

# Navigating Colorectal and Pancreatic Cancer Patients in a Multidisciplinary Cancer Center

Christine Guarnieri, MSN, RN-BC, OCN

BROUGHT TO YOU BY:

**OncologyNurseAdvisor**



# Navigating the Colorectal & Pancreatic Cancer Patient

- Objectives
  - At the end of this presentation, participants will be able to:
    - Discuss incidence, risk factors, screening and prevention
    - Identify diagnosis, staging and treatment options
    - Appreciate national benchmarks and quality indicators
    - Understand the referral process and support services
    - Develop patient satisfaction evaluations

# We Are...



- Mission driven
- Goal oriented
- Disease based
- Patient focused
- Multi-disciplined

# We Offer...

OncologyNurseAdvisor  
**navigation**  
SUMMIT

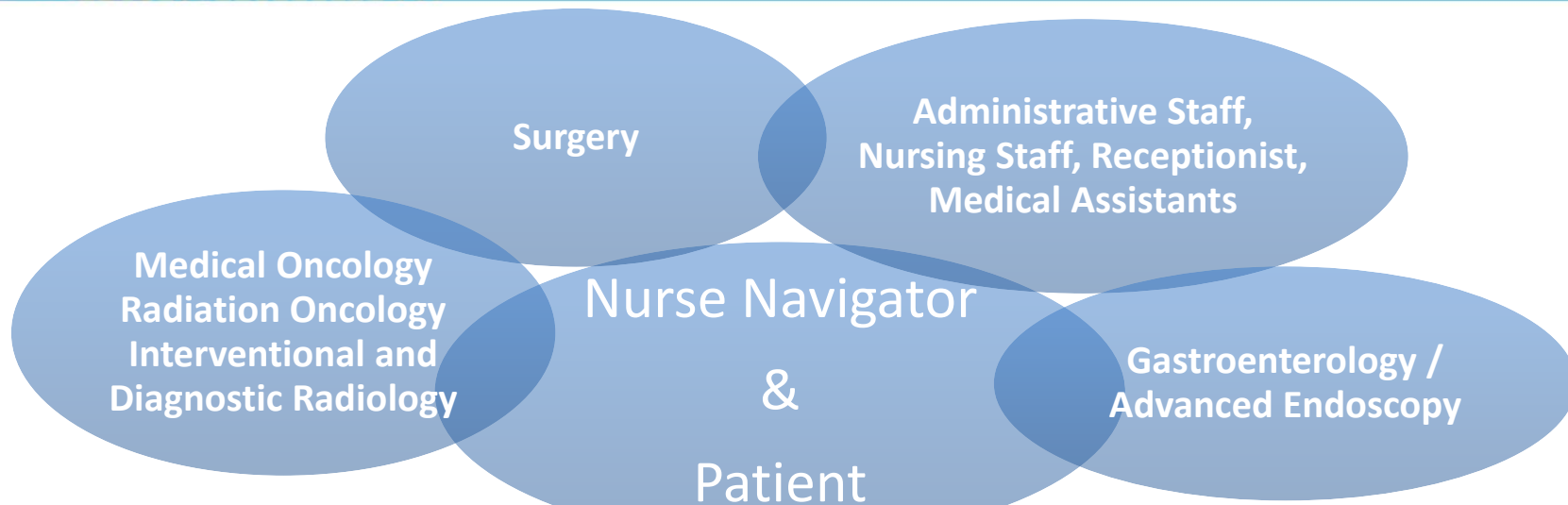


- Research
- Education
- Support Services
- Community Outreach



# Our Team

OncologyNurseAdvisor  
**navigation**  
SUMMIT



# Faces of Colorectal Cancer

OncologyNurseAdvisor  
**navigation**  
SUMMIT



***Who's at Risk???***

# Colorectal Cancer Screening



## A Shared Goal of 80% by 2018



BRFSS (behavioral risk factor surveillance system) results from 2013-2014

% of adults aged 50-75 have received colorectal cancer screening based on recent guidelines

Nassau County:	70.6 %	Long Island Region:	72.1 %
----------------	--------	---------------------	--------

New York State:	69.3 %
-----------------	--------

% of adults aged 50-75 with annual income less than \$25,000 have received colorectal cancer screening based on recent guidelines

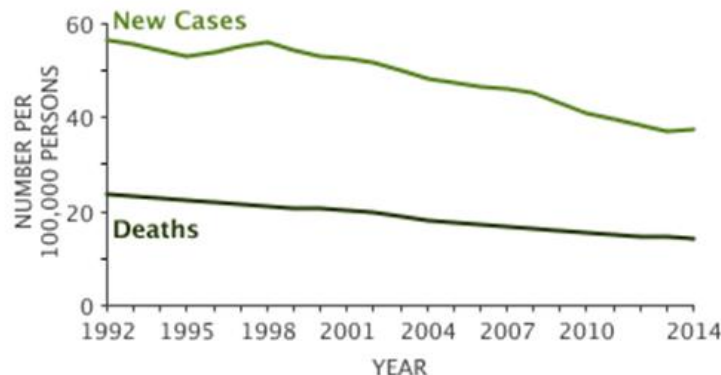
Long Island Region:	62.3 %	New York State:	61.4 %
---------------------	--------	-----------------	--------



# Colorectal Cancer National Statistics

## > At a Glance

Estimated New Cases in 2017	135,430
% of All New Cancer Cases	8.0%
Estimated Deaths in 2017	50,260
% of All Cancer Deaths	8.4%



### Percent Surviving 5 Years

**64.9%**

2007-2013

**Number of New Cases and Deaths per 100,000:** The number of new cases of colon and rectum cancer was 40.1 per 100,000 men and women per year. The number of deaths was 14.8 per 100,000 men and women per year. These rates are age-adjusted and based on 2010-2014 cases and deaths.

**Lifetime Risk of Developing Cancer:** Approximately 4.3 percent of men and women will be diagnosed with colon and rectum cancer at some point during their lifetime, based on 2012-2014 data.

**Prevalence of This Cancer:** In 2014, there were an estimated 1,317,247 people living with colon and rectum cancer in the United States.



# Colorectal Cancer Statistics at Winthrop

	2010	2011	2012	2013	2014	2015
Colon excluding rectum	112	105	124	113	110	110
Rectum & Rectosigmoid Junction	37	50	46	52	62	47
Total	149	155	170	165	172	157

# Colon Cancer Diagnosis

- Clinical Presentation
  - History & Physical
  - Sigmoidoscopy
  - Colonoscopy with biopsy
  - Imaging for distant disease
    - CT chest/abd/pelvis
    - MRI
    - PET or PET/CT

# Rectal Cancer Diagnosis

- Clinical Presentation
  - History & Physical
  - Rectal ultrasound
  - Pelvic CT
  - Pelvic MRI
  - FNA of nodes



# Rectal Cancer Staging

- **MOST** high risk rectal cases receive neoadjuvant treatment
- **MUST** assign clinical stage prior to neoadjuvant treatment
- Determining factors of “high risk” rectal cancer eligible for neoadjuvant treatment
  - Pelvic extent of disease (T N)
  - Absence of extrapelvic mets (M)
  - MSI stability (high vs. low)

# Genetic Mutation Analysis

## Colon & Rectal Cancer

### **Microsatellite Instability (MSI)**

Colorectal tumors with MSI have distinctive features, including a tendency to arise in the proximal colon, lymphocytic infiltrate, and a poorly differentiated, mucinous or signet ring appearance. They have a slightly better prognosis than colorectal tumors without MSI and do not have the same response to chemotherapeutics.

### **KRAS Gene Analysis Mutation Status**

The presence of KRAS mutations has been identified as a potent predictor of resistance to EGFR-directed antibodies such as cetuximab or panitumumab. These agents should therefore be applied only in tumors with a wild-type status of the KRAS

### **Genomic Testing**

#### **Mismatch Repair Deficiency**

Mutations in one of several DNA MMR genes (MLH1, MSH2, MSH6, PMS2, EPCAM) are found in Lynch syndrome (hereditary nonpolyposis CRC [HNPCC]) and in 15 to 20 percent of sporadic colon cancers.

# Prognostic Indicators Colon & Rectal Cancer

- Carcinoembryonic antigen (CEA)
- Tumor Deposits (TD)
- Circumferential resection margin (CRM)
- Perineural invasion (PN)
- Distant Metastasis
- At least 12 lymph nodes dissected in radical resections
- Microsatellite instability (MSI)
- Mutation status (KRAS/BRAF)
- Tumor regression grade (with neoadjuvant therapy)



# Navigating the Colorectal Cancer Patient

- Colon Cancer

- Gastroenterology
- Medical Oncology
  - Distress Screening
  - Chemo Orientation
- Surgical Oncology
  - Port Placement
- Radiology (CT Scan)

- Rectal Cancer

- Gastroenterology
- Surgical Oncology
  - Colorectal Surgeon
- Radiation Oncology
- Medical Oncology
  - Distress Screening
  - Chemo Orientation
  - PO Chemo Adherence
- Radiology (CT Scan)
- Surgical Oncology
  - Colorectal Surgeon
- Ostomy Marking

# Colon Cancer Case Study

- **AF**

57 -year-old blind male, lives with his wife PM Hx HTN, hyperlipidemia, DM  
CC: Weakness, tired, general malaise

- July 2014      Normocytic anemia (Hb 10.5g/dl) **elevated CEA of 183**. Patient refused colonoscopy at that time.
- January 2015   s/p Iron supplementation hemoglobin 10.0g/dL. Additional testing revealed an **increase in CEA to 472**
- March 2015      EGD and colonoscopy revealed malignant lesion descending colon biopsied and pathology proven adenocarcinoma of the colon.
- March 2015      CT imaging C/A/P revealed proximal sigmoid colon mass with applecore morphology measuring 4.4 cm. Infiltration of the mesocolon and mildly prominent mesocolic lymph nodes. Numerous hepatic lesions compatible with metastatic disease.
- April 2015      He was evaluated by colorectal surgeon and found to be unresectable then referred to oncology for further management.
- April 2015      Patient referred to Nurse Navigator**

## Opportunities / Lessons Learned

- Assessment:    Patient distress score not evaluated, understanding (elevated CEA and importance of timely follow-up) not evaluated
- Planning:       Timely follow up (7 months until EGD/colonoscopy)
- Implementation: Follow up and treatment plan made in collaboration with patient. Patient lost in the shuffle.
- Evaluation:     Patient understanding of treatment related side effects and next steps in treatment plan. Ongoing process.

# Rectal Cancer Case Study

- **BH**

85 year old female with PMH HTN, macular degeneration, legally blind, lives alone

CC: rectal pain, constipation and bright red blood per rectum with bowel movements for the past year

March 2015      Colonoscopy positive for rectal mass, pathology consistent with moderately differentiated invasive adenocarcinoma of the rectum, with concern for posterior vaginal wall invasion.

March 2015      **Patient referred to Nurse Navigator**

March 2015      **Recommendations: neo-adjuvant chemo/RT for T3N1 (Stage IIIB)**

CT C/A/P, clinical staging with endo-rectal US, consult with Oncology, Radiation Oncology, Oncology SW, Dietitian,

Referred to VNS for Cancer Care support program

Referred for transportation assistance

April 2015      Begin neo-adjuvant capecitabine / radiation x 25 treatments

July 2015      Surgical resection and creation of end colostomy  
Referred for ostomy marking and ostomy support service

August 2015      Begin adjuvant treatment for ypT1N0 adenocarcinoma

## Opportunities / Lessons Learned

Assessment:      Patient distress screening evaluation, understanding disease and treatment recommendation.

Planning:          Timely referral to multiple disciplines timely follow up, PO chemo adherence and education

Implementation:      Follow up and treatment plan made in collaboration with patient

Evaluation:          Patient understanding of treatment related side effects and next steps in treatment plan



# American College of Surgeons National Surgical Quality Improvement Program

OncologyNurseAdvisor  
**navigation**  
**SUMMIT**

07/01/2015 - 06/30/2016

ACS NSQIP Semiannual Report: Site Summary

## Colorectal

Winthrop University Hospital

Site Number: 1387

	Total	Observed		Pred**	Expected	Odds	C.I.***		Outlier	Decile	Comment*
	Cases	Events	Rate	Obs. Rate	Rate	Ratio	Lower	Upper			
COLORECT Mortality	225	6	2.67%	2.74%	2.76%	0.98	0.57	1.70		5	As expected
COLORECT Morbidity	225	29	12.89%	12.98%	13.20%	0.98	0.69	1.38		5	As expected
COLORECT Length of Stay	191	31	16.23%	16.57%	18.35%	0.86	0.58	1.27		4	As expected
COLORECT Pneumonia	224	1	0.45%	1.15%	1.93%	0.58	0.25	1.36		1	Exemplary
COLORECT Unplanned Intubation	225	3	1.33%	1.43%	1.45%	0.98	0.61	1.59		5	As expected
COLORECT Ventilator > 48 Hours	225	7	3.11%	2.70%	2.32%	1.23	0.63	2.39		9	As expected
COLORECT VTE	225	2	0.89%	1.30%	1.47%	0.88	0.48	1.63		2	As expected
COLORECT Renal Failure	225	1	0.44%	1.10%	1.28%	0.85	0.47	1.53		1	Exemplary
COLORECT UTI	225	3	1.33%	1.44%	1.51%	0.95	0.49	1.87		5	As expected
COLORECT SSI	224	14	6.25%	6.33%	6.48%	0.97	0.62	1.52		5	As expected
COLORECT Sepsis	218	4	1.83%	2.17%	2.44%	0.89	0.49	1.62		3	As expected
COLORECT C.diff Colitis	225	1	0.44%	1.00%	1.28%	0.77	0.37	1.63		1	Exemplary
COLORECT ROR	225	12	5.33%	4.68%	4.08%	1.16	0.74	1.80		9	As expected
COLORECT Readmission	225	20	8.89%	8.64%	8.50%	1.02	0.77	1.35		7	As expected

# Pancreatic Cancer

Stage IV Adenocarcinoma of Pancreas  
20 Month Survival



Pancreatic Neuroendocrine Tumor  
8 year survival

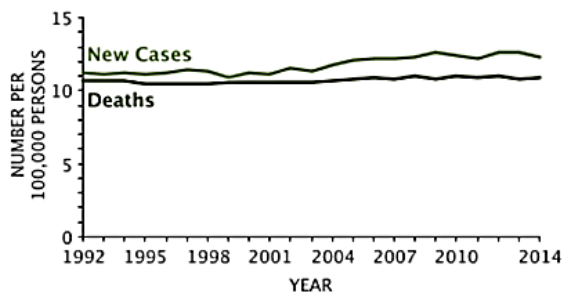
# Pancreatic Cancer National Statistics

## Cancer Stat Facts: Pancreas Cancer

[Expand All](#)[Collapse All](#)[Statistics at a Glance](#)[Show Less](#) -

### > At a Glance

Estimated New Cases in 2017	53,670
% of All New Cancer Cases	3.2%
Estimated Deaths in 2017	43,090
% of All Cancer Deaths	7.2%



Percent Surviving  
5 Years

8.2%

2007-2013

**Number of New Cases and Deaths per 100,000:** The number of new cases of pancreas cancer was 12.5 per 100,000 men and women per year. The number of deaths was 10.9 per 100,000 men and women per year. These rates are age-adjusted and based on 2010-2014 cases and deaths.

**Lifetime Risk of Developing Cancer:** Approximately 1.6 percent of men and women will be diagnosed with pancreas cancer at some point during their lifetime, based on 2012-2014 data.

**Prevalence of This Cancer:** In 2014, there were an estimated 64,668 people living with pancreas cancer in the United States.

# Pancreatic Cancer Statistics at Winthrop

	2010	2011	2012	2013	2014	2015
Pancreas	68	69	67	69	73	95
Gall Bladder / Other Biliary	13	16	9	16	22	18
Liver & Intrahepatic Bile Duct	8	14	14	18	20	36
Total	86	99	90	103	115	149



# Pancreatic Cancer Diagnosis

- Clinical Presentation
  - History & Physical
  - Jaundice
  - Labs
  - Radiology Imaging
    - CT Scan
    - MRI
  - Endoscopic Ultrasound

# Genetic Mutation Analysis Risk for Pancreatic Cancer

Diagnosis younger than 60, more than one cancer in the family history  
2 or more family members with pancreatic cancer

- APC - Familial adenomatous polyposis (FAP) syndrome
- BRCA1 & BRCA 2 - Hereditary breast-Ovarian cancer syndrome
- CDKN2A & P16 – Mutation supports development of pancreatic cancer in melanoma prone family
- MLH1, MSH2, MSH6, PMS2, EPCAM - Lynch Syndrome (HNPCC or hereditary nonpolyposis colorectal cancer)
- STK11 - Peutz-Jeghers Syndrome (Polyps & Spots Syndrome)
- TP53 - Li-Fraumeni Syndrome

# Navigating Pancreatic Cancer Patient

- Radiology
- Advanced Endoscopy
  - EUS
- Surgical Oncology
- Medical Oncology
- Chemo Orientation
- Radiation Oncology
- Nutrition / Dietitian
- Social Work
  - Support Group
- Palliative Care
  - Pain Management
  - Symptom Management

# Pancreatic Cancer Case Study

- AS

50 year old male, uninsured, single, lives with friend / relative, PMHx: HTN, HLD,  
CC: Weight loss, dyspepsia, clay colored stools, pruritis, jaundice sclera

October 2015            presents to ED for evaluation and is admitted to medical service  
CT C/A/P, revealed pancreatic head mass.  
ERCP with bx positive for malignant cells  
**Patient referred to Nurse Navigator**

November 2015        Whipple surgery for T3N1 invasive ductal adenocarcinoma of pancreas

December 2015        Referred to adjuvant chemo, complicated by TTP  
Referred to plasmapheresis, then back to chemotherapy

October 2016           Recurrence - - metastatic to liver  
Referred to Interventional Radiology, tissue analysis for mutation testing, referral for clinical trials

## Opportunities / Lessons Learned

Assessment:	Patient distress score initiated on diagnosis, Psychosocial evaluation and referral to SW, nutrition, transportation, Financial Aid
Planning:	Timely follow up and referral process
Implementation:	Treatment plan made in collaboration with patient
Evaluation:	Patient understanding of treatment related side effects and next steps in treatment plan

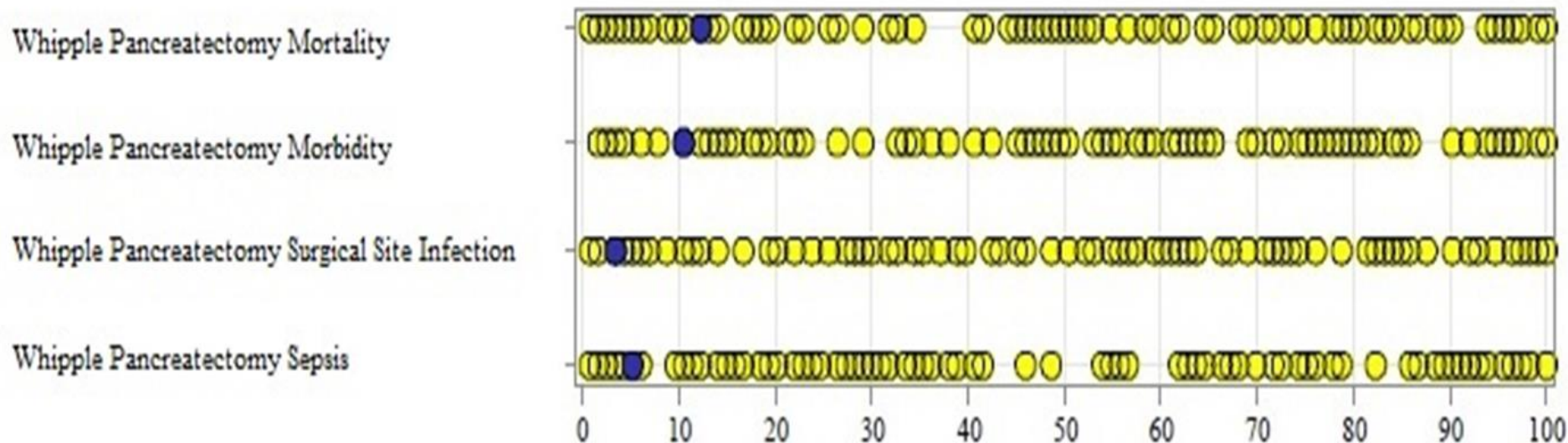
# ACS National Surgical Quality Improvement Program

OncologyNurseAdvisor  
**navigation**  
SUMMIT

## Percentile Rank of Collaborative Hospitals

January 2016 Report

Data Collected July 1, 2014 to June 30, 2015





# Referral process

- Multidisciplinary Cancer Conference
  - Biweekly Tumor Boards
- Direct referral
  - Website resource page
  - Primary Care Physician
  - “Oh! By the way there’s a patient....”
- Referral Checklist Sheet

# Patient Referral Checklist

## **Cancer Referral Checklist**

*For assistance with referrals*

*Please contact:*

Christine Guarnieri, MSN, RN-BC, OCN  
P - 516-663-2601    F - 516-742-4207

Oncology Nurse Navigator:  
Colorectal/Gastrointestinal/Pancreatic  
Cancers

◇ Winthrop Oncology / Hematology 200 Old Country Road, Suite 450 Phone - 516-663-9500 Fax - 516-663-4613	◇ Winthrop Infusion Center 120 Mineola Blvd. Phone - 516-663-4510 Fax – 516-663-2988
◇ Winthrop Radiation Oncology 269 First Street (LL) Mineola, NY 11501 Phone - 516-663-2501 Fax - 516-663-8558	◇ Winthrop Gastroenterology 222 Station Plaza Phone - 516-663-2066 Fax - 516-663-4655
◇ Winthrop Radiology for PET/CT HopeLyn Burger, Coordinator @ Winthrop University Hospital Phone - 516-663-2300	◇ Winthrop Surgical 120 Mineola Blvd. #300 Phone – 516-663-3300
◇ Winthrop Dept. of Genetic Testing 120 Mineola Blvd Suite 220 Mineola, NY 11501 Phone 516-663-2657	◇ Winthrop Radiology(CT/MRI) 120 Mineola Blvd. LL Phone – 516-663-4510

# Referrals to support the Colorectal and Pancreatic cancer patient

- Social Work Referral
  - Distress Screening
- Financial Assistance
- Cancer Support Groups
- Nutritional Assessment
- Community Resources
- Clinical Trial
- Palliative Care
  - Quality of Life
  - Pain Management

## ClinicalTrials.gov

A service of the U.S. National Institutes of Health

[Try our beta test site](#)

*ClinicalTrials.gov is a registry and results database of publicly and privately supported clinical studies of human participants conducted around the world. Learn more [about clinical studies](#) and [about this site](#), including relevant [history](#), [policies](#), and [laws](#).*

[Find Studies](#) ▾ [About Clinical Studies](#) ▾ [Submit Studies](#) ▾ [Resources](#) ▾ [About This Site](#) ▾

**IMPORTANT:** Information on ClinicalTrials.gov is provided by the sponsor or principal investigator of the clinical study, and posting to this site does not necessarily reflect endorsement by NIH. ClinicalTrials.gov does not independently verify the scientific validity or relevance of the submitted information beyond a limited quality control review for apparent errors, deficiencies, or inconsistencies. **Talk with a trusted healthcare professional before choosing to participate in a clinical study.**

ClinicalTrials.gov currently lists **240,252 studies** with locations in all 50 States and in **197 countries**.

### Search for Studies

Example: "Heart attack" AND "Los Angeles"

[Advanced Search](#) | [See Studies by Topic](#)  
[See Studies on Map](#)

### Search Help

- [How to search](#)
- [How to find results of studies](#)
- [How to read a study record](#)

### For Patients and Families

- [How to find studies](#)
- [See studies by topic](#)
- [Learn about clinical studies](#)
- [Learn more](#)

### For Researchers

- [How to submit studies](#)
- [Download content for analysis](#)
- [About the results database](#)
- [Learn more](#)

### For Study Record Managers

- [Why register?](#)
- [How to register your study](#)
- [FDAAA 801 requirements](#)
- [Learn more](#)

Text Size ▾

### Locations of Recruiting Studies



- Non-U.S. only (56%)
- U.S. only (39%)
- Both U.S. and non-U.S. (5%)

Total N = 41,686 studies  
(Data as of March 29, 2017)

• [See more trends, charts, and maps](#)

### Learn More

- [Final Rule Webinar Series](#)
- [Tutorials for using ClinicalTrials.gov](#)
- [Glossary of common site terms](#)
- [For the press](#)
- [Using our RSS feeds](#)

# Oncology Nurse Navigator Patient Satisfaction Survey

## Institute for Cancer Care

### Oncology Nurse Navigator Program Patient Satisfaction Survey

*Oncology Nurse Navigators are registered nurses who are dedicated to assisting the cancer patient and their loved ones throughout their entire cancer care experience. Their goal is to decrease frustration by helping cancer patients better understand their diagnosis, prognosis and treatment plan.*

**Instructions:** You recently were assisted by one of our Oncology Nurse Navigators. We would appreciate any feedback that will help us to enhance our service to best meet your needs or help recognize areas of improvement. Please **circle the number** that best represents your feelings. After you have completed the survey, please mail in the enclosed envelope. Thank you for your participation

---

At what point during your care did you first have contact with the nurse navigator? **Circle one**

- At initial diagnosis
- Before surgery
- After surgery
- Before or after chemo radiation
- Other

---

Would you have found it beneficial to receive navigation services earlier? **Yes/No**

---

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Does Not Apply
1. My calls were returned by the navigator in a timely manner	5	4	3	2	1	N/A
2. I felt the navigator knew about my case	5	4	3	2	1	N/A
3. The navigator provided me with helpful information	5	4	3	2	1	N/A
4. The navigator kept me informed	5	4	3	2	1	N/A
5. I would recommend this service to others	5	4	3	2	1	N/A
6. How would you rate your overall experience with the navigator?	5	4	3	2	1	N/A
7. Did you feel the navigator improved your overall cancer care experience at Winthrop?	5	4	3	2	1	N/A
8. Did being part of the navigation program keep you from seeking care elsewhere?	5	4	3	2	1	N/A

Which services to your care did the navigator assist you with? **Please circle.**

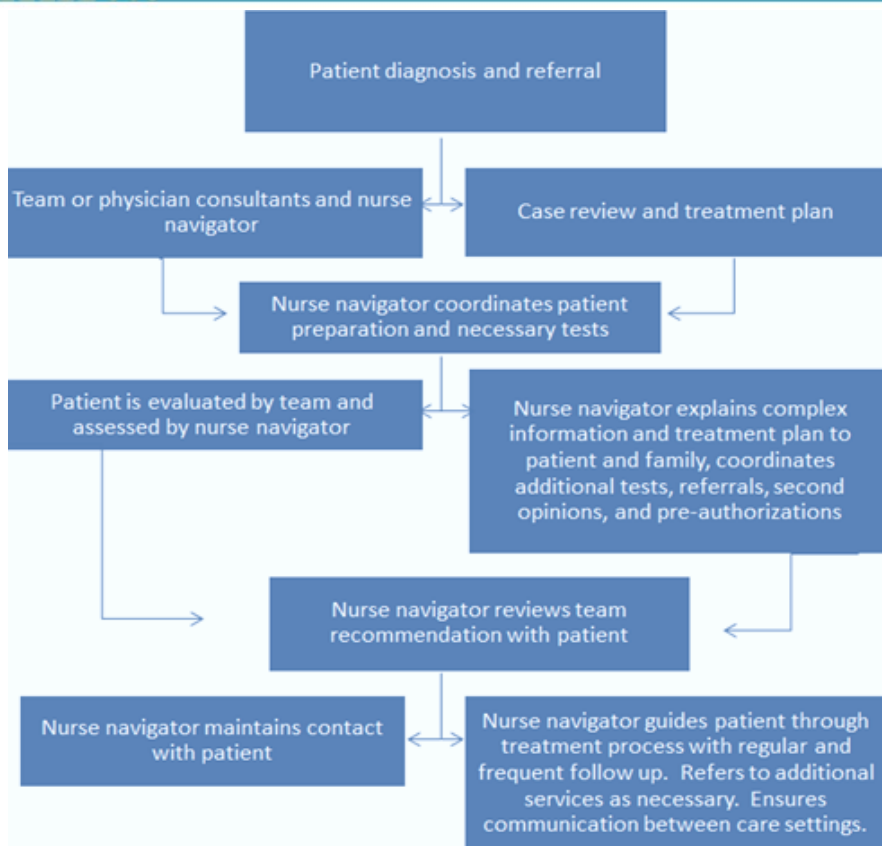
- Coordination of Appointments
- Learning and educational resources
- Financial assistance
- Insurance assistance
- Caregiver assistance
- Counseling services
- Communication concerns with medical personnel
- Support groups
- Transportation assistance
- Nutrition

Did these supports services meet your needs? **Yes/No**

Suggestions or Comments: \_\_\_\_\_

Name (optional) \_\_\_\_\_

# A day in the life...





# Summary

- By identifying incidence, prevalence and risk factors for colorectal and pancreatic cancer in our communities Nurse Navigators can develop screening and prevention programs to better serve these populations
- Understanding diagnosis, staging and treatment options for colorectal and pancreatic cancer provides the Nurse Navigator with information for proper patient guidance and management
- National Benchmarks and Quality Indicators... “*How are we doing*” as an accredited cancer program
- In this multidisciplinary setting, a streamlined referral processes is key to removal of actual and potential barriers to patient care
- A Patient Satisfaction Survey is the best tool to measure successes and challenges for navigation service

# References

- AJCC, A. J. (2013). *Collaborative Stage Data Collection System Coding Manual*. Retrieved April 2017, from Cancer Staging Version 02.00.01: <http://web2.facs.org/cstage0205/colon/Colonschema.html>
- Ambry. (2017). *Genes associated with increased risk for pancreatic cancer*. Retrieved March 2017, from Ambry Genetics Corporation: <http://www.ambrygen.com/tests/pancnxt>
- Boland, C. &. (2010). Microsatellite Instability in Colorectal Cancer. *Gastroenterology*, 138(6), 2073-2087.
- BTW. (2016). *Difference between Colonoscopy and Sigmoidoscopy*. Retrieved April 2017, from The difference between: <http://www.differencebtw.com/difference-between-colonoscopy-and-sigmoidoscopy/>
- FACS, T. A. (2017). *Cancer Program Practice Profile Reports (CP3R)*. Retrieved April 2017, from Quality Cancer Tools: <https://www.facs.org/quality-programs/cancer/ncdb/qualitytools/cp3r>
- MFMER. (2017). *Overview Pancreatic Cancer*. Retrieved March 2017, from Mayo Foundation for Medical Education and Research: <http://www.mayoclinic.org/diseases-conditions/pancreatic-cancer/home/ovc-20268502>
- NCCN. (2017, March). *Clinical Practice Guidelines Colon Cancer*. Retrieved April 2017, from National Comprehensive Cancer Network: [https://www.nccn.org/professionals/physician\\_gls/pdf/colon1.pdf](https://www.nccn.org/professionals/physician_gls/pdf/colon1.pdf)
- NLM. (2017). *Clinical Trials*. Retrieved March 2017, from National Library of Medicine (NLM) : <https://clinicaltrials.gov/>
- NSQIP, A. C. (2017). *ACS National Surgical Quality Improvement Program*. Retrieved April 2017, from National Surgical Quality Improvement Program: <https://www.facs.org/quality-programs/acs-nsqip>
- NYSDOH. (2017). *Behavioral risk factors surveillance system*. Retrieved April 2017, from New York State Department of Health: <https://www.health.ny.gov/statistics/brfss/>
- SEER. (2017, April). *National Cancer Institute*. Retrieved May 2017, from The Surveillance, Epidemiology and End Results Program (SEER): <https://seer.cancer.gov/statfacts/html/colorect.html>
- Society, A. C. (2017). *ACS*. Retrieved May 2017, from Causes risk factors and prevention: <https://www.cancer.org/cancer/colon-rectal-cancer/causes-risks-prevention/risk-factors.html>
- Stocken, e. a. (2008). Modelling prognostic factors in advanced pancreatic cancer. *British Journal of Cancer*, 883–893.