%)	72 (52%)	93 (51%)
Not an Urban Commuting Area	143 (55%)	103 (54%)	163 (54%)	66 (48%)	91 (49%)
Diagnosis Year					
2017	135 (52%)	78 (41%)	133 (44%)	65 (47%)	91 (49%)
2018	123 (48%)	111 (59%)	169 (56%)	73 (53%)	93 (51%)

Table 2. Treatment/No Treatment agreement between summary treatment variables from academic medical center and consolidated state registry record

	Breast			Colorectum			Lung			Pancreas			Prostate		
	agree	disagree	% agree	agree	disagree	% agree	agree	disagree	% agree	agree	disagree	% agree	agree	disagree	% agree
Immunotherapy	>253	<5	>98%	180	9	95%	290	11	96%	>133	<5	>96%	>179	<5	>97%
Chemotherapy	>253	<5	>98%	>184	<5	>97%	290	11	96%	127	11	92%	>179	<5	>97%
Hormone therapy	251	7	97%	>184	<5	>97%	301	0	100%	138	0	100%	177	7	96%
Radiation (2017 dx)	125	10	93%	73	5	94%	119	14	89%	>133	<5	>96%	84	7	92%
Radiation (2018 dx)	123	0	100%	>184	<5	>97%	161	7	96%	>133	<5	>96%	>179	<5	>97%
Surgery of primary site	>253	<5	>98%	183	6	97%	>296	<5	>98%	>133	<5	>96%	>179	<5	>97%

Results

- Concordance between the hospital registry and the state’s central registry was high across tumor sites and treatment modalities. Agreement ranged from 89-100% for radiation therapy to 96-100% for surgery of primary site (Table 2).
- High concordance was maintained across values of all Table 1 variables (data not shown).

Discussion

- High concordance between the academic medical center and the central registry suggests that analyses of either data source would yield similar results.
- In general, hospital tumor registries only include cases that are diagnosed and/or treated at the hospital; patients who have been seen for consult or second-opinion only are usually not included.
 - Only patients with abstracted records are reflected in these analyses, and it is unclear if those patients are systematically different from those who are not abstracted. Medical records for non-abstracted cases may be less comprehensive.