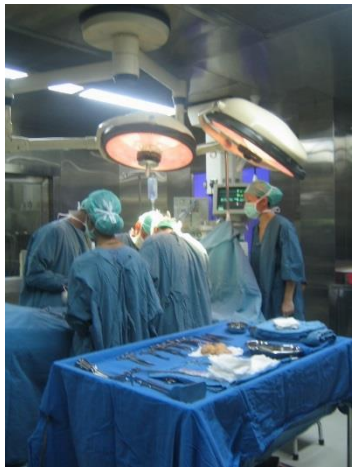
Healthcare Industry

Oncology Research Analytics



Inspired by and dedicated to

Cancer Fighting Patients, Oncologists & All supporting staff

Jana Analysis – HEALTH ANALYTICS COMPANY

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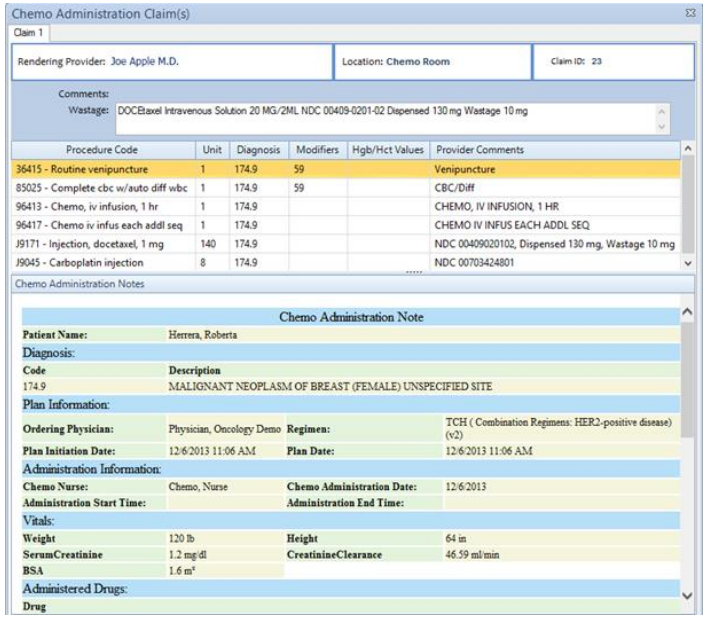
Who we are

ONCOLOGY Specific Research Based Analytics Company



What we do

- ❖ **Oncology Specialized EHR**
- ❖ **Enable Oncology Research via Pioneering Analytics and using Proprietary Algorithms**
- ❖ **Protocol based clinical trials in Radiation**

PURPOSE

Research

- For future research
- Findings to improve the survival rates

Patients

- Tracking of cancer symptoms, history, therapies and post follow ups in patient care
- Improve overall wellness of patients

Doctors

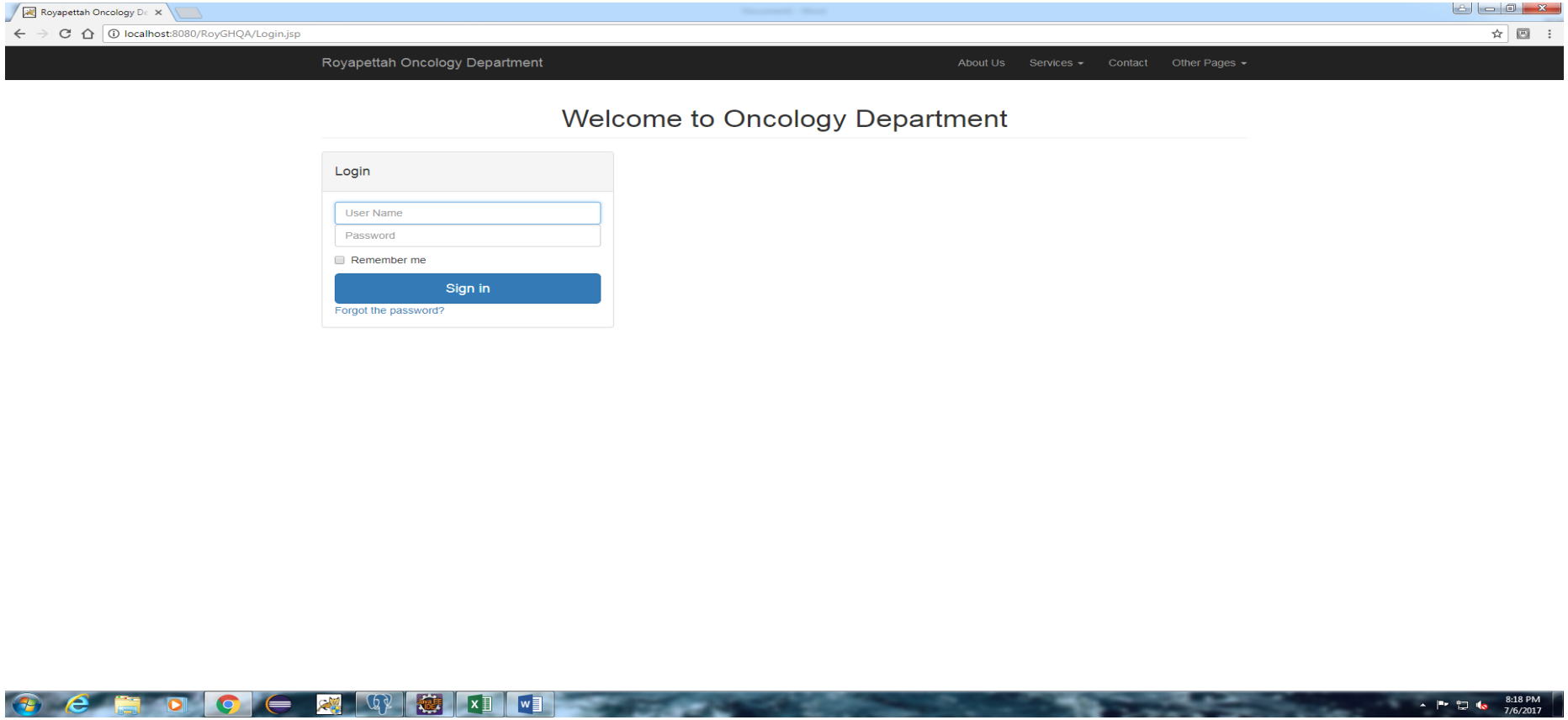
- Easy of use of cancer specific patients data sets
- Publishing break through clinical trials.
- Overall improvement in performance & differentiation

Why we are best suited to collaborate

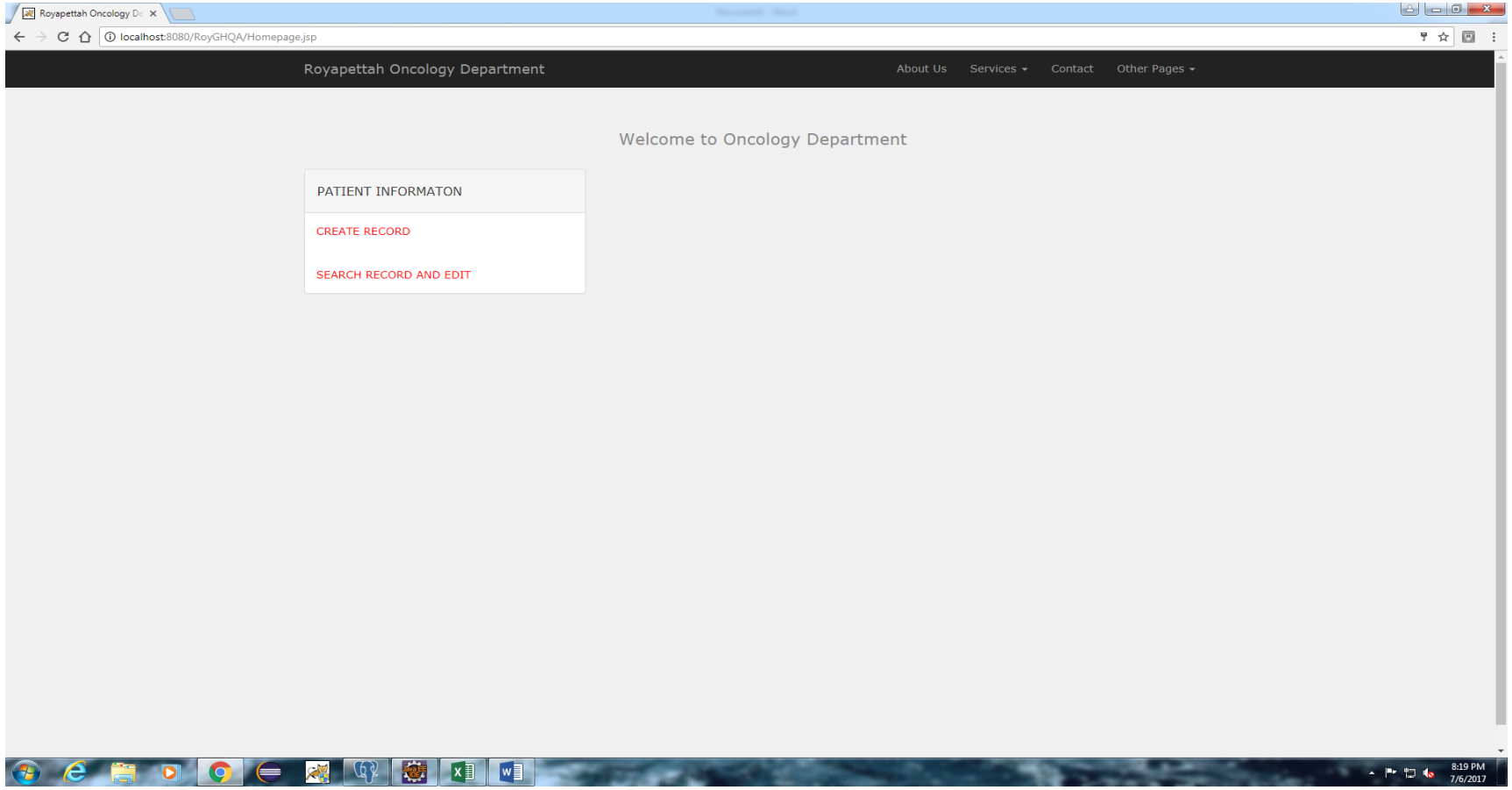
- **We work with number of Oncologists – multi year projects and knowledge sharing. We know the intersection of IT and Oncology Research**

- **Uniquely positioned to provide best oncology analytics to region based on Oncology solutions experience**

Welcome Screen



New record / Edit record



Demographics Page

Patient Information

localhost:8080/RoyGHQA/patient.jsp?PatientID=0

Royapettah Oncology Department

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Patient Information

Second Primary: Select
Name:
Sex:
CD No: 0
Occupation:
Organ: Select Organ
Input:
Age: 0
Phone: 0
Address:
Diagnosis: Type
Sub Types: Select Sub Types

Clinical Stage

T - TUMOR: Select | Select
N - Nodal: Select | Select
M - Metastasis: Select | Select
Stage:
Stage Group: Select | Select

Referral Information

Recorded By:
Referral Physician:
Consultant:
Referral Hospital:

Tumor Board Policy

Date: mm/dd/yyyy
Therapy: null
Therapy Number: 0

Save

Patient Info Page

Patient Information

localhost:8080/RoyGHQA/patient.jsp?PatientID=0

Royapettah Oncology Department

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Patient Information

Second Primary	No		
Name	Peter	Age	65
Sex	male	Phone	987654321
CD No	655	Address	New York
Occupation	Analysis	Diagnosis	SOFT TISSUE SARCOMA
Organ	HEAD AND NECK	Sub Types	HEAD AND NECK - NASAL CAVITY
Input	test		

Clinical Stage

T - TUMOR	X	a
N - Nodal	X	a
M - Metastasis	X	a
Stage	TXaNXaMXa	
Stage Group	II	B

Referral Information

Recorded By	Mano from other PC	Consultant	Test Phy
Referral Physician	test phy	Referral Hospital	test hospital

Tumor Board Policy

Date	12/02/2015	Therapy Number	6565
Therapy	test		

Save

General Examination Page

Patient Information

localhost:8080/RoyGHQA/Genexami.jsp?patient_id=124

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GENERAL EXAMINATION

PERFORMANCE STATUS: Select

NUTRITIONAL STATUS: Select

ANAEMIA: Select

JAUNDICE: Select

PEDAL EDEMA: Select

PULSE: PER MIN

BLOOD PRESSURE: mmHg

HEIGHT: CM

WEIGHT: KG

BODY SURFACE AREA: METER SQ

BODY MASS INDEX: KG /SQ. MTR

CARDIO VASCULAR SYSTEM

HEART SOUNDS

OTHER

RESPIRATORY SYSTEM

TRACHEAL SHIFT: Select

Select

BILATERAL AIR ENTRY: Select

REMARKS

ADDED SOUNDS

CENTRAL NERVOUS SYSTEM

Examination

ABDOMEN

Local Examination Page

Patient Information

localhost:8080/RoyGHQA/Genexami.jsp?patient_id=124

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EXAMINATION

MASS Select

ORGANOMEGALY Select

SPINE AND CRANIUM

Examination

SUPRACLAVICULAR NODE

EXAMINATION Select

LOCAL EXAMINATION

INSPECTION

PALPATION

PERCUSSION

AUSCULTATION

REGIONAL NODES

DISTAL PULSE / DISTAL NEUROLOGICAL DEFICIT

EXTERNAL GENITALIA

PER VAGINAL EXAMINATION

PER RECTAL

Surgery / Chemo / Radiation Pages

DATE OF SURGERY			
ANESTHESIA			
GENERAL	ETGA		
REGIONAL	EPIDURAL		
LOCAL			
INTENT OF SURGERY	CURATIVE		
SURGERY			
PROCEDURE			
FROZEN / IMPRINT	POSITIVE		
DURATION OF SURGERY		MINS	
BLOOD LOSS		ML	
BLOOD REPLACEMENT		UNITS	

POST OPERATIVE HISTOPATHOLOGY

NUMBER			
HISTOLOGICAL TYPE	Papillary Cystadeno Carcinoma		
	Length	Breadth	Depth
SPECIMEN SIZE			
MARGINS			

RADIATION THERAPY PLANNING - EXTERNAL BEAM RT

RECORDED BY						
STARTING DATE						
DIAGNOSIS						
STAGE	T - TUMOR		N - NODAL		M - METASTASIS	
	X		0		1	
PRINCIPLE		IF CURATIVE				
INVESTIGATIONS						
	Hb					
	Tc					
	Dc					
	PLATELETS					
	OTHERS					
CT SIMULATION		REMARKS				
PRE RT CLINICAL EXAMINATION						
ADVICE						

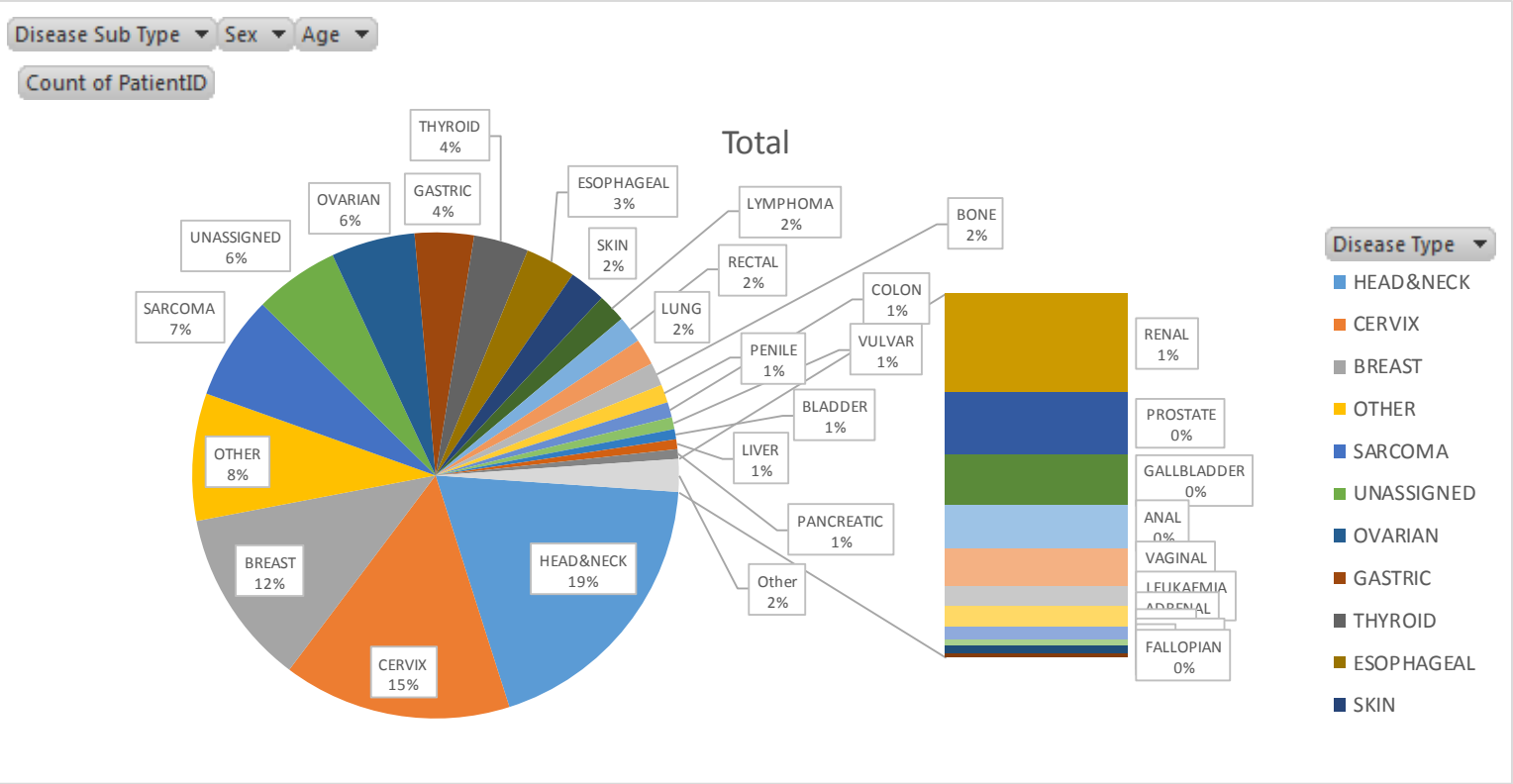
TELETHERAPY PLANNING - GENERAL			ANTEROPOSTERIOR	POSTEROANTERIOR	RIGHT LATERAL	LEFT LATERAL	OBLIQUES	
	S.NO	PRESCRIPTION	PLAN I	PLAN II	PLAN III	PLAN IV	ANTERIOR	POSTERIOR
	1	POSITION OF THE PATIENT						
	2	TARGET VOLUME						
	3	SHIELDING						
	4	TOTAL DOSE						
	5	DOSE/#						
	6	NO.OF #						
	7	DURATION OF TREATMENT						
	8	PORTALS						
	9	DEPTH						
	10	FIELD SIZE						
	11	DAILY TUMOR DOSE TO BE GIVEN THROUGH EACH FIELD						

Jana Networks

SAMPLE ANALYTICS

Disease Sub Type	(All)
Sex	(All)
Age	(All)

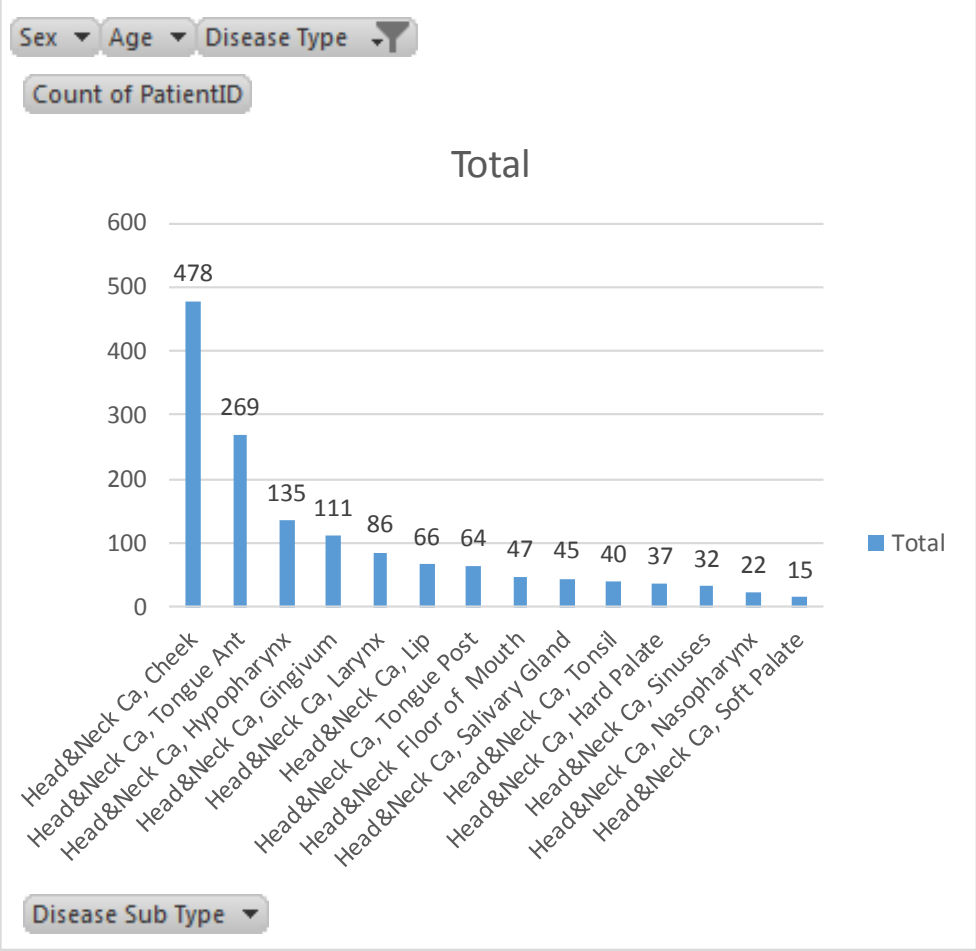
HEAD&NECK	1447
CERVIX	1155
BREAST	893
OTHER	645
SARCOMA	529
UNASSIGNED	429
OVARIAN	424
GASTRIC	299
THYROID	277
ESOPHAGEAL	255
SKIN	185
LYMPHOMA	144
RECTAL	136
LUNG	133
BONE	117
PENILE	92
COLON	77
VULVAR	61



ANALYTICS – HEAD & NECK

Sex	(All)
Age	(All)
Disease Type	HEAD&NECK

Head&Neck Ca, Cheek	478
Head&Neck Ca, Tongue Ant	269
Head&Neck Ca, Hypopharynx	135
Head&Neck Ca, Gingivum	111
Head&Neck Ca, Larynx	86
Head&Neck Ca, Lip	66
Head&Neck Ca, Tongue Post	64
Head&Neck Floor of Mouth	47
Head&Neck Ca, Salivary Gland	45
Head&Neck Ca, Tonsil	40
Head&Neck Ca, Hard Palate	37
Head&Neck Ca, Sinuses	32
Head&Neck Ca, Nasopharynx	22
Head&Neck Ca, Soft Palate	15
Grand Total	**1447**



TOBACCO CO-RELATION WITH HEAD & NECK SUB TYPES

OVERALL POPULATION	TOBACCO USERS / TOTAL HEAD&NECK PATIENTS										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Grand
Head&Neck Ca, Cheek	18%	36%	47%	38%	47%	93%	81%	89%	59%	38%	**52%**
Head&Neck Ca, Tongue Ant	22%	38%	56%	25%	100%	75%	100%	75%	17%	19%	**45%**
Head&Neck Ca, Gingivum	5%	22%	60%	31%	25%	100%		50%	48%	7%	**30%**
Head&Neck Ca, Larynx	25%	40%	44%	43%	100%	83%	80%	43%	71%	43%	**52%**
Head&Neck Ca, Hypopharynx	13%	60%	0%	67%	63%	100%	100%	80%	67%	31%	**54%**
Head&Neck Ca, Lip	27%	43%	45%	28%	46%	88%	81%	59%	35%	17%	**47%**
Head&Neck Ca, Tongue Post	8%	63%	100%	33%	50%	80%	100%	83%	14%	0%	**42%**
Grand Total	17%	40%	49%	35%	49%	89%	86%	74%	49%	25%	**47%**

MALE POPULATION	TOBACCO USERS / TOTAL HEAD&NECK PATIENTS										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Head&Neck Ca, Cheek	22%	44%	75%	47%	39%	100%	93%	82%	66%	48%	**59%**
Head&Neck Ca, Tongue Ant	33%	43%	75%	67%	100%	75%	100%	50%	0%	13%	**56%**
Head&Neck Ca, Gingivum	10%	33%	75%	57%	43%	100%		100%	53%	14%	**45%**
Head&Neck Ca, Larynx	30%	50%	67%	60%		80%	100%	50%	71%	43%	**59%**
Head&Neck Ca, Hypopharynx	25%	60%	0%	67%	67%	100%	100%	75%	100%	30%	**56%**
Head&Neck Ca, Lip	29%	60%	67%	38%	63%	100%	83%	63%	50%	19%	**55%**
Head&Neck Ca, Tongue Post	9%	57%	100%	50%	60%	75%	100%	80%	17%	0%	**44%**
Grand Total	22%	49%	70%	50%	53%	92%	93%	72%	59%	29%	**55%**

ANALYTICS - BREAST

SURGERY TYPE / DISEASE TYPE	
Disease Type	BREAST
YearofRegistration	(Multiple Items)
Surgery	Yes
RadioTherapy	(All)
Sex	(All)
Social History	(All)
Family History	(All)
SmokerOrTobaccoUser	(All)
Disease Sub Type	(All)

Row Labels	Count of PatientID
Modified radical mastectomy-patey's	29
Modified radical mastectomy lt	16
Lt MRM	12
Modified radical mastectomy- Auchincloss left	12
Modified radical mastectomy- right	11
modifed radical mastectomy	10
Rt MRM	9
Mastectomy	8
Modified radical mastectomy- Auchincloss	7
Left MRM	6
MODIFIED RADICAL MASTECTOMY L	6
modified radical mastectomy done	6
Modified radical mastectomy- Auchincloss-right	5
Right MRM	4
L MRM	4
Rt. MRM	4
Modified Radical Mastectomy - revision	4
left modified radical mastectomy	3
Revision mastectomy rt	3
MRM rt	3

DEEP ANALYTICS – MODIFIED RADICAL MASTECTOMY-PATEY'S – 29 Nos

Row Labels	Count of PatientID
Modified radical mastectomy-patey's	29
Modified radical mastectomy lt	16
Lt MRM	12
Modified radical mastectomy- Auchincloss left	12
Modified radical mastectomy- right	11
modifed radical mastectomy	10
Rt MRM	9
Mastectomy	8
Modified radical mastectomy- Auchincloss	7
Left MRM	6
MODIFIED RADICAL MASTECTOMY L	6
modified radical mastectomy done	6
Modified radical mastectomy- Auchincloss-right	5
Right MRM	4
L MRM	4
Rt. MRM	4
Modified Radical Mastectomy - revision	4
left modified radical mastectomy	3
Revision mastectomy rt	3
MRM rt	3

Patient	Disease Type	Disease Sub Typ	Status	StatusDate	PresentHistory	PastHistory	OnExamination	NameOfSurgery	TypeOfSurgery	DateOfSurgery
4058	BREAST	Breast Ca	Alive NED	25/9/2012	had lump rt breast	not a known dr	no mass in breast	Modified radical mastectomy-patey's	Curative	
3625	BREAST	Breast Ca	Alive With	15/3/2011	Lump lt breast-3 months.		# lump present in left breast predominantly upper inner quadrant. Axillary node palpable-1	Modified radical mastectomy-patey's		28/4/2009
3530	BREAST	Breast Ca	Alive NED	5/1/2009			ca breast Rt T2N1Mo	Modified radical mastectomy-patey's	Curative	22/10/2008
3511	BREAST	Breast Ca	Alive With	21/5/2010	[remenopausal women with h/o lump lt breas 6m	no comorbid co	lump lt breast 4x3 cm uoq skin/ pm free lt axiilla 1x1 cm node +	Modified radical mastectomy-patey's		30/10/2008
3428	BREAST	Breast Ca			lump rt breast 3 months duration underwent 3 cycles of	NIL	3X2 Cms mobile lump inmthe lower outer quadrant axilla 1x1 cms mobile node in the ant axillary	Modified radical mastectomy-patey's	Curative	
3311	BREAST	Breast Ca	Alive With	24/4/2009	Lump un the Breast-3months.			Modified radical mastectomy-patey's		31/5/2008
3220	BREAST	Breast Ca	Alive NED	29/10/2008	Diagnosed as ca breast when alur		4cmx4cm lump in the left breast lower	Modified radical mastectomy-patey's	Curative	24/5/2008
2621	BREAST	Breast Ca	Alive NED	21/7/2007	ca breast	nocomorbid co	axillary tail skin/chest wall free	Modified radical mastectomy-patey's	Curative	
2512	BREAST	Breast Ca	Alive NED	31/7/2007	h/o swelling in lt breast- lumpectc		6/5 cm swelling in lt UIQ, mobile, axill	Modified radical mastectomy-patey's	Curative	3/5/2007

SAMPLE REPORTS

STANDARD REPORTS
How many patients have recurrence – 1 year, 2 years, 3 years
How many deaths – by year, by type of cancer, by age, by gender, etc
Survival patterns – Disease free, overall free, morbidity patterns
Symptoms Vs patient care given - Medicines Prescribed

ONCO SUMMARY

We would like to collaborate in any of the following models:

1. Custom solutions in oncology HER
2. Population specific research analytics
3. New process to automate in Radiation
4. Develop customized solution in Clinical Research

Thank you.

Let us join together for the good cause

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