

Cancer Care: *A New Mission*



- *Provide cutting-edge cancer care, deploying the latest therapies and technologies within an empathic patient centered environment*
- *Introduce new scientific paradigms in cancer care through basic and translational research*
 - Emphasis on basic research, clinical trials, outcomes measurement and **population health management**
- *Educate new generations of oncologists in the emerging subspecialties*



The New Vision



- Focus on the **“entire” patient**, not just on the cancer
- **Eliminate all possible barriers** between the patient and the best cancer care
- **Full return** to being a productive member of our society after cancer treatment

Support Services

- Nutritional Oncology
- Psychosocial Oncology
- Social Services
- Caregiver Support Center
- Financial Services Navigation
- Navigation Services
- Pain Management and Palliative Care
- Physical Medicine and Rehabilitation
- Genetics
- Survivorship



Holistic care *cannot be an add on!*

IOM Calls for Focus on the Whole Patient



2007

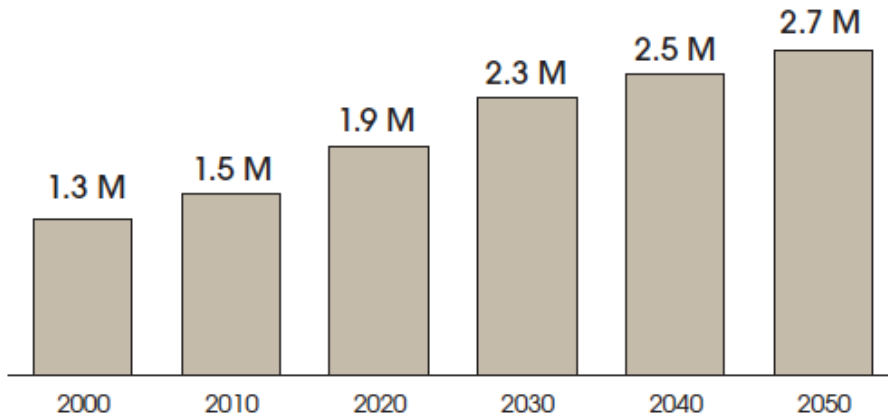
Recommendation #1: The Standard of Care

"All cancer care should ensure the provision of appropriate psychosocial health services by:

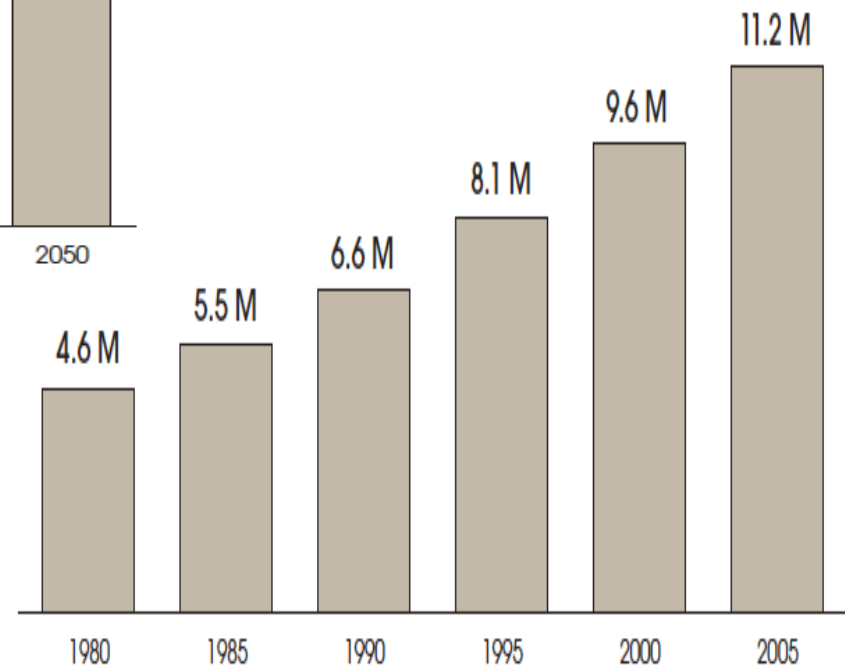
- Facilitating effective communication between patients and care providers.
- Identifying each patient's psychosocial health needs.
- Designing and implementing a plan that:
 - Links the patient with needed psychosocial care.
 - Coordinates biomedical and psychosocial care.
 - Engages and supports patients in managing their illness and health.
- Systematically following up on, reevaluating, and adjusting plans."

Magnitude of cancer problem

Projected Number of Annual U.S. Cancer Cases



Estimated Number of U.S. Survivors



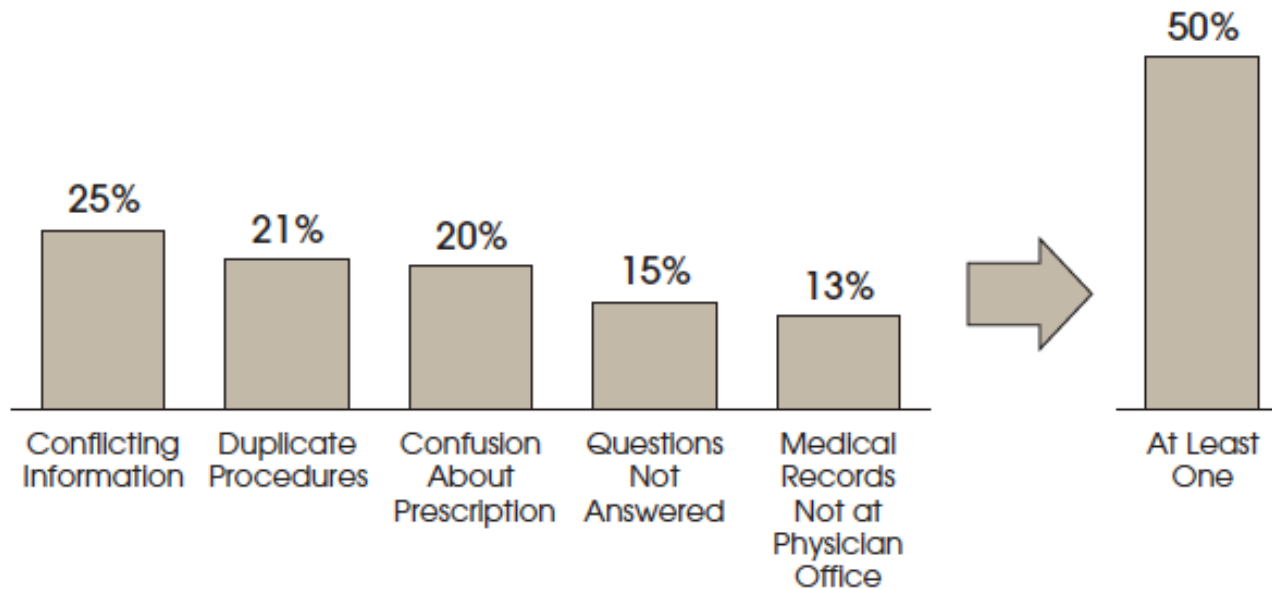
Advisory Board Oncology Roundtable, 2015

The problem

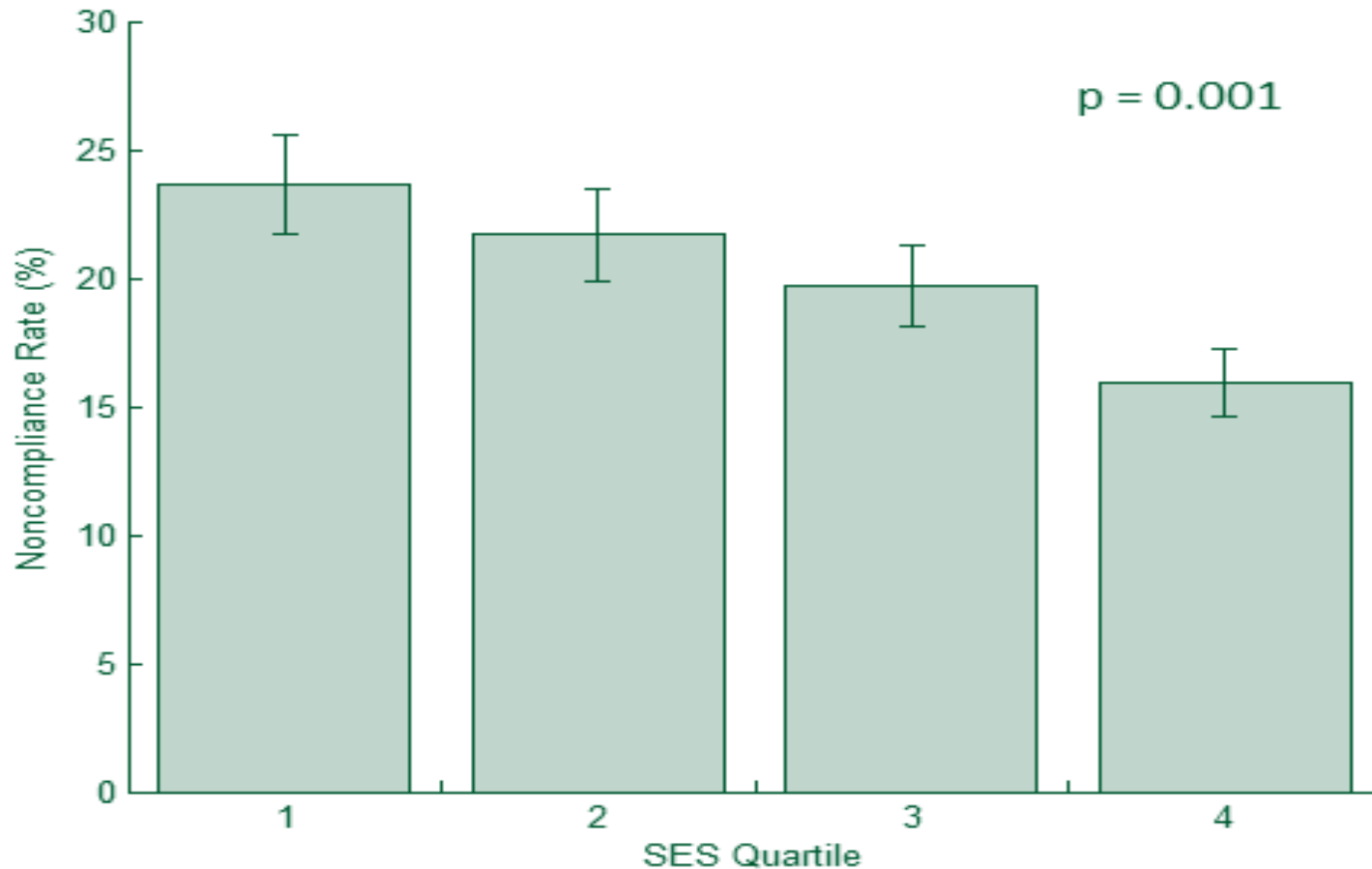
We can't get our act together!

During the course of your cancer treatment, did you experience/have you experienced any of the following...

n=930

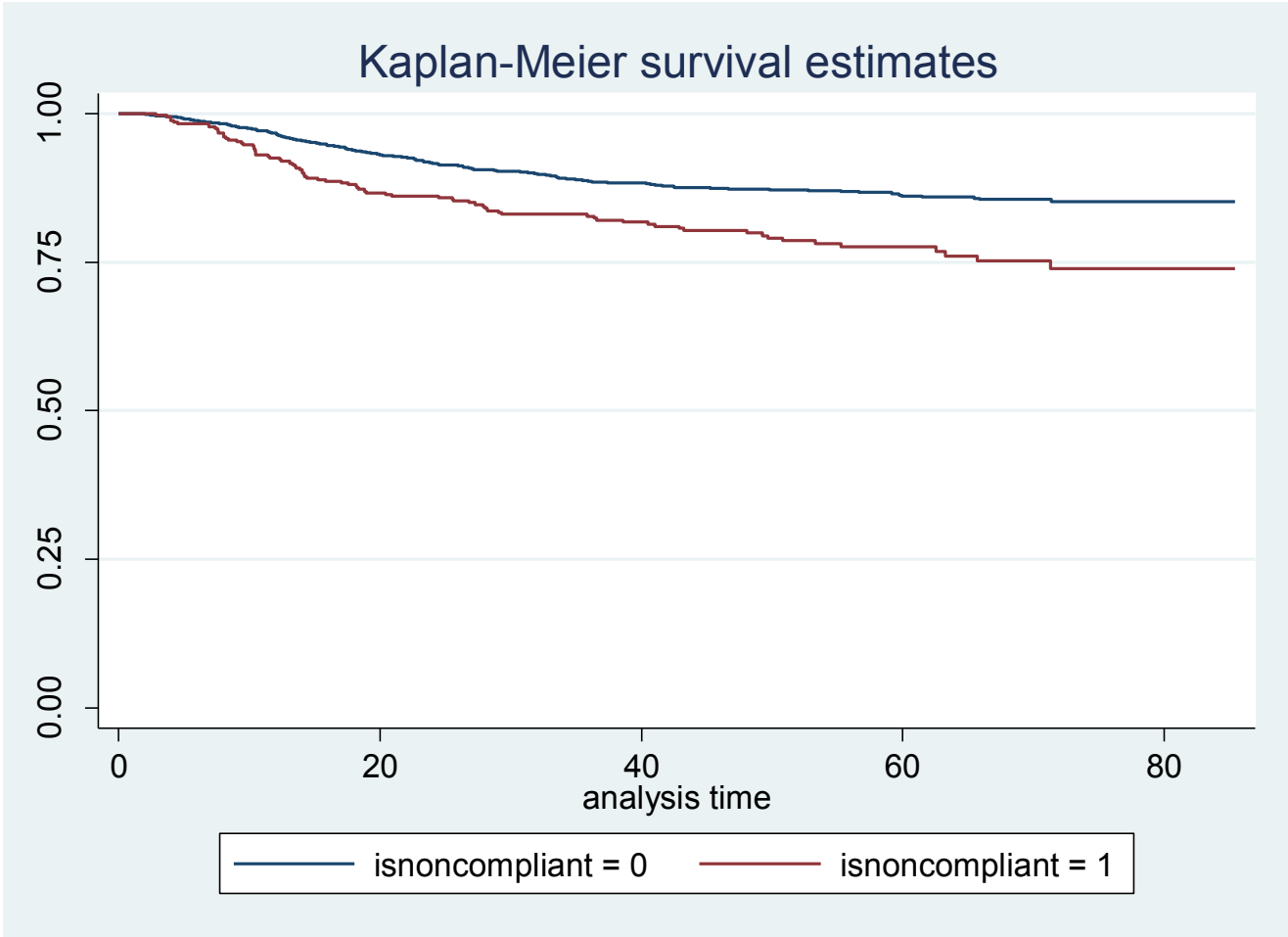


Population Health: SES & Non-compliance



Ohri et al. *IJROBP*, 2015

Noncompliance and OS



Ohri et al. IJROBP, 2015

Economics of Cancer Care

Need for Change

- *Impacting Patients' Ability to Earn a Living*
 - 40%-85% Percentage of cancer patients who stop working during initial treatment
- 1.37x
 - Times more likely cancer survivors are to be unemployed compared to people without cancer

Advisory Board Oncology Roundtable 2015

Health Care Reform Changing the Health Care Delivery System

Current Delivery System



Driven by volume and cost data

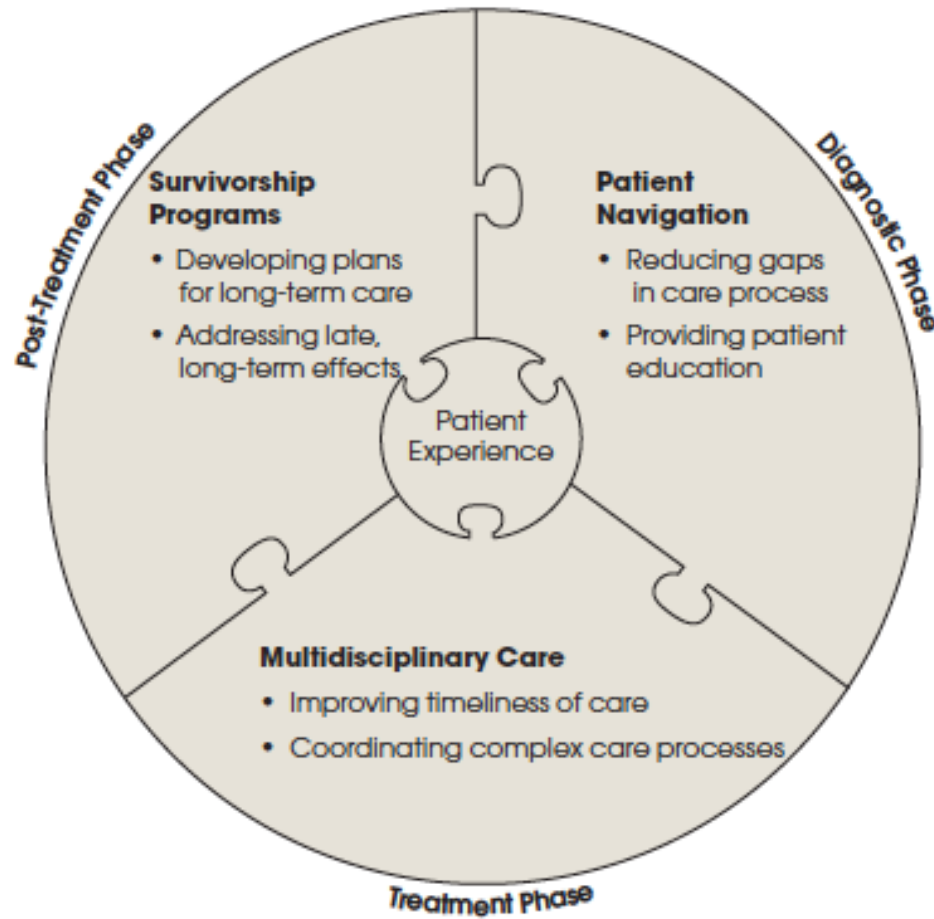
Future Delivery System



Driven by experience and outcomes data

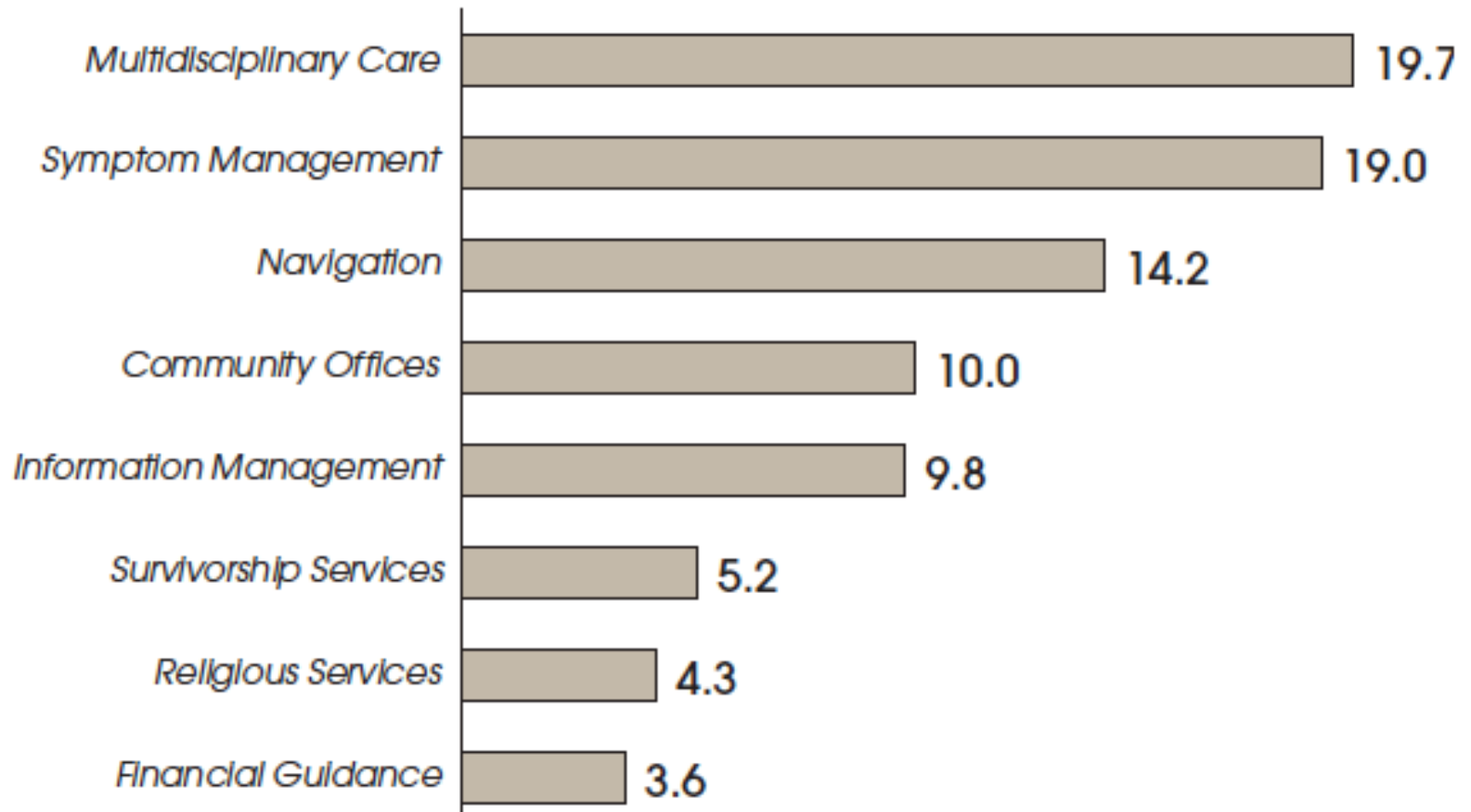


The modern cancer patient experience

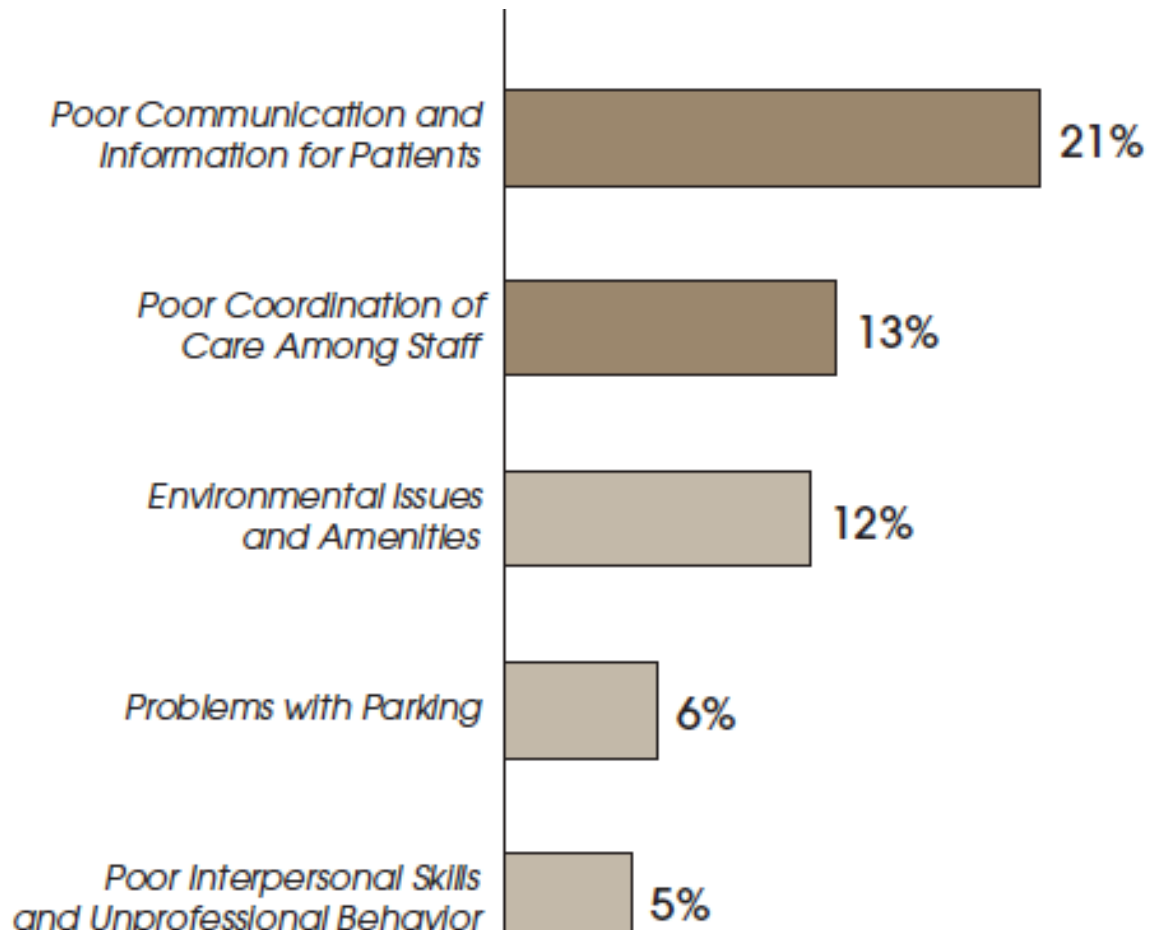


Let's ask oncology patients

What they want?



Communication and care coordination almost 1/3 of problems



The empowered oncology patient

- Shared decision making
- Shared information platforms
- Care team as educators and coaches
- Care for the “whole” patient

Multidisciplinary cancer care

- Provided by disease-based teams rather than discipline focused
 - Three major treating specialties
 - Pathology and imaging
 - Supportive services
- Patient centered, all specialists in team revolve around the patient
- Formulated plans handled by navigators:
 - Care coordination
 - Clinical pathways
 - Clinical trials
- Tumor boards: prospective case management and discussions
- Holistic care and survivorship integral part of programs

Challenges

- True multidisciplinary planning and evaluation not equal to three consultations the same day
- “Length of stay” in clinic
- Access to appointments
- Patients can be overwhelmed by “too much information at the same time”

MECC Multidisciplinary Care Pathway

E-referral – the answer to access problem

- EMR-based program to expedite appointments for newly diagnosed cancer patients and positive screens suspicious for cancer
- Pilot introduced at all MMG sites in 2014
- E-referral manager schedules appointments and communicates with referring MDs and patients
- Appointments within 10 business days, weekly QA ensures timeliness
- Extremely positive response from PCPs, more than 30% increase in referrals in first year.

Ambulatory referral to MECCC (Cancer Center) Accept Cancel Remove

Internal Referral, Routine, M-E CENTER FOR CANCER CARE ONCOLOGY (MECCC), Oncology, Consultation

Class: Internal Ref.

Referral:

Override restrictions

To dept spec: Oncology

To dept: M-E CENTER FOR

To provider:

Type: Consultation Consultation

Priority: Routine Routine Urgent

Reason: Route to Coordinator

Questions:

Prompt	Answer	Comments
1. Reason for Referral		
2. Therapeutic or Diagnostic		

Status: Future Expected: Approx. Expires: 6/15/2016

Sched Inst: [If you were referred to a specific provider above, use that telephone number to schedule your appointment. If no specific provider was identified, schedule your appointment using this phone number\(s\): 718-405-8536 - New Appointments 718-405-8505 ...](#)

Additional Order Details Accept Cancel Remove

Associate Providers Sign Pend

MECC Multidisciplinary Care Pathway Social Work Services Screen

Supportive services are activated by screening
and NOT by referral

PHQ-9 Over the last two weeks how often have you been bothered by the following problems?

1. Little interest or pleasure in doing things	<input type="button" value="0=Not at all"/>	<input type="button" value="1=Several days"/>	<input type="button" value="2=More than half the days"/>	<input type="button" value="3=Nearly every day"/>
2. Feeling down, depressed, or hopeless	<input type="button" value="0=Not at all"/>	<input type="button" value="1=Several days"/>	<input type="button" value="2=More than half the days"/>	<input type="button" value="3=Nearly every day"/>
3. Trouble falling or staying asleep, or sleeping too much	<input type="button" value="0=Not at all"/>	<input type="button" value="1=Several days"/>	<input type="button" value="2=More than half the days"/>	<input type="button" value="3=Nearly every day"/>
4. Feeling tired or having little energy	<input type="button" value="0=Not at all"/>	<input type="button" value="1=Several days"/>	<input type="button" value="2=More than half the days"/>	<input type="button" value="3=Nearly every day"/>
5. Poor appetite or overeating	<input type="button" value="0=Not at all"/>	<input type="button" value="1=Several days"/>	<input type="button" value="2=More than half the days"/>	<input type="button" value="3=Nearly every day"/>
6. Feeling bad about yourself	<input type="button" value="0=Not at all"/>	<input type="button" value="1=Several days"/>	<input type="button" value="2=More than half the days"/>	<input type="button" value="3=Nearly every day"/>
7. Trouble concentrating on things	<input type="button" value="0=Not at all"/>	<input type="button" value="1=Several days"/>	<input type="button" value="2=More than half the days"/>	<input type="button" value="3=Nearly every day"/>
8. Slow speech or restlessness	<input type="button" value="0=Not at all"/>	<input type="button" value="1=Several days"/>	<input type="button" value="2=More than half the days"/>	<input type="button" value="3=Nearly every day"/>
9. Thoughts that you would be better off dead, or of hurting yourself	<input type="button" value="0=Not at all"/>	<input type="button" value="1=Several days"/>	<input type="button" value="2=More than half the days"/>	<input type="button" value="3=Nearly every day"/>
PHQ-9 Total Score	<input type="text"/>			

Referral: Social Work

Referral to Social Worker	<input type="button" value="Patient needs a referral to Social Worker"/>	<input type="button" value="The Patient has Social Work needs but does not wish to address them at this time"/>
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MECC Multidisciplinary Care Pathway

Social Work Services Screen

Loss of interest in usual activities Yes No

Spiritual/Cultural

Do you wish to speak with a hospital Chaplain? Yes No

Are religious beliefs important to you? Yes No

Do you have any Spiritual/Cultural practices we need to know to plan our care and respect your wishes? Yes No

GAD-7 Over the last two weeks, how often have you been bothered by the following problems?

1. Feeling nervous, anxious, or on edge:	<input type="checkbox"/> 0=Not at all	<input type="checkbox"/> 1=Several days	<input type="checkbox"/> 2=More than half the days	<input type="checkbox"/> 3=Nearly every day
2. Not being able to stop or control worrying:	<input type="checkbox"/> 0=Not at all	<input type="checkbox"/> 1=Several days	<input type="checkbox"/> 2=More than half the days	<input type="checkbox"/> 3=Nearly every day
3. Worrying too much about different things:	<input type="checkbox"/> 0=Not at all	<input type="checkbox"/> 1=Several days	<input type="checkbox"/> 2=More than half the days	<input type="checkbox"/> 3=Nearly every day
4. Having trouble relaxing:	<input type="checkbox"/> 0=Not at all	<input type="checkbox"/> 1=Several days	<input type="checkbox"/> 2=More than half the days	<input type="checkbox"/> 3=Nearly every day
5. Being so restless that it is hard to sit still:	<input type="checkbox"/> 0=Not at all	<input type="checkbox"/> 1=Several days	<input type="checkbox"/> 2=More than half the days	<input type="checkbox"/> 3=Nearly every day
6. Becoming easily annoyed or irritable:	<input type="checkbox"/> 0=Not at all	<input type="checkbox"/> 1=Several days	<input type="checkbox"/> 2=More than half the days	<input type="checkbox"/> 3=Nearly every day
7. Feeling as if something awful might happen:	<input type="checkbox"/> 0=Not at all	<input type="checkbox"/> 1=Several days	<input type="checkbox"/> 2=More than half the days	<input type="checkbox"/> 3=Nearly every day

GAD-7 Score

MECC Multidisciplinary Care Pathway

Nutritional Oncology Screen

Nutrition Assessment - Oncology Nutrition Assessment

Time taken: 1010 | 12/17/2015 | Show: Row Info | Last Filed | Details | All Choices

Responsible [Create Note](#)

▼ Patient Diagnosis:

Patient has been diagnosed with the following:

<input type="checkbox"/> Breast Cancer	<input checked="" type="checkbox"/> Colon & Rectum Cancer	<input type="checkbox"/> Gynecologic malignancy	<input checked="" type="checkbox"/> Head & Neck Cancer	<input type="checkbox"/> Hematologic malignancy	<input checked="" type="checkbox"/> Lung & Bronchus Cancer	<input type="checkbox"/> Melanoma
<input type="checkbox"/> Prostate Cancer	<input checked="" type="checkbox"/> Upper GI Cancer	<input type="checkbox"/> Other Cancer				

▼ Height/Weight:

Height | Weight

Vitals, Height, and Weight: 12/16 0000 - 12/17 1010

BMI (Calculated)

▼ Symptoms

Problems eating	<input type="checkbox"/> Yes	<input type="checkbox"/> No
No appetite, just did not feel like eating (x1 week)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Nausea/vomiting (x3 days)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Constipation without BM (x>4 days)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Mouth sores, oral mucositis	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Problems or painful swallowing	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Pain (specify where below)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Diarrhea	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Feel full quickly	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Fatigue	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Ostomy	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Open wound or ulcer	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Visible cachexia/muscle wasting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Trouble buying food	<input type="checkbox"/> Yes	<input type="checkbox"/> No

▼ Referral to Nutritionist

Referral: Nutrition Patient needs referral to nutritionist The patient has nutritional needs but does not wish to address them at this time

Restore Close F9 Cancel Previous F7 Next F8

MECC Multidisciplinary Care Pathway Supportive/Palliative Care Screen

Supportive/Palliative Care Assessment - Oncology Supportive/Palliative Care Assessment

Time taken: 1013 12/17/2015 Show: Row Info Last Filed Details All Choices

Responsible Create Note

Palliative Care Screening Tool

Presence of metastatic or locally advanced cancer: 0 1

ECOG Performance Status: 0 1 2 3 4 5

Palliative Care Total Score:

Presence of one or more serious complications of advanced cancer usually associated with a prognosis of <12 months: Yes No

Presence of one or more serious comorbid diseases also associated with poor prognosis: Yes No

Presence of palliative care problems:

Symptoms uncontrolled by standard approaches: Yes No

Moderate to severe distress in patient or family, related to cancer diagnosis or therapy: Yes No

Patient/family concerns about course of disease and decision making: Yes No

Patient/family requests palliative care consult: Yes No

Team needs assistance with complex, decision making or determining goals of care: Yes No

Referral to Supportive/Palliative Care

Referral: Palliative Care

MECC Multidisciplinary Care Pathway Rehabilitation Screen

Oncology Rehabilitation Assessment - Oncology Rehabilitation Assessment

Time taken: 1013 | 12/17/2015 | Show: Row Info | Last Filed | Details | All Choices

Responsible | Create Note

▼ Patient Diagnosis:

Patient has been diagnosed with the following:

Breast Cancer	Colon & Rectum Cancer	Gynecologic malignancy	Head & Neck Cancer	Hematologic malignancy	Lung & Bronchus Cancer	Melanoma
Prostate Cancer	Upper GI Cancer	Other Cancer				

▼ Symptoms and Rehab Diagnosis Screening:

Patient has fallen in the last 3 months	Yes	No
Headache	Yes	No
Paralysis	Yes	No
Cognitive problems	Yes	No
Musculoskeletal or neuropathic pain	Yes	No
Urinary dysfunction	Yes	No
Bowel dysfunction	Yes	No
Speech impairment	Yes	No
Swallowing impairment	Yes	No
Neuropathy after chemotherapy	Yes	No
Lymphedema	Yes	No
Scar Adhesions	Yes	No
Shoulder problems	Yes	No
Axillary web syndrome	Yes	No
Brachial plexopathy	Yes	No
Weakness and fatigue	Yes	No
Weakness/Fatigue Scale	0 1 2 3 4 5 6 7 8 9 10	
Pelvic pain	Yes	No
Plexopathy	Yes	No
Jaw pain or stiffness	Yes	No
Difficulty with neck range of motion	Yes	No
Radiation fibrosis syndrome	Yes	No
Joint pain	Yes	No
Back pain	Yes	No
Shortness of breath	Yes	No
Poor endurance	Yes	No
Oxygen use	Yes	No

MECC Multidisciplinary Care Pathway Rehabilitation Screen

Poor endurance	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Oxygen use	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
History of COPD or other lung disease	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
History of cardiac problems	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
General deconditioning (needs instruction on an appropriate exercise program)	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Assistive devices (cane/walker) or durable medical equipment (DME) needs	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Difficulty with joints range of motion (stiffness or pain)	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Difficulty with ADLs (self care and routine needs - dressing, bathing, chores, shopping, etc.)	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Difficulty walking or balance problems (history of falls)	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other Comments:	<input type="checkbox"/>		
Referral to Rehabilitation			
Referral:	<input type="checkbox"/>	<input type="button" value="Patient needs a referral to rehabilitation services"/>	<input type="button" value="Patient is receiving Rehabilitation service at other facility"/>
Rehabilitation		<input type="button" value="The patient does not report rehabilitation needs"/>	<input type="button" value="The patient has rehabilitation needs but does not wish to address them at present"/>
HRQOL - Activity Limitations Module			
Are you LIMITED in any way in any activity because of any impairment or health problem?	<input type="checkbox"/>	<input type="button" value="Yes"/>	<input type="button" value="No"/>
		<input type="button" value="Don't know"/>	<input type="button" value="Refused"/>

F9

 F7
 F8

MECC Multidisciplinary Care Pathway

Distress Thermometer

Social Work Assessment - Oncology Social Work Assessment

Time taken: 1011 12/17/2015

Show: Row Info Last Filed Details All Choices

Responsible Create Note

Distress Thermometer:

Distress Thermometer

Practical Problems

Insurance/Financial

Transportation

Work/School

Physical Problems

Appearance

Bathing/Dressing

Fatigue

Getting Around

Memory/Concentration

Sexual

Sleep

Substance Abuse

Family Problems

Dealing with children

Dealing with partner

Family health issues

Issues with fertility

Partner/family having difficulty with your diagnosis

Emotional Problems

Depression

Fears

Nervousness

Sadness

Worry

Loss of interest in usual activities

Enhancing Prostate Cancer Care Through the Multidisciplinary Clinic Approach: A 15-Year Experience.

Gomella et al. JOP, 2010 (Jefferson)

- Patients evaluated weekly by multiple specialists at a single site.
- The longest continuously operating center of its kind at an NCI Cancer Center in the US.
- Data from Jefferson's Oncology Data Services were compared to SEER prostate cancer outcomes.
- Data on treatment changes in localized disease, patient satisfaction.
- Ten-year survival data approach 100% in stage I and II prostate cancer. Ten-year data for stage III (T3 N0M0) and stage IV (T4 N0M0) disease show that our institutional survival rate exceeds SEER.
- Our long-term experience suggests a benefit of the multidisciplinary clinic approach to prostate cancer, most pronounced for high-risk, locally advanced disease.
- A high level of satisfaction with this patient-centered model is seen.
- The multidisciplinary clinic approach to prostate cancer may enhance outcomes and possibly reduce treatment regret through a coordinated presentation of all therapeutic options.
- This clinic model serves as an interdisciplinary educational tool for patients, their families, and our trainees and supports clinical trial participation.

Evaluating the Impact of a Single-Day Multidisciplinary Clinic on the Management of Pancreatic Cancer

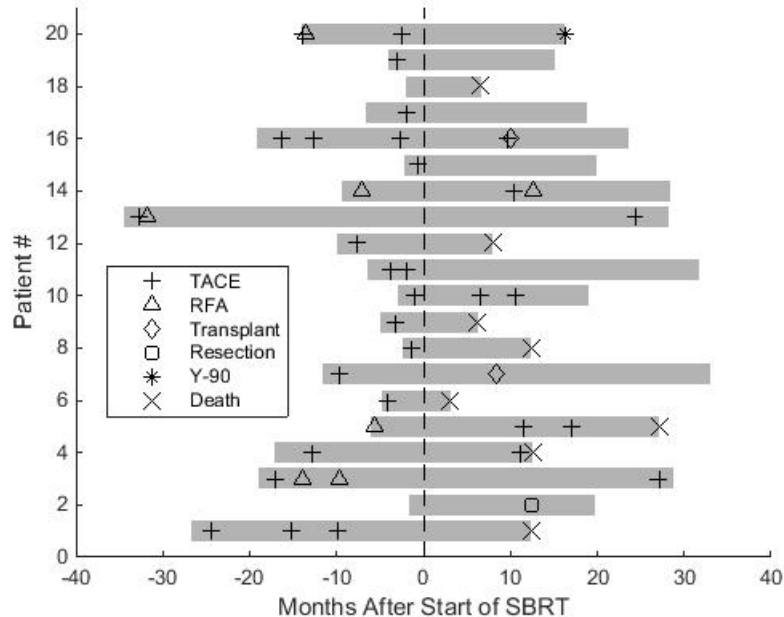
Pawlick T et al. Annals of Surgical Oncology 2008;15:2021

- 203 consecutive patients at Johns Hopkins pancreatic multidisciplinary clinic.
- Imaging, pathology, and clinical evaluation by a panel of medical/radiation oncologists, surgical oncologists, pathologists, diagnostic radiologists, and geneticists.
- Recommendations between the outside institution and the multidisciplinary clinic were recorded and compared.
- 23.6% of patients had a change in management.
- Enrollment into the National Familial Pancreas Tumor Registry increased from 52 out of 106 (49.2%) patients in 2005 to 158 out of 203 (77.8%) with initiation of the multidisciplinary clinic.

Evolving Multidisciplinary Care at MECCC: HCC

No Modality is an Island!

Liver-directed treatments in our SBRT pilot study



A Liver SBRT study turned into multi-specialty management outcomes

Systemic treatments for HCC and cirrhosis

Sorafenib in Advanced Hepatocellular Carcinoma

Ledipasvir and Sofosbuvir for Untreated HCV Genotype 1 Infection

Evolving Multidisciplinary Care at MECCC: Lung Cancer

- **Screening/Diagnosis**

High-Risk Lung Cancer Screening Introduced at Montefiore

Low-Dose CT Scans Can Detect Lung Cancer at Earliest, Most Treatable Stage

Mediastinoscopy vs Endosonography for Mediastinal Nodal Staging of Lung Cancer

A Randomized Trial

Multimodality Bronchoscopic Diagnosis of Peripheral Lung Lesions

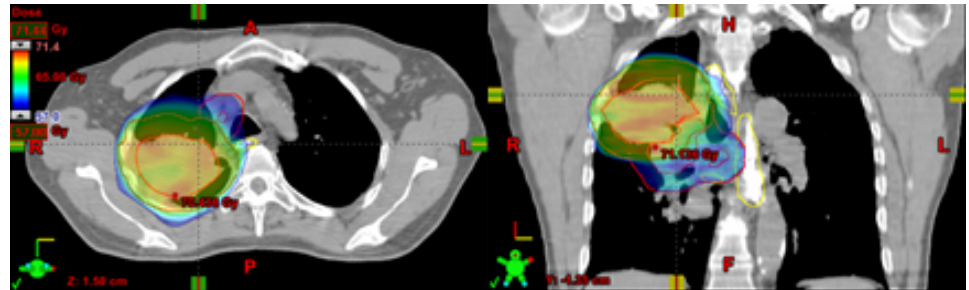
A Randomized Controlled Trial

- **Early-stage**

Stereotactic ablative radiotherapy versus lobectomy for operable stage I non-small-cell lung cancer: a pooled analysis of two randomised trials

- **Locally Advanced**

PET-Adjusted IMRT for NSCLC Trial (PAIN_T)



- **Advanced**

Nivolumab versus Docetaxel in Advanced Nonsquamous Non-Small-Cell Lung Cancer

Early Palliative Care for Patients with Metastatic Non-Small-Cell Lung Cancer

Cancer Care 2015 and beyond?

- Goals
 - Clinical Pathways and Clinical Trials
 - Compliance
 - Patient satisfaction
 - Outcomes measurement
- New tools
 - Cancer genomics and precision medicine
 - Oncology Medical Home
 - CMS and ASCO Demonstration Projects
 - Bundled payments
 - Prepaid models

Thank you! Questions?

