

Cancer Data

The Hidden Gem of Health Care



Presenters



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Objectives

- Discuss promoting the use of cancer registry data
- Discuss how cancer registry data can be utilized to support hospital administration
- Discuss how to determine referral patterns and how this can help facilities look for growth opportunities
- Discuss utilizing registry data to support NAPBC program with BPL audits

Promoting Use of Cancer Registry Data

- Helps to improve quality care
- Develop a quarterly dashboard
- In and Out Migration
- Provide data on analytic cases from Dx to Rx
- Capture RCRS measures by facility or system-wide to monitor compliance with benchmarks

Promoting Use of Cancer Registry Data (cont.)

- Review data system wide specific by stage to look for opportunities of improvement in standard of care

Example:

As a system we are currently looking at Stage 1 lung cancers to identify if we are utilizing surgery or RT as the first line of therapy compared to benchmark

- Literature suggests that RT should be the initial therapy

Our data showed we are (as a system) doing surgery first 50% of the time and doing RT first 50% of the time

We are now taking the data and looking at some additional variables to see if we can make some changes in the percentages outlined above

In and Out Migration

Year	Dx and Rx Here	Dx Elsewhere and Rx Here	Dx Here and Rx Elsewhere	Totals
2019	1121	524	472	2117
2020	917	471	390	1778

Days from Dx to Initial Rx

Accession Nbr	Site Code	Class of Case	Date of Diagnosis	Initial Rx Date	Days from Dx to Initial Rx
01202000364	BREAST	14	11/18/2020	11/18/2020	0
01202000506	BRONCHUS & LUNG	20	09/01/2020	09/16/2020	15
01202000495	BREAST	14	06/05/2020	10/11/2020	128
01202000773	BRONCHUS & LUNG	22	03/19/2020	04/01/2020	13
01202000098	COLON	22	02/15/2020	04/01/2020	46
01202000099	COLON	22	03/23/2020	03/23/2020	0

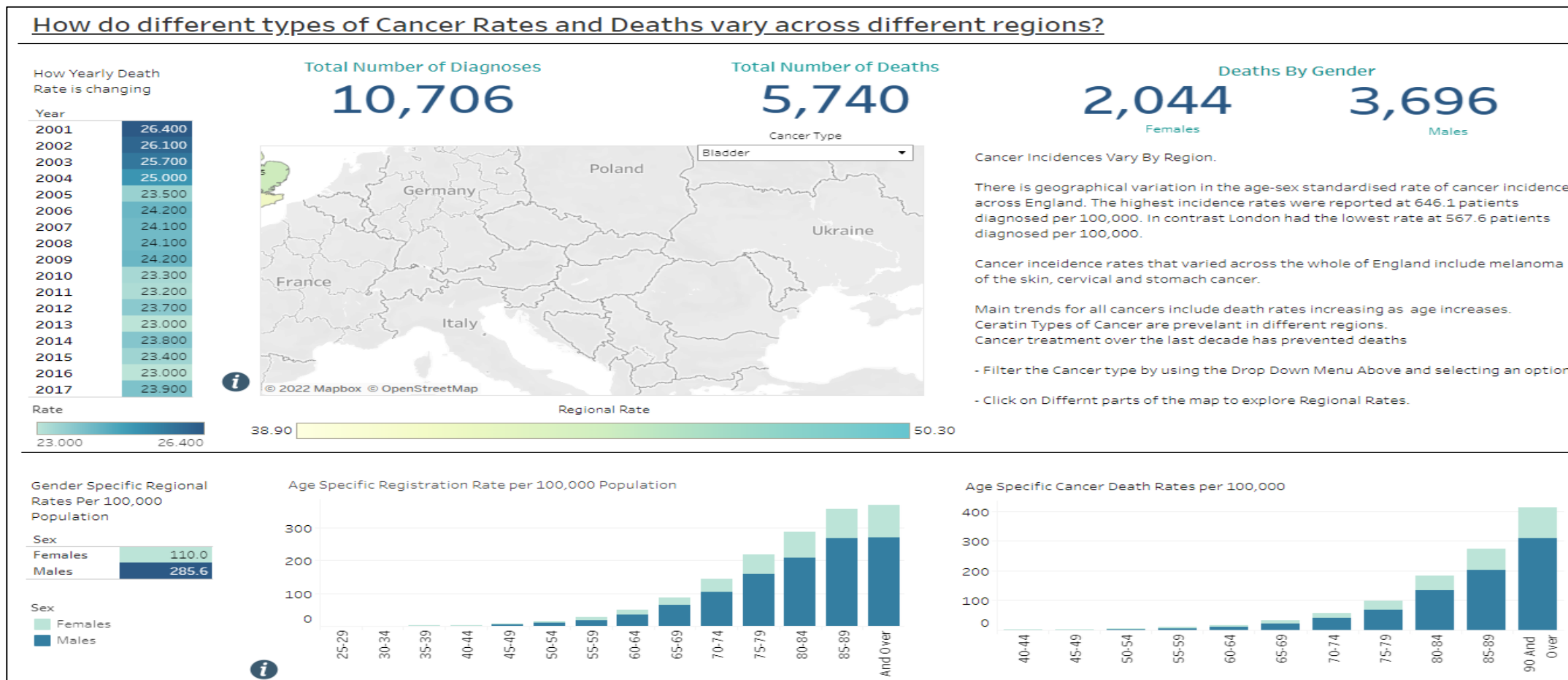
Administrative Data Use

- Top cancer site volume
- Timeliness Report days from Dx to Rx
- Fiscal Year Report
- Center of Excellence
- Physician Recruitment

Administrative Data Use (Cont.)

- Oncology Dashboard (Quality Measures)
- Reports by race (for grants)
- Track referral patterns by site specific
- Evaluate need to expand cancer services by county
- Florida Trend Magazine

TABLEAU Public Dashboard Example



Marketing Use of Data

- The cancer registry data is helpful to marketing
- FCDS online tool:
 - Incidence rates by type and count
 - Incidence reports site specific and facility
 - ▶ Gives marketing more details not available from AHCA data
 - Facilities can compare data to other hospitals in the market
 - Monitor cancer volume trends overtime by calendar year

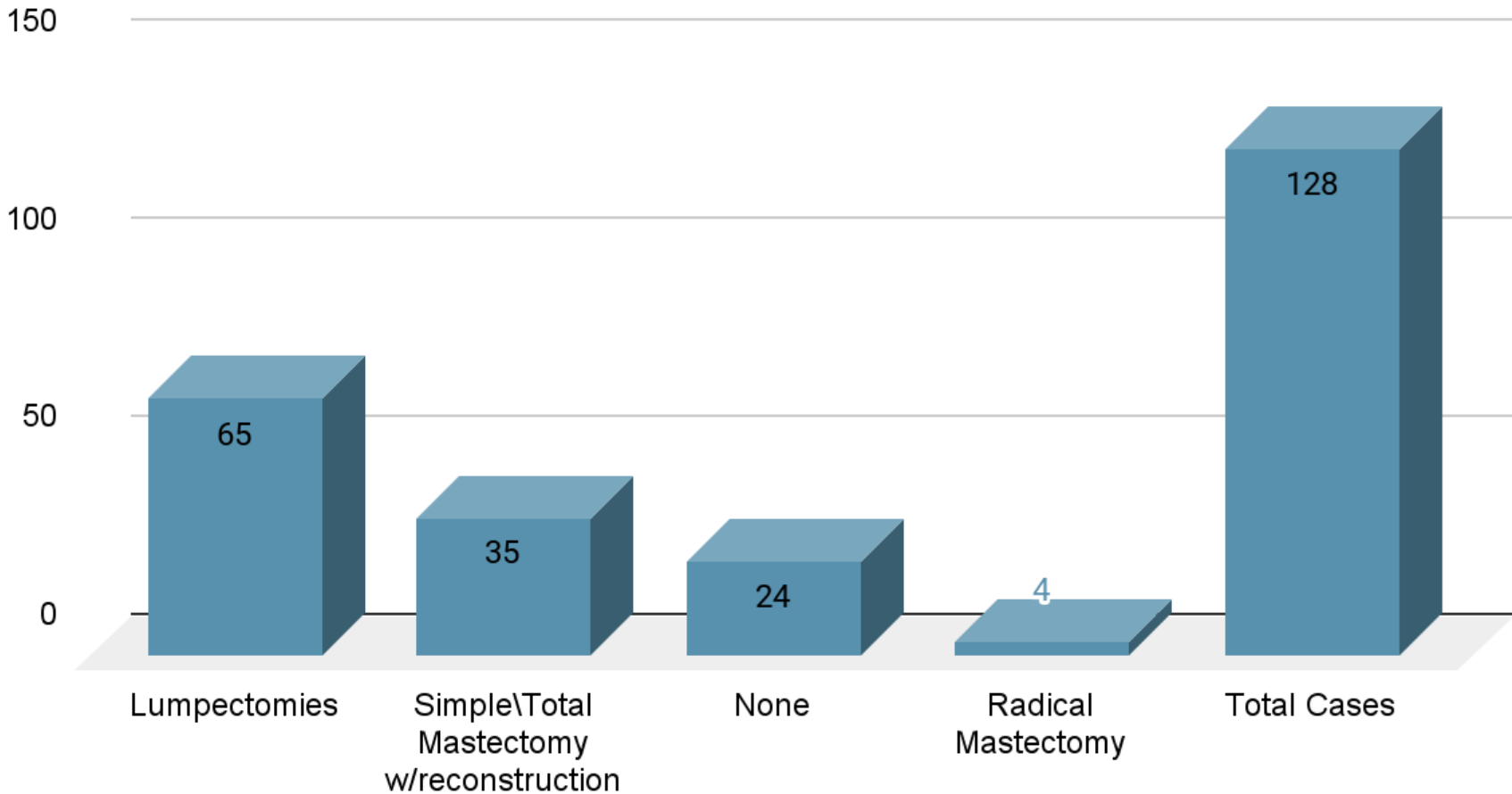
Support NAPBC Accreditation

NAPBC BPL Audits:

- Breast Conservation Rate
- SLN Biopsy Rate and Offered
- Breast Reconstruction Offered/Performed
- Needle Biopsy Rate
- Breast Quality Measures

Breast Conservation Rate

Breast Conservation Rate (Class of Case 10-14) Stage 0, I, II



Sentinel Lymph Node Offered

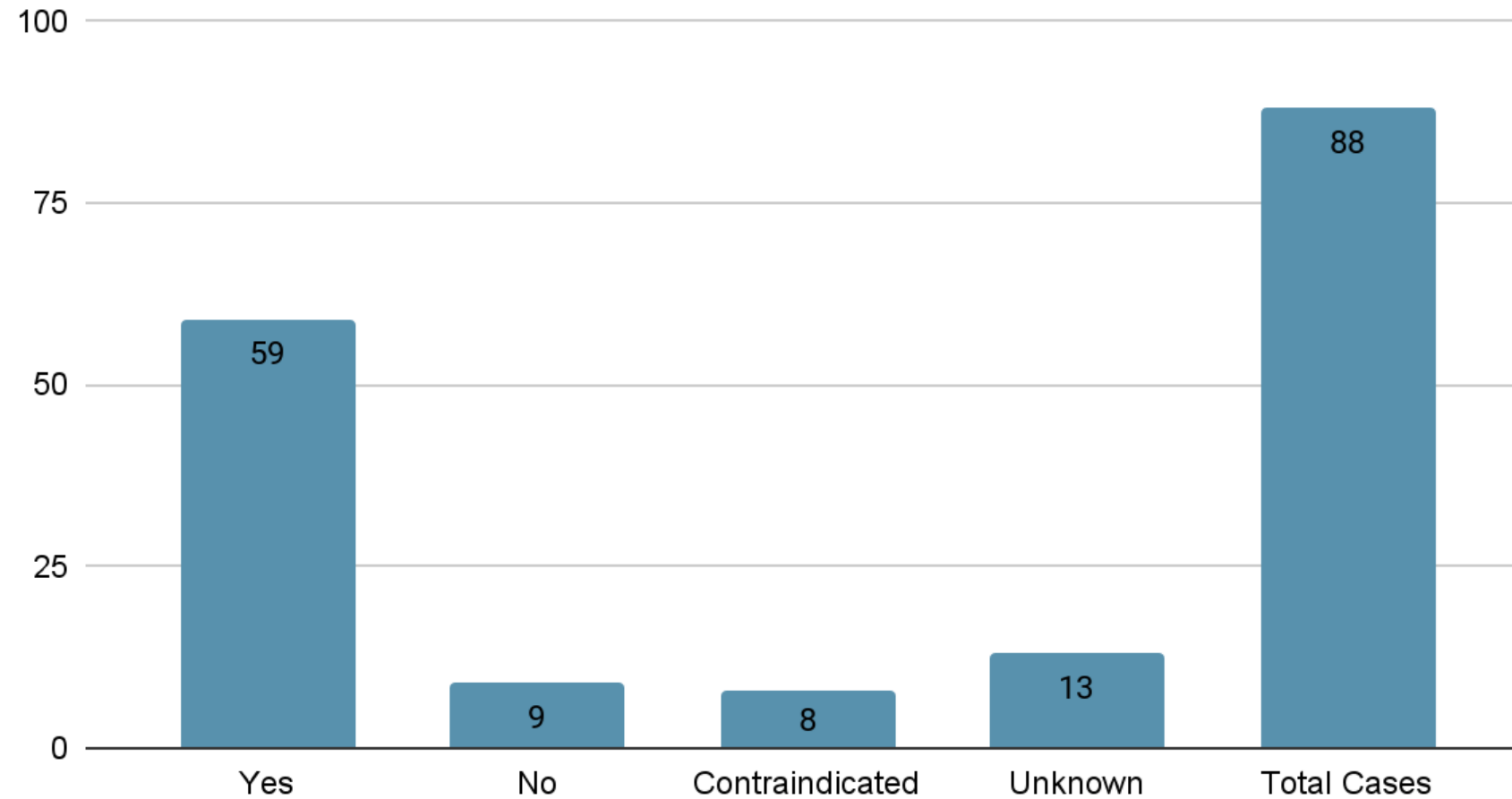
- Utilize the Breast Program Maintenance screen
- Make sure abstractors code if offered on analytic cases
- Select only Class of Case I, II for monitoring SLN Rate
- Examined cases coded unknown

NEEDLE Biopsy Rate

- Create a User Defined field for biopsy exclusions

Breast SLN Offered

2020 Cases (Class of Case I, II)



Needle Biopsy Rate

Consider using the BPM screen to create a user defined field for needle biopsy exclusions

00	Case not censored
12	Patient medically unable to hold position for image guided bx
13	Patient requires sub areolar excision for nipple discharge
14	Lesion too superficial
15	Breast too small
16	Lesion in accessible by needle biopsy

Needle Biopsy Exclusion (Cont.)

17	Cancer found in the prophylactic mastectomy or through an elective procedure
18	Benign, high risk lesions diagnosed by needle bx requiring excisional biopsy
19	Discordant biopsy results compared to susp imaging
20	Patient presents with co morbid conditions that directly impacts delivery of standard of care
21	Diagnosed via cytology FNA only
90	Patient Refused

Breast Program Maintenance Screen

Core Data Items to consider capturing

- Mammogram date
- Bilateral Mammogram
- Type of Mammogram
- Ultrasound date
- MRI date
- MRI of breast
- Outside Pathology Review

BPM Screen (Cont.)

- Initial Biopsy Type
- Plastic Surgery Referral
- Pre-op plastic surgery consult
- Plastic Surgeon
- Breast Conserving Surgery Offered
- Reason SLN Bx Not Offered

BPM Screen (Cont.)

- Type of Node Procedure
- Referred to Support/Rehab Services
- Genetic Counseling
- Needle Bx Exclusion BPM User Defined Data item

Data Request Log

- Date of request
- Requestor
- Data requested
- Purpose and intended use
- Date completed
- Date due
- Keep a copy of data provided

Cancer Registry Data Value

Identifying Growth Opportunities for Your Leadership

Catherine Bieker, CTR, RHIT, BS-HCA
System Cancer Registry Director



Benefits of Data Utilization

- Identifies areas that require attention/improvement from a business or quality of care perspective
- Addresses growth opportunities
 - Both items above can result in the improvement/expansion of programs and improved patient care
- Highlights the value of the Cancer Registry beyond required reporting
 - Informs leaders that CTR's have specialized and valuable skill set

Important 1st Step - Know Your Audience

- Not everyone speaks “cancer registry”!
 - It is important to provide information and definitions and explain what you do

Examples:

- Analytic Caseload: Cases with a new diagnosis and/or received all or part of 1st course treatment at Hospital ABC
- Cancer Registry Database: Requirements and Use
 - Cancer Registry required by law to report newly diagnosed cases and required data to the State Central Registry
 - State Dept. of Public Health & Environment
 - Detailed information available for Care Site Review

Start Out Simple

- Starting with basic reports will generate more questions
 - Drilling down to the:
 - What
 - Where
 - When
 - Why
 - How

“What” Examples

- What are the primary body sites to focus on?
- What type of diagnostic workup and treatments are patients receiving at your facility?
 - Are they diagnosed at your facility and receiving 1st course treatment there?
 - Do they receive all or part of their 1st course treatment at your facility
 - Which specific treatments: surgery, systemic, radiation, palliative

"Where" Examples

- Where are patients being referred from?
 - Other hospitals
 - Imaging centers
 - Physicians
 - PCPs
 - Surgeons
 - OB/Gyn
 - Pulmonologists
- Where are patients being referred to?
 - Hospitals
 - Free standing cancer centers

"When" Examples

- Are there certain months that have more new diagnoses than others? Months with less?
 - By body type?
 - Breast - October is Breast Cancer Awareness Month

"Why" Examples - Resulting in Additional Data Review

- Why are cases being diagnosed at my facility, and receiving all or part of their 1st course treatment elsewhere?
 - Additional Data Review:
 - Hospital referred to field
 - Treating physicians
 - Surgeons - who do the surgeons typically refer the patient to? Your facility? Another facility?
 - Med Oncs, Rad Oncs - Are they located at your facility or elsewhere?
 - Insurance
 - Does the patient's insurance automatically refer them to facilities other than yours?
 - Do they want the patient to go to a free standing cancer center where charges are lower
 - Are there certain months that have more cases diagnosed than others?
 - Is this an opportunity to increase outreach and screening programs?

"How" Examples

- Surgeon typically refers outside your facility
 - Physician liaison, medical oncologists, or radiation oncologists does outreach to the surgeon and surgical practice
 - Provides information on patient centered continuum of care services available in one place
 - Develop a working relationship with the surgeons in that practice
 - Create a Medical Directorship for Key Surgeons
 - Cancer Committee Chair, Surgeon representative or CLP
 - Breast Program Medical Director - Leader/Chair of BPLC

"How" Examples - Leadership Opportunities

- Insurance
 - Does the patient's insurance automatically refer them to facilities other than yours?
 - Develop stronger relationships with referring physicians and medical groups
 - Discuss with the facilities managed care department the opportunities to change contract agreements with the insurance company
 - Does insurance want the patient to go to a free standing cancer center where charges are lower than an acute care (hospital)
 - Leadership may consider transitioning the cancer program to a freestanding practice
 - If 403B program is too valuable to lose, consider opening a freestanding clinic
 - Infusion alone or include radiation

Cancer Registry Data Utilization

- Caseload comparison
- Comparison of class of case
- Referral Patterns
- Breakout of top body sites
- Physician referral patterns

Example: Leadership Presentation using CR Data

Hospital ABC
Oncology Steering Committee
April 29, 2022

SCL Health System Cancer Registry
Catherine Bieker, CTR, RHIT, BS-HCA

Example: Leadership Presentation using CR Data (con't)

Cancer Registry Review of Hosp ABC Analytical Caseloads

- Analytical Caseload: Cases with a new diagnosis and/or received all or part of 1st course treatment at ABC Hospital.
- Data from Cancer Registry Database
 - Cancer Registry required by law to report newly diagnosed cases and required data (diagnosis & treatment) to the Colorado Central Cancer Registry (Colorado Dept. of Public Health & Environment).
 - Detailed information available for Care Site Review

Example: Leadership Presentation using CR Data (con't)

Site Name	Number of Cases	Percent	Site Name	Number of Cases	Percent
BREAST	43	31.16%	BREAST	45	30.00%
BRONCHUS & LUNG	18	13.04%	COLON	20	13.33%
BLOOD & BONE MARROW	13	9.42%	BLOOD & BONE MARROW	16	10.67%
COLON	11	7.97%	BRONCHUS & LUNG	11	7.33%
MENINGES	5	3.62%	THYROID GLAND	7	4.67%
PANCREAS	5	3.62%	STOMACH	5	3.33%
LYMPH NODES	5	3.62%	KIDNEY	4	2.67%
LIVER & BILE DUCTS	4	2.90%	URINARY BLADDER	4	2.67%
THYROID GLAND	4	2.90%	LYMPH NODES	4	2.67%
RECTUM	4	2.90%	MENINGES	3	2.00%
OVARY	4	2.90%	PROSTATE GLAND	3	2.00%
URINARY BLADDER	3	2.17%	LIVER & BILE DUCTS	2	1.33%
ESOPHAGUS	2	1.45%	RECTUM	2	1.33%
SMALL INTESTINE	2	1.45%	CERVIX UTERI	2	1.33%
SKIN	2	1.45%	CORPUS UTERI	2	1.33%
URETER	1	0.72%	ESOPHAGUS	2	1.33%
ANUS & ANAL CANAL	1	0.72%	PANCREAS	2	1.33%
PAROTID GLAND	1	0.72%	OTHER DIGESTIVE ORGANS	2	1.33%
RETROPERITONEUM & PERITONEUM	1	0.72%	RETROPERITONEUM & PERITONEUM	2	1.33%
GALLBLADDER	1	0.72%	SMALL INTESTINE	1	0.67%
			ANUS & ANAL CANAL	1	0.67%
			TONSIL	1	0.67%

How to Create:

1. Select Pop (two total):
One for each Year

1. Graph Pop:
By Date of First Contact
Year Field #3783

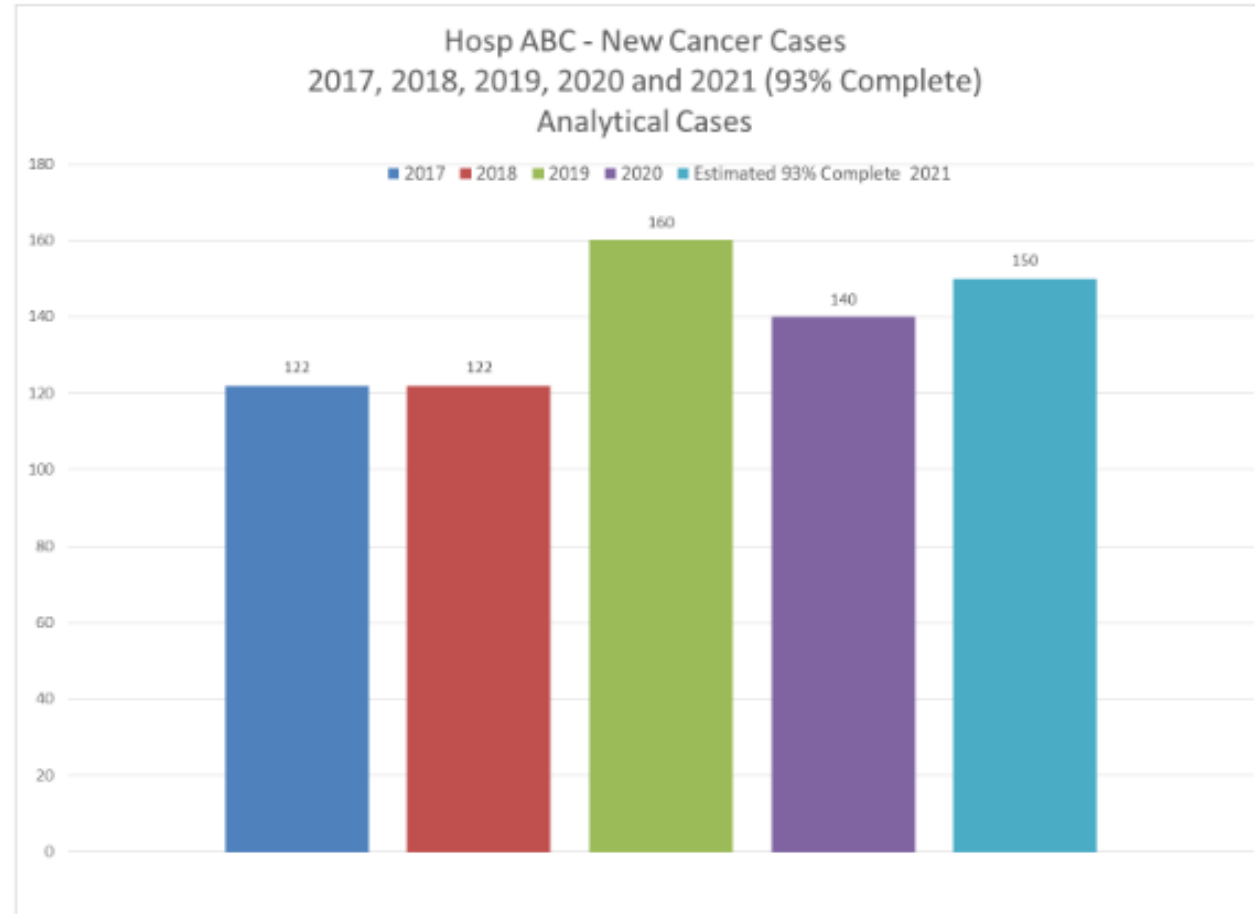
Start SIMPLE:

Analytic Cases: Cases diagnosed AND/OR treated at your facility

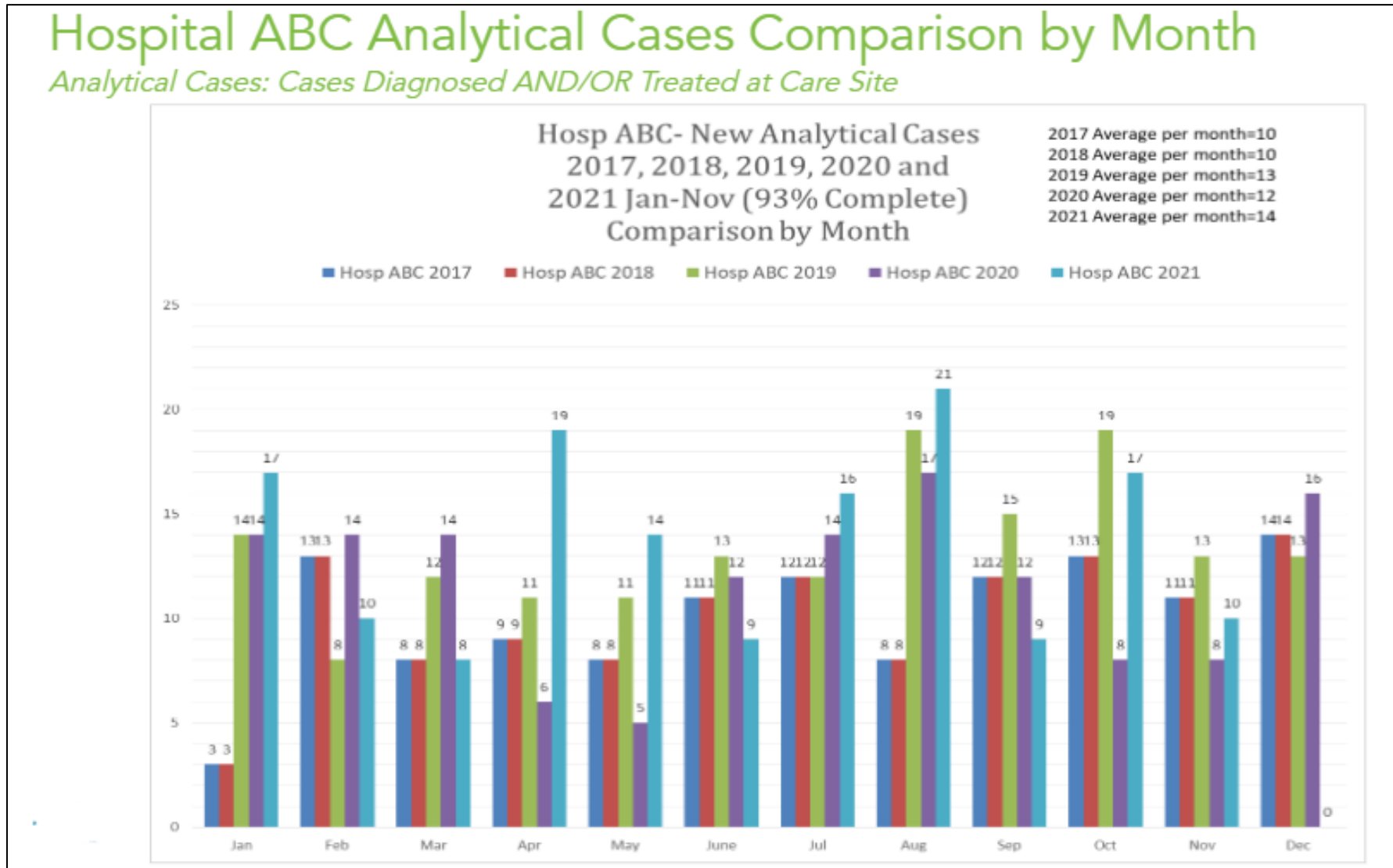
Example: Leadership Presentation using CR Data (con't)

Hospital ABC Analytical Cases Comparison by Year

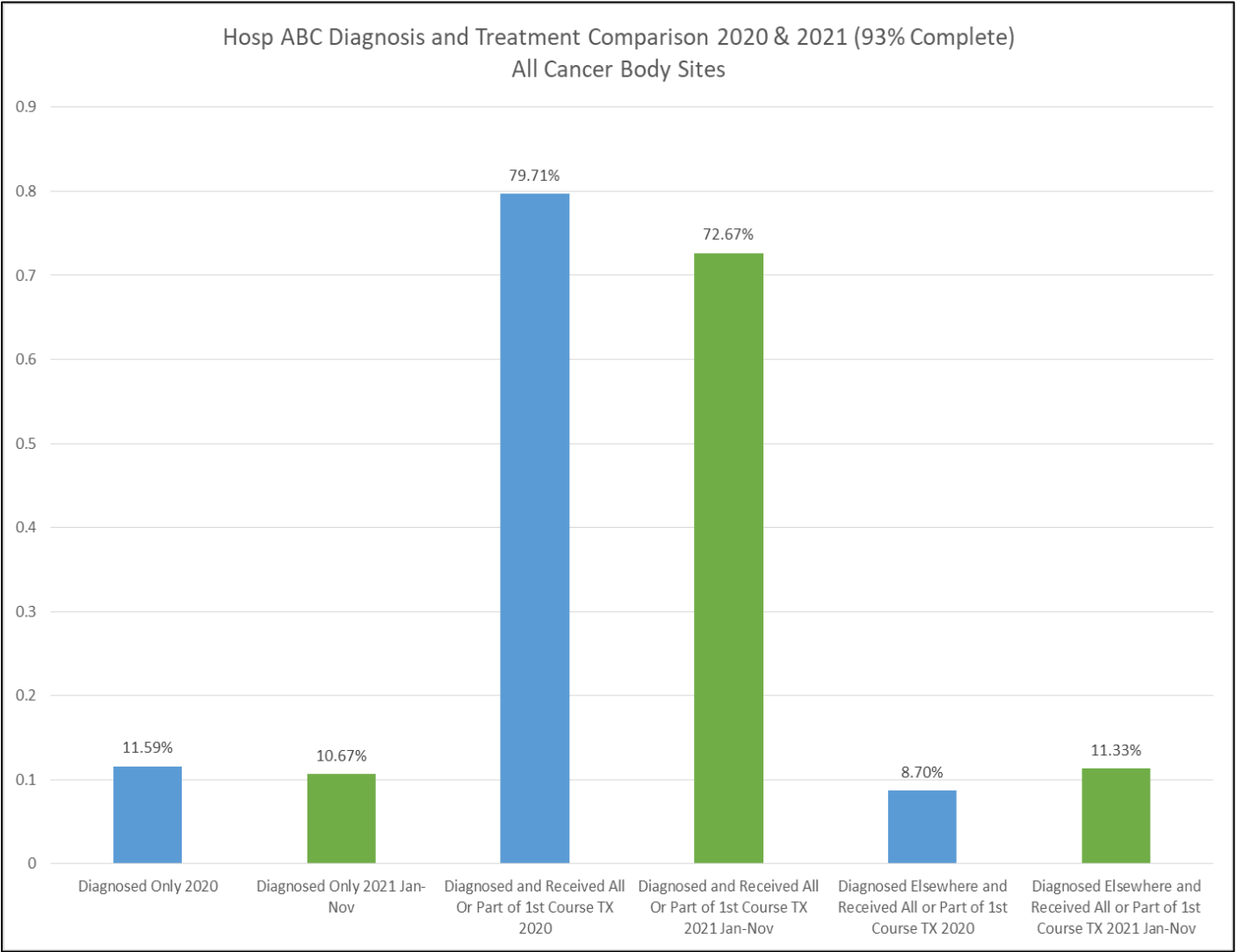
Analytical Cases: Cases Diagnosed AND/OR Treated at Care Site



Example: Leadership Presentation using CR Data (con't)



Class of Case Comparison



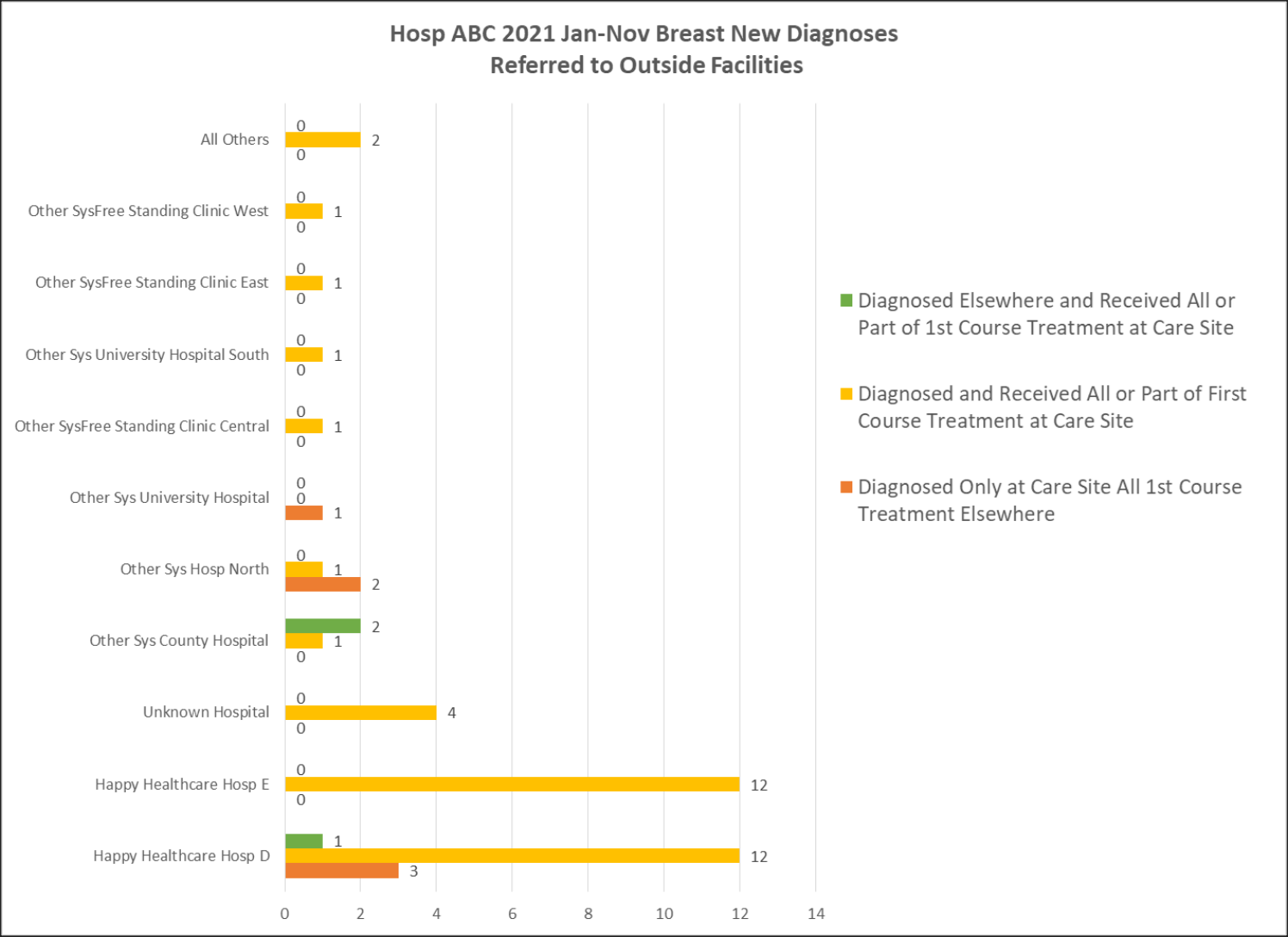
Diagnosis and Treatment Data Sheet

Cross Tabulation of Site Code by Class of Case for 2020 & 2021 YTD Hosp ABC													
		Diagnosed Only		Diagnosed Only		Diagnosed and Received All Or Part of 1st Course TX		Diagnosed and Received All Or Part of 1st Course TX		Diagnosed Elsewhere and Received All or Part of 1st Course TX		Diagnosed Elsewhere and Received All or Part of 1st Course TX	
Total Cases 2020	Total Cases 2021 YTD	Diagnosed Only 2020	Diagnosed Only 2021 YTD	Diagnosed Only 2020	Diagnosed Only 2021 YTD	Diagnosed and Received All Or Part of 1st Course TX 2020	Diagnosed and Received All Or Part of 1st Course TX 2021 YTD	Diagnosed and Received All Or Part of 1st Course TX 2020	Diagnosed and Received All Or Part of 1st Course TX 2021 YTD	Diagnosed Elsewhere and Received All or Part of 1st Course TX 2020	Diagnosed Elsewhere and Received All or Part of 1st Course TX 2021 Jan-Nov	Diagnosed Elsewhere and Received All or Part of 1st Course TX 2020	Diagnosed Elsewhere and Received All or Part of 1st Course TX 2021 YTD
138	150	16	24	11.59%	10.67%	110	109	79.71%	72.67%	12	17	8.70%	11.33%

- Remember: Use terms your audience understands
 - For example: Instead of class of case codes, use the descriptions
- This report: Grouped by type in a Xtab (Crosstab) report
 - 00 = Diagnosed only at your facility
 - 10-14 = Diagnosed & treated, receiving all or part of treatment at your facility
 - 20-22 = diagnosed elsewhere and receiving all or part of treatment at your facility

Breast Cases Referral

Possible next steps:
Identify cases that
went outside by
surgeon or insurance
company

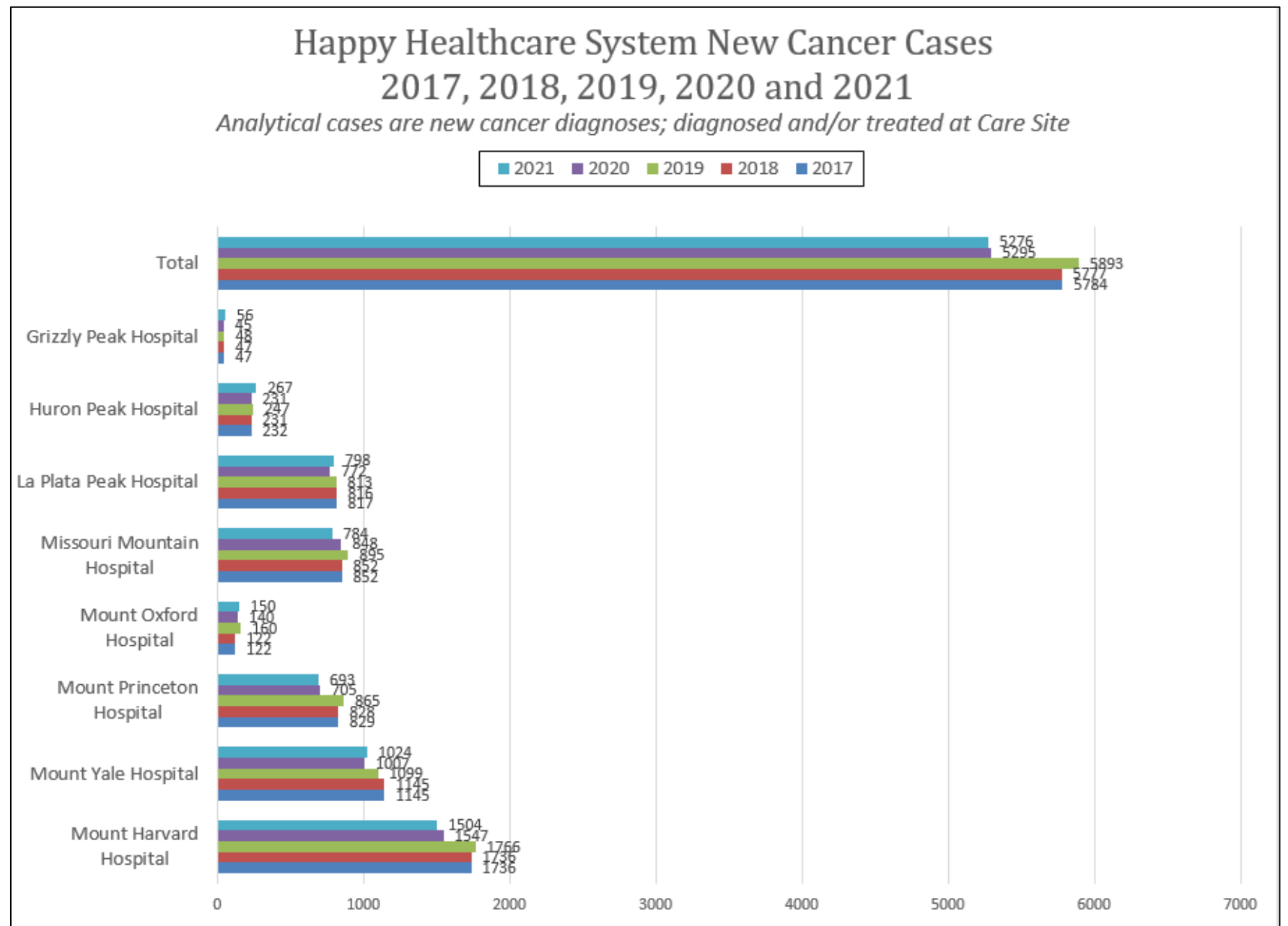


Referred to Outside Facilities by Body Site and Class of Cases Data Sheet

Cross Tabulation of Class of Case by Hospital Referred to for 2020 & 2021 YTD Breast Hosp ABC Analytical												
Class of Case	Happy Healthcare Hosp D	Happy Healthcare Hosp E	Unknown Hospital	Other Sys County Hospital	Other Sys Hosp North	Other Sys University Hospital	Other SysFree Standing Clinic Central	Other Sys University Hospital South	Other SysFree Standing Clinic East	Other SysFree Standing Clinic West	All Others	Total Values
Diagnosed Only at Care Site All 1st Course Treatment Elsewhere	3	0	0	0	2	1	0	0	0	0	0	6
Diagnosed and Received All or Part of First Course Treatment at Care Site	12	12	4	1	1	0	1	1	1	1	2	36
Diagnosed Elsewhere and Received All or Part of 1st Course Treatment at Care Site	1	0	0	2	0	0	0	0	0	0	0	3
Any Others	0	0	0	0	0	0	0	0	0	0	0	0
Overall Totals	16	12	4	3	3	1	1	1	1	1	2	45

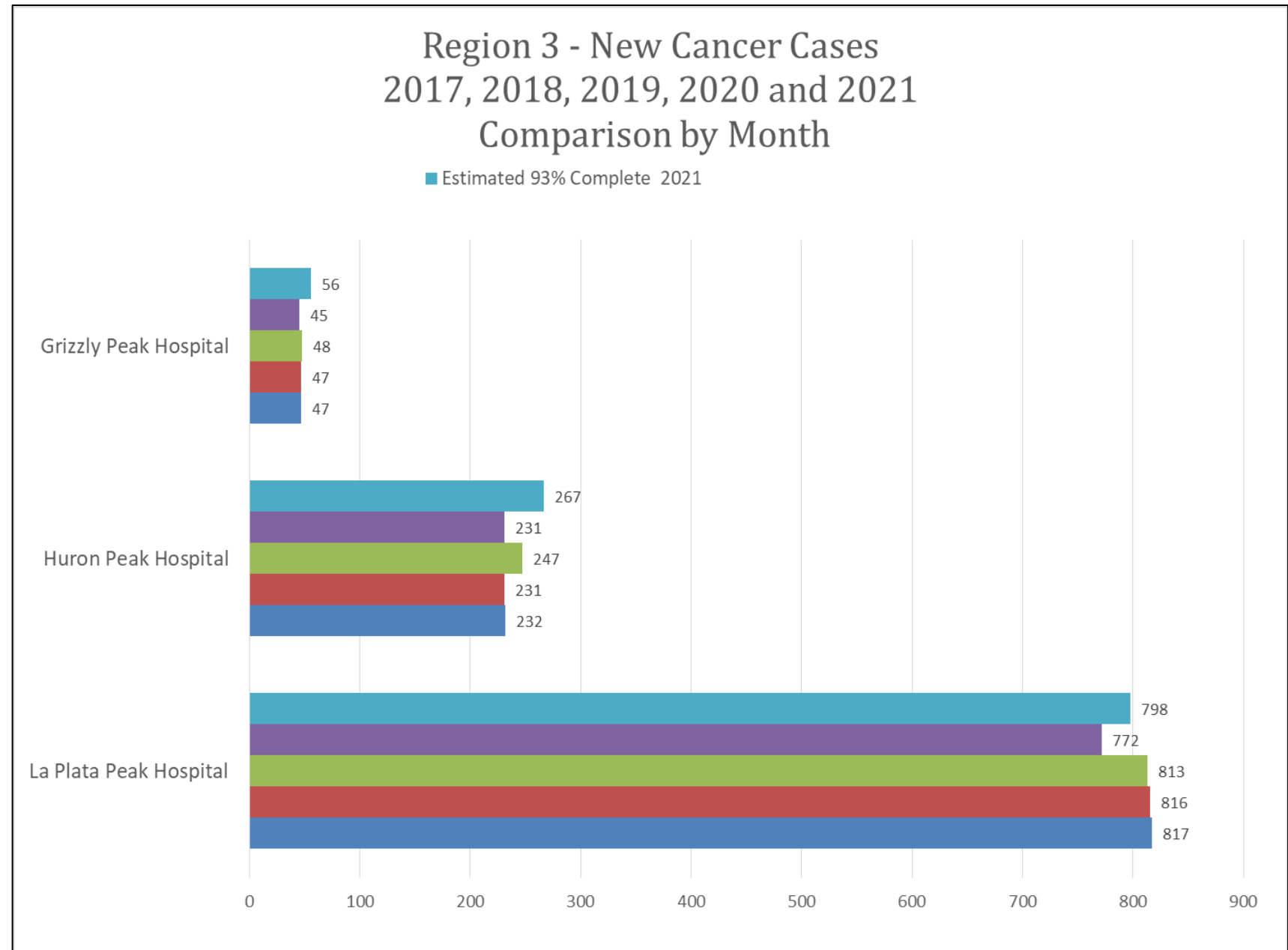
New Cancer Cases

The same information can be provided by the healthcare system



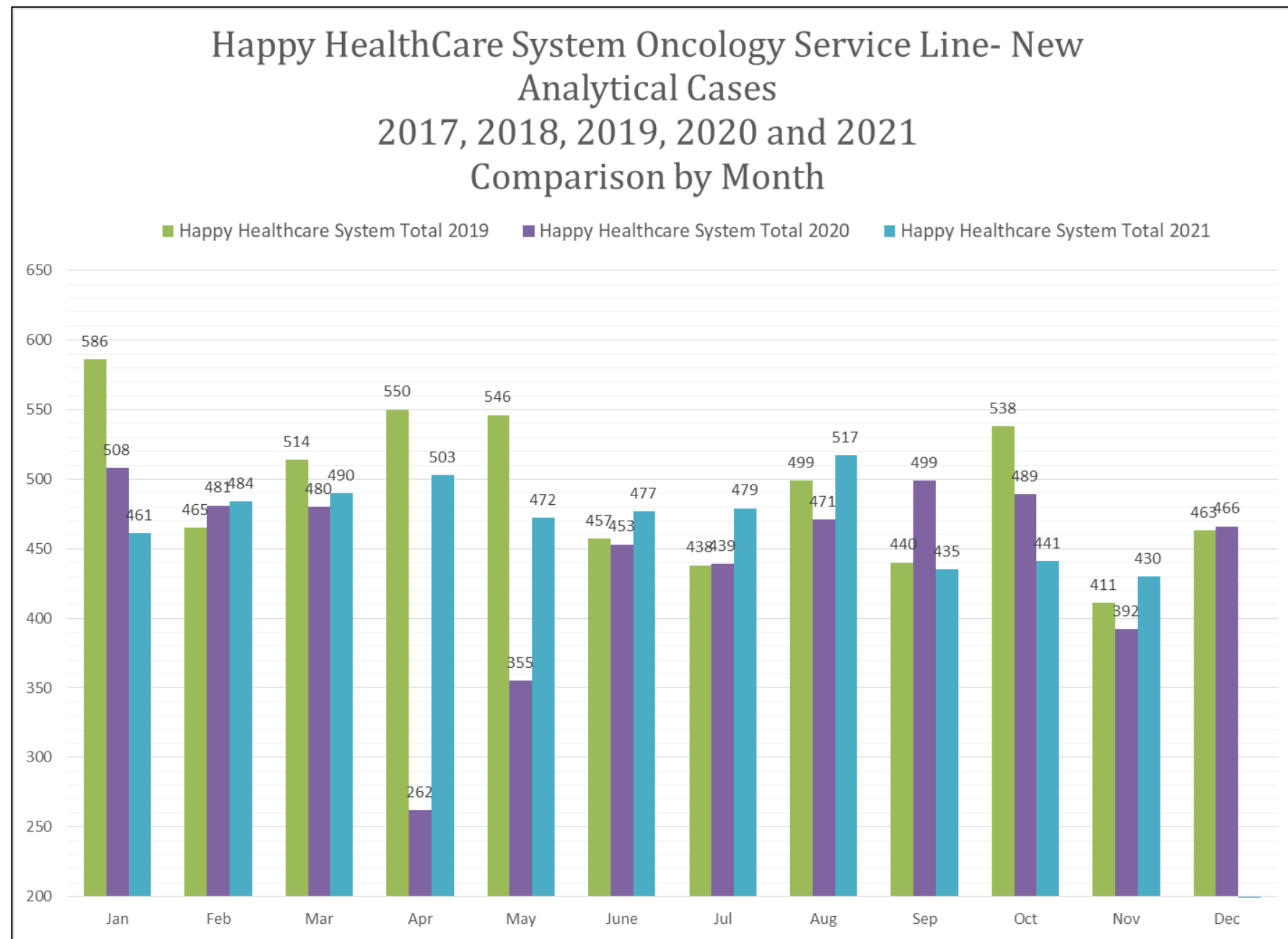
New Cancer Cases by Hospital

Or provided by region or state where facilities are located



New Cancer Cases by Month/Year

By System and Month



Data Sheets for System Graphs

Care Site	2020 # Cases	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	2020 # Total YTD	Average Cases Per Month	2020 % of Total
Mount Harvard Hospital	1547	149	150	147	66	102	129	126	134	134	143	126	141	1547	129	29.2%
Mount Yale Hospital	1007	93	93	78	56	71	88	73	87	106	97	77	88	1007	84	19.0%
Mount Princeton Hospital	705	62	69	64	39	40	50	58	57	64	80	60	62	705	59	13.3%
Mount Oxford Hospital	140	14	14	14	6	5	12	14	17	12	8	8	16	140	12	2.6%
Missouri Mountain Hospital	848	85	65	84	39	47	82	76	81	86	73	54	76	848	71	16.0%
La Plata Peak Hospital	772	77	72	65	38	61	66	69	74	71	67	55	57	772	64	14.6%
Huron Peak Hospital	231	24	13	23	15	25	22	20	18	21	16	12	22	231	19	4.4%
Grizzly Peak Hospital	45	4	5	5	3	4	4	3	3	5	5	0	4	45	4	0.8%
Total	5295	508	481	480	262	355	453	439	471	499	489	392	466	5295	441	100%

Care Site	2021 # Cases	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	2021 # Total YTD	Average Cases Per Month	2021 % of Total
Mount Harvard Hospital	1504	116	149	140	129	143	138	131	169	126	110	121	32	1504	125	28.5%
Mount Yale Hospital	1024	81	80	90	107	92	104	82	82	89	98	101	18	1024	85	19.4%
Mount Princeton Hospital	693	73	74	57	61	61	60	85	57	62	45	52	6	693	58	13.1%
Mount Oxford Hospital	150	17	10	8	19	14	9	16	21	9	17	10	0	150	13	2.8%
Missouri Mountain Hospital	784	78	74	82	87	71	58	61	81	56	71	51	14	784	65	14.9%
La Plata Peak Hospital	798	66	68	87	70	58	85	72	82	58	67	70	15	798	67	15.1%
Huron Peak Hospital	267	26	25	23	26	26	20	25	22	27	25	21	1	267	22	5.1%
Grizzly Peak Hospital	56	4	4	3	4	7	3	7	3	8	8	4	1	56	5	1.1%
Total	5276	0	0	0	0	0	0	0	0	0	0	0	0	5276	440	100%

Sel Pop: Time Frame-Year

Xtab: Month of 1st Contact by Hosp

Then copy and paste into main spreadsheet above in the correct order by month and hospital. Update all months and previous year once a month.

User Defined Fields

- Consider creating UDF fields to capture more specific information for leadership not available in the regular STORE codes

Example: UDF field to identify specific insurance company

- Create a Graph Pop by that user defined field
 - Use codes defined by your organization
 - Save a referenced spreadsheet for abstractors to refer to

Conclusions

- The use of cancer registry data can identify areas that require attention/improvement from a business or quality of care perspective
- The analysis by leadership can result in the improvement/expansion of programs and improve patient care
- Sharing this information with leadership at your hospital will highlight the value of the cancer registry database
- Educates others that CTRs are highly skilled and valuable employees

Thank you for joining us!!!

