

Association of Cancer Executives

Oncology Finances: The Use of Dashboards to Drive Decisions

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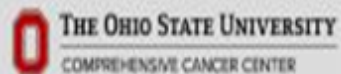
January 27, 2019



OUR VISION

Creating a
Cancer-Free World.
One Person,
One Discovery
at a Time.

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Agenda

- **Welcome to ACE**
- **Introductions of people in the room (name, cancer center/hospital, role and how long in that position)**
- **I don't actually believe in this topic, sort of**
- **Background**
- **Dashboard examples**
- **Glossary**
- **Discussion and Questions**

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Topic at hand

- **Understanding key financial metrics and using dashboard data to drive decisions is fundamental to success for all oncology executives**
- **New executives must understand key terminology**
- **Knowing what data points to collect to help decision-making is half the battle**
- **Building a dashboard facilitates decision-making, but decisions should be based on what the patients need, not the impact to the bottom line (recognizing no margin = no mission)**

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Background

- Robert S. Kaplan and David P. Norton published “Using the Balanced Scorecard as a Strategic Management System” in the *Harvard Business Review* in January 1996
- Described four processes for managing strategy as part of balanced scorecard

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Background (cont'd)



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Is this how decisions are made at your hospital?



Important question #1:
Does finance drive the operational decisions or does operations drive the financial decisions?

***not at the table: the people actually doing the work!

"My job is to make decisions. Your job is to make them good decisions."

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Dashboards...

Dashboards? Dashboards?



We don't need no stinking dashboards!!!

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Financial Dashboards



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MSAC - Patient Activity Summary
For the Month and Year Ending November 30, 2018

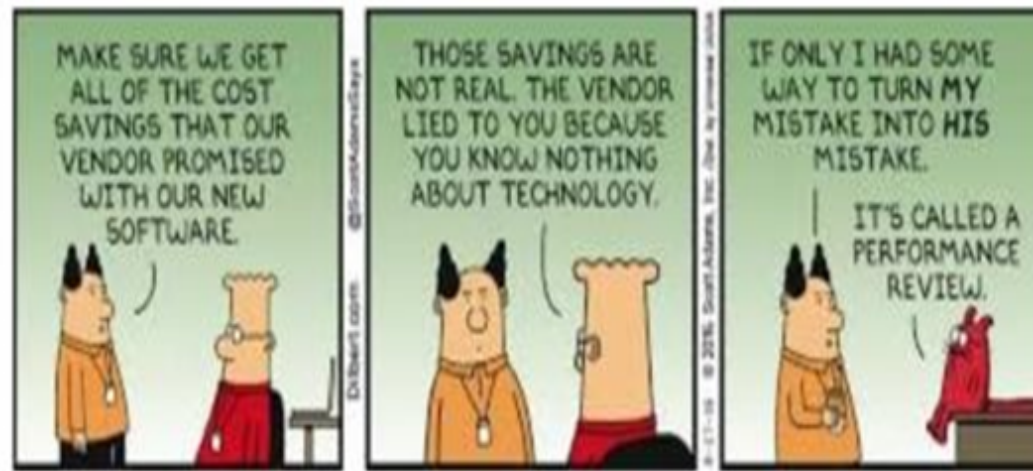
Patient Activity -- November, FY19				Patient Activity -- FY19 YTD			
	Actual	Budget	% Variance		Actual	Budget	% Variance
Admissions	1,213	1,241	-2.3%	Admissions	6,097	6,277	-2.9%
Patient Days	8,127	8,458	-3.9%	Patient Days	42,668	42,239	1.0%
Average Daily Census	284	287	-0.9%	Average Daily Census	288	282	2.1%
Average Length of Stay	6.70	6.82	-1.7%	Average Length of Stay	7.00	6.73	4.0%
Surgeries in James OR	806	868	-7.1%	Surgeries in James OR	4,465	4,548	-1.8%
James Surgeries in All OR's	844	896	-5.8%	James Surgeries in All OR's	4,641	4,650	-0.2%
Outpatient Visits	32,529	37,096	-12.3%	Outpatient Visits	171,044	188,014	-9.0%
Chemotherapy Sessions	4,995	4,607	8.4%	Chemotherapy Sessions	24,859	23,334	6.5%
Radiation Treatments	3,426	4,108	-16.6%	Radiation Treatments	19,792	20,761	-4.7%

Financial Performance -- November, FY19 (\$ in millions)				Financial Performance -- FY19 YTD (\$ in millions)			
	Actual	Budget	% Variance		Actual	Budget	% Variance
Operating Revenue	\$ 119.1	\$ 123.0	-3.1%	Operating Revenue	\$ 640.0	\$ 623.5	2.6%
Expenses	(96.5)	(95.0)	-1.6%	Expenses	(474.0)	(470.7)	-0.7%
Gain From Operations	\$ 22.6	\$ 28.0	-19.0%	Gain From Operations	\$ 165.9	\$ 152.8	8.6%
Non Operating Gain	0.3	0.3	0.0%	Non Operating Gain	4.4	1.3	232.1%
Medical Center Investments	(5.6)	(5.6)	0.0%	Medical Center Investments	(28.0)	(28.0)	0.0%
Excess Revenue Over Expenses	\$ 17.3	\$ 22.6	-23.5%	Excess Revenue Over Expenses	\$ 142.3	\$ 126.2	12.8%

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Performance Scorecards



OSU WEXNER MEDICAL CENTER - ENTERPRISE PERFORMANCE SCORECARD
 FY2019 July Year-To-Date Results



Strategic Priorities	Champion	Metric(s)	FY18 Actual	FY19 YTD - July Actual	Status	FY19 Target	FY24 - 7 Year Aspirational Target
TALENT & CULTURE	Mincey/ McQuaid/ Kent	Percentage of Tier 3 work areas – staff	33% total units (175)	Data Available February 2019		Reduction of Tier 3 units to 26% (136)	Top Quartile
	Mincey/ McQuaid/ Kent	Faculty engagement score	3.84	Data Available March 2019		3.93	Top Quartile
	Mincey/ McQuaid/ Kent	Staff hire turnover in first year	22.0%	2.3%	↔	19.7% (10% reduction in first year exits from FY18)	10th Percentile of Benchmark
	Mincey/ McQuaid/ Kent	Percentage of URM/Women in leadership positions	11% (URM) 46.1% (Women)	11.1% (URM) 46.9% (Women)	▲	12% (URM) 48.5% (Women)	18% (URM) 53% (Women)
RESEARCH	Mohler/ Kent	Total Awards	\$209.2M	\$14.6M	▲	\$217.6M	\$374.9M
	Mohler/ Kent	NIH Awards	\$118.2M	\$9.7M	▲	\$122.9M	\$178.2M
	Mohler/ Kent	New Federally Funded Faculty	25	10	▲	22	20 in FY24 Cumulative 140
EDUCATION	Clinch/ Kent	US News and World Report (Peer Assessment Score and Residency Director Score)	Peer: 3.5 Residency: 3.4	Data Available March 2019		Peer: 3.5 Residency: 3.5	Peer: 3.9 Residency: 4.0
	Clinch/ Kent/ Holliday	% of top students matched as residents	29.3%	Data Available March 2019		29.3%	30.0%
	Clinch/ Kent	Number of T-32 training grant applications submitted	N/A	Data Available Fall 2018		3	10 Total T-32 Training Grants

Domain	Metric
Mortality	Observed/Expected Inpatient Mortality
	End of Life Measures
Safety	PSIs –PSI-03, PSI-06, PSI-09, PSI-11, PSI 13
	CAUTI, CLABSI, C-Diff, SSI-colon procedures, SSI – abdominal hysterectomies, MRSA
	Khorana Risk Score Stratified VTE Rate
	Percentage of cases with all recorded hemoglobin (Hgb) ≥ 10 to ESA use (erythropoietin/darbepoetin)
	GCSF (filgrastim) use compared to WBC count, persistently elevated calcium not receiving a bisphosphonate, or severely elevated uric acid not receiving Rasburicase

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Effectiveness

30-day Unplanned Readmissions for Cancer Patients

Excess Days

Revisit>Returns within 7-days of Outpatient Chemotherapy

End of Life Measures

Efficiency

LOS & Direct Cost

End of Life Measures

Patient Centeredness

9 composite question groupings

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Key Statistics FY18 - Adult Only	
Cancer Cases (OP)	5,387
Annual +/-	0.0%
CR	2,478
ACIS	733
CR Adj. ACIS	338
Cancer Visits (OP)	62,808
Annual +/-	4.0%
Net Revenue	
Inpatient	\$ 43,240,930
OP Net per Case	\$ 24,728
Annual OP +/-	0.0%
Outpatient	\$ 103,953,248
OP Net per Case	\$ 1,122
Annual OP +/-	14.6%
Total	\$ 147,194,178
Annual +/-	8.0%
Patients Admitted	
Inpatient	334
Outpatient	4,333
Contribution Margin	
Inpatient	\$ 22,214,321
Outpatient	\$ 14,621,377
Total	\$ 36,835,698
Annual +/-	14.3%
Quality and Safety (one month lag)	
OSI Index	0.98
Morbidity Index	1.17
Efficiency	
Patients Per Room Per Day	
Multi-Disciplinary Clinic	3.28
Medical Hematology	3.08
CR	2.58
Patients Per Chair Per Day	
Chemotherapy Weekday	2.33
Chemotherapy Weekend	1.87

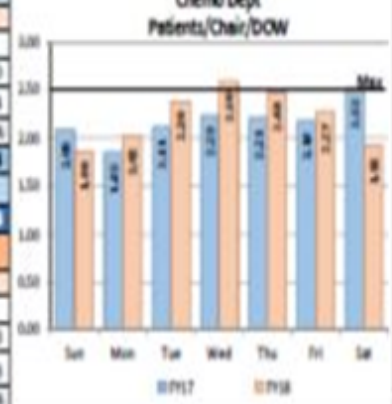
- Overall (Inpatient and Outpatient)**
- FY18 cases increased 1,433, 4.3% from the prior year
 - Net revenue increased \$15.7M, 8.7%
 - Direct cost increased \$7.6M, 6.7%
 - Supply cost increased \$3.5M, 13.5%
 - Personnel cost increased \$3.6M, 7.3%
 - Other direct costs decreased \$2.7M, 17.3% due to a change in internal enterprise transfers.
 - Contribution margin increased \$8.5M to \$38.8M driven by \$1.2M in rate & \$1.2M in volume.
- Inpatient**
- FY18 adult cases increased 211, +6.8% from the previous year
 - GI and Respiratory increased by 78 and 37 cases, respectively (Chemotherapy down by 84)
 - Surgical and Medical cases increased by 227 and 71 cases, respectively, from the prior year.
 - FY18 FY17 - GI Bone Marrow Transplant cases, down -12 from last FY18.
 - Medical (M) + 2,288 (+4,038%) and Surgical (S) + 2,238 (+4,034%)
 - FY18 ACIS measures compared to FY17
 - Medical (M) adjusted ACIS + 1.87 (+4.11)
 - Surgical (S) adjusted ACIS + 1.43 (+4.52)
 - Morbidity Index FY18 was 1.17 for encounters with a primary diagnosis of neoplasms, hematology
 - Marked occupancy and Non-Admits & Remissions growth challenged patient counting efforts
 - Discharge goal = 87% Note - Marked hospital readmissions to Pw & Flow (1) on 12/19/2017
 - Marked Pw & Flow (17) MCI: 85.5% FY18: 75.8%
 - Marked Pw & Flow (17) (MCI) MCI: 85.4% FY18: 75.4%
 - MCI MCI: n/a FY18: 75.8%
 - MCI (MCI) MCI: n/a FY18: 81.2%
- Revenue**
- Net revenue is up +\$1.2M driven by \$3.8M volume increase (partially offset by -\$2.6M in rate)
 - Net revenue per case is down by -\$700/case
 - Volume and net revenue are trending in a positive direction
 - A decrease in acuity as well as a decrease in rate per case drove the decline in net revenue per case. Significant decrease in net revenue per case included Breast (+\$8,370/case), Hem (+\$8,175/case), Respiratory (+\$2,575/case) and Chemotherapy (+\$2,898/case)
 - Direct cost increased \$2.6M (5.7%) from the prior year (+CR) cases
 - Excluding the positive benefit from change in internal transfer methodology, direct cost increased \$1.6M (2.1%) from the prior year (FY17) trend, driven by
 - Offloading the rate and (+) incremental back - variable Patient Care Staff and SS Wages were up \$1.8M (5.1%) and \$25M (2.1%) respectively, increase in cost of care also occurred due to higher pharmacy rates, CT and Respiratory equipment
 - Variable Drug costs increased \$7.1M (2.2%) (patient) driven by an increase in Pharmaceuticals, Cardiovascular, and Radiophysics
 - Variable supplies increased \$1.2M and were up 3.7% (patient)
 - Contribution margin was \$22.2M, 75% greater than the prior year.
- Outpatient**
- FY18 Adult OP cases increased by 1,640 (+4.29%) from last year.
 - Revenue**
 - Net revenue is up \$12.8M (26%) driven by \$8.8M increase in rate and \$1.7M in volume
 - Increase included Chemo \$7.2M (25%) (case), Lyph and Hema \$1.8M (26%) (case), and Blood Coagula \$2.8M (25%) (case)
 - OP direct cost was up \$5.8M (7.2%) mainly attributable to increased volume, as well as an increase in intravenous drug costs, particularly with Pentostatin (\$2.8M), Pembrolizumab (\$1.5M), and Acetaminophen (\$475K)
 - Contribution margin increased \$7.6M (52.5%) in rate and \$1.2M in volume.
- OP provider based clinical services**
- Multi-D visits decreased 3.3% (due to gap reduction in provider coverage in Diagnostic and Diagnostic)
 - CRCC consult visits are up 1.8% with MIMM FY18 utilization at 88.5%
 - MHP visits increased 13.7%
 - Chemo visits increased 15.1% driven by increase in weekend volume
 - Infection visits increased 38.5%
 - Genetic visits are up 12.2% from the last fiscal year.
 - Real Med visits are down 2.0% however, the number of unique patients receiving treatment has increased slightly over the prior year (7%) due to new treatment options that reduce the number of total visits required per patient.

UK HealthCare
 Chemotherapy and Infusion Departments
 Dashboard Report as of May, 2018

Chemotherapy Department Visits													
FY2017													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	YTD May
Est	1,064	1,137	1,123	1,102	1,223	1,240	1,166	1,068	1,260	1,200	1,314	1,264	12,808
New ¹	117	114	80	171	148	126	119	142	161	110	133	142	1,420
%New	10.0%	9.1%	7.0%	13.4%	10.8%	9.2%	9.3%	11.7%	10.7%	8.4%	9.2%	11.2%	9.9%
Total	1,171	1,251	1,212	1,273	1,371	1,375	1,285	1,210	1,411	1,310	1,447	1,446	14,316
Utilization % ²										63%	59%	62%	

Patients/Chair/Day			
	Chairs	YTD May	
		FY17	FY18
Chemo (M ¹)	24	2.06	2.32
Chemo (S ¹)	18	2.27	1.87
Infusion (M ¹)	3	2.09	3.75
Apheresis (M ¹) ³	2	0.06	0.09

FY2018													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	YTD May
Est	1,392	1,439	1,180	1,375	1,300	1,341	1,362	1,383	1,438	1,394	1,600	-	14,990
New ¹	137	142	154	144	120	119	137	136	136	144	116	-	1,484
%New	9.0%	9.0%	11.8%	9.5%	8.4%	8.2%	9.1%	8.8%	8.7%	9.4%	7.1%	-	9.0%
Total	1,529	1,581	1,304	1,519	1,429	1,460	1,499	1,419	1,572	1,538	1,624	-	16,474
Utilization % ²	69%	69%	61%	68%	61%	69%	68%	71%	71%	72%	71%	-	
FY Val.	304	330	92	246	14	85	214	209	141	238	177	-	2,104



Infusion Department Visits													
FY2017													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	YTD May
Est	187	167	163	155	188	178	158	155	166	157	162	180	1,783
New ¹	28	30	29	27	43	35	28	36	33	30	31	52	348
%New	14.4%	15.2%	15.3%	14.8%	20.7%	16.4%	14.1%	18.8%	16.6%	16.0%	16.1%	22.4%	16.2%
Total	195	197	182	182	208	213	184	191	199	187	193	232	2,131
FY Val.	15	37	44	80	32	26	40	30	54	84	74	-	622

Top 5 Divisions Referring New Patients to Chemo (by volume, through May)			
Division	FY17	FY18	Variance
MEDICAL ONCOLOGY	426	471	43
HEMATOLOGY ONCOLOGY	427	462	35
GEN-ONCOLOGY	132	132	-5
BREAST CARE CENTER	40	108	15
UNIDENTIFIED PROVIDER	47	106	18

FY2018													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	YTD May
Est	180	211	192	216	202	197	177	187	201	220	220	-	2,183
New ¹	32	43	34	46	38	44	47	34	54	51	47	-	470
%New	16.7%	16.0%	15.0%	17.6%	15.8%	18.3%	21.0%	15.4%	21.2%	18.6%	17.6%	-	17.7%
Total	192	254	228	262	240	241	224	221	255	271	267	-	2,653
FY Val.	15	37	44	80	32	26	40	30	54	84	74	-	622



Top 5 Pharmaceuticals (by Variable Direct Cost Impact through May)					
Drug	FY17 Qty	FY18 Qty	Qty Var	Rate/Var	VDC Impact
CONDITIONAL RES (S ¹) NO	29,404	57,813	28,399	Rate	\$ 477,703
DOXILUQUIN (S ¹) (DOXILUQIN)	-	6,900	6,900	Rate	\$ 278,585
INFUSION PER (S ¹) NO	18,152	23,310	5,158	Rate	\$ 460,863
INFUSION (S ¹) NO	4,243	3,698	(545)	Rate	\$ (201,216)
POWTRACED PER (S ¹) (S ¹) NO	9,898	11,091	1,193	Rate	\$ 222,207

¹Note: NEW is determined as an MFI that has had no prior encounter in Chemo or Infusion from FY10 - FY17 Prior YTD Month. "Var" is counted as any encounter with a charge in Chemotherapy or Infusion Dept.
²Represents M¹ Chair Utilizations scheduled from the OHSU Chemo Infusion - Tables Dashboard established in April 2017
³Apheresis operates M-F only; however, requests can be made on the weekends.



Glossary

ADC	Average Daily Census	In the hospital setting, the total number of patients admitted to the facility by midnight, or sometimes at another time of the day. The average daily census is the average number of patients per day in a hospital over a given period of time; admitted patients and outpatients are counted separately.
Admission		The act or process of accepting someone into a hospital, clinic, or other treatment facility as an inpatient.
ALOS	Average Length of Stay	A mean calculated by dividing the sum of inpatient days by the number of patients admissions with the same diagnosis-related group classification.
CAUTI	Catheter-associated urinary tract infection	A catheter-associated urinary tract infection (CAUTI) is one of the most common infections a person can contract in the hospital. Indwelling catheters are the cause of this infection. An indwelling catheter is a tube inserted into your urethra.
CLABSI	Central Line-associated Blood Stream Infection	CLABSI is a primary laboratory confirmed bloodstream infection in a patient with a central line at the time of (or within 48-hours prior to) the onset of symptoms and the infection is not related to an infection from another site.
CM	Contribution Margin	Net revenue (all the revenue the hospital receives for providing care to a population of interest) minus (variable direct expenses + fixed direct expenses) for the population of interest.
CMI	Case Mix Index	CMI is a relative value assigned to a diagnosis-related group of patients in a medical care environment. The CMI value is used in determining the allocation of resources to care for and/or treat the patients in the group.
CMI Adj. ALOS	Case Mix Index Adjusted Average Length of Stay	The ratio of the number of days of hospital care that were utilized to care for patients adjusted for the documented severity of the illnesses.
E&M Visit	Evaluation and Management Visit	This is essentially referring to a doctor's visit, or a consultation (a visit requested by another physician or healthcare entity).

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Glossary

End of Life Measures		In February 2012, NQF endorsed 14 measures on palliative care and end-of-lifecare. The measures address a wide range of care concerns, including pain management, psychosocial needs, care transitions, and experiences of care.
Gain from Operations		The result of subtracting operating expenses from gross profit. Income from operations is the amount before non-operating items (such as gains and losses on the sale of assets, interest revenue, and interest expense).
Khorana Risk Score Stratified VTE Rate	Khorana Risk Score for Venous Thromboembolism in Cancer Patients	Cancer-associated venous thromboembolism (VTE) is one of the leading causes of mortality and morbidity among patients with malignancy. The Khorana risk score (KRS) is currently the best validated risk assessment model to stratify risks of VTE development in ambulatory patients with cancer.
LOS Index	Length of Stay Index	Ratio of observed length of stay to expected (the average LOS based on diagnosis).
Mortality Index		Observed mortality is the actual number of inpatient deaths that occur in the hospital during a specific period. Patients who are very sick (higher severity of illness) have a higher expected mortality rate. A mortality ratio of 1.0 means the observed mortality equals the expected mortality for this patient population.
MRSA	Methicillin-resistant Staphylococcus aureus	Methicillin-resistant Staphylococcus aureus (MRSA) is a bacterium that causes infections in different parts of the body. It's tougher to treat than most strains of staphylococcus aureus – or staph – because it's resistant to some commonly used antibiotics.
NR	Net Revenue	Sum of net patient service revenue, other operating revenue, non-operating revenue, revenue from insurance activities and revenue from non-patient services. This is the total amount of money received by the system or corporate entity.
O/E Mortality	Observed vs Expected Mortality Rate	Observed mortality is divided by the expected mortality to create the O/E ratio.
Occupancy		Occupancy is calculated by dividing the number of rooms sold by rooms available.

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Glossary

Operating Revenue		Operating revenue is revenue generated from a company's primary business activities. For example, a retailer produces revenue through merchandise sales, and a physician derives revenue from the medical services he/she provides.
Patient Days		The total number of days for all patients who were admitted for an episode of care and who separated during a specified reference period.
PSI	Patient Safety Indicators	The Patient Safety Indicators (PSIs) are a set of indicators providing information on potential in hospital complications and adverse events following surgeries, procedures, and childbirth.
SSI-procedures	Surgical Site Infections for operative procedures	This dataset shows the surgical site infections (SSIs) reported by a hospital to the Center for Disease Control and Prevention National Healthcare Safety Network (NHSN). The data is provided in two tables 1) SSIs for the 5 Operative procedures and 2) SSIs for 24 Operative procedures.
Unplanned Readmissions		The hospital return days measures add up the number of days patients spent back in the hospital (in the emergency department, under observation, or in an inpatient unit) within 30 days after they were first treated and released. The measures compare each hospital's return days to results from an average hospital with similar patients to determine if this hospital has more, similar, or fewer days than average.
Utilization		The quantification or description of the use of services by persons for the purpose of preventing and curing health problems, promoting maintenance of health and well-being, or obtaining information about one's health status and prognosis.

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Fake News



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Discussion and Questions

???

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THANK YOU

for all you do to help
create a cancer-free world!



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