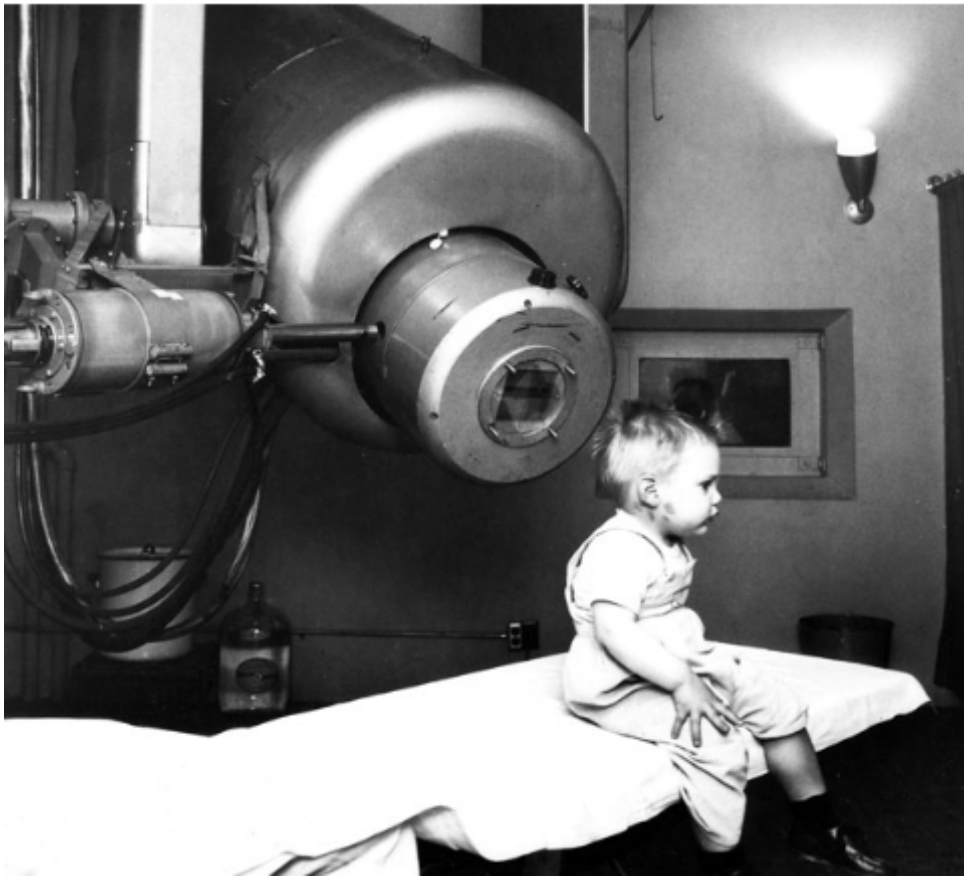
WAYNE STATE UNIVERSITY
SCHOOL OF MEDICINE

BARBARA ANN Karmanos
CANCER INSTITUTE
Wayne State University

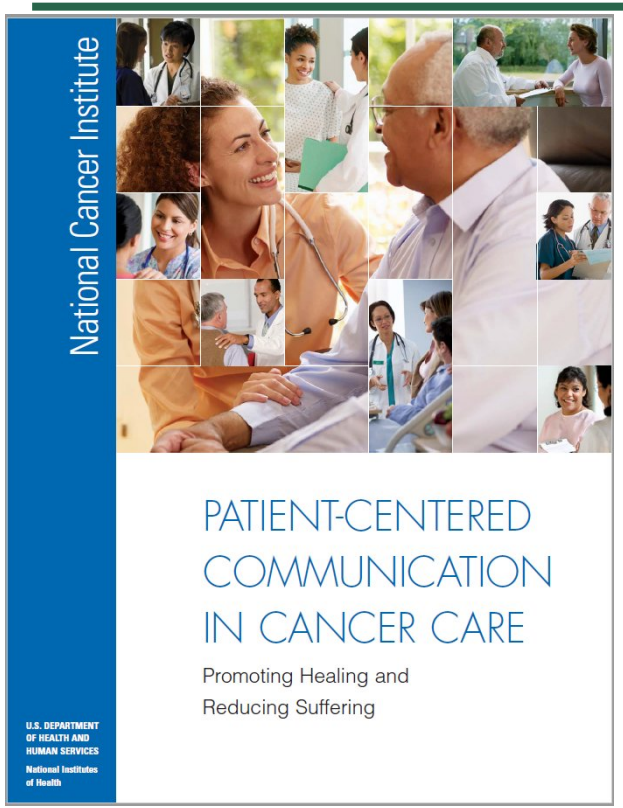
Implementing a Physicist-Patient Communication Program

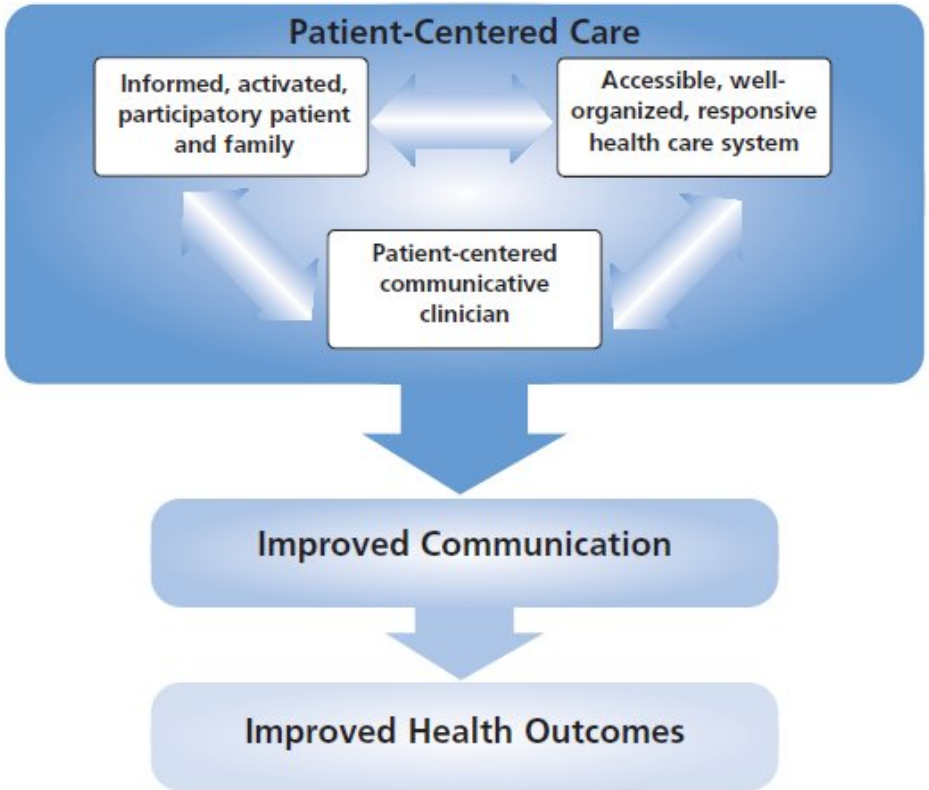
Jay Burmeister, Ph.D.
Wayne State University
Karmanos Cancer Center

Visualizing Our Target



Our Patients' Needs





Epstein – Patient-Centered Communication in Cancer Care (NCI)

Patient-Centered Clinician Interaction

- Understanding psychological and social context
- Concerns, feelings, and expectations
- Shared understanding of disease and treatment
- Involving the patient in treatment choices

Patient-Centered Care

- Depends collectively on:
  - Clinicians
  - Patients
  - Relationships (clinical and social)
  - Health services

Benefits of Physicist Communication

- Increased patient satisfaction
- Decreased patient anxiety
- Improved outcome
- Increased treatment adherence
- Extending Radiation Oncologist capabilities

Developing a Program

- Institutional support
- Communication training
- Logistics / resources
- Evaluation of success

Training Program

WAYNE STATE UNIVERSITY
SCHOOL OF MEDICINE

BARBARA ANN Karmanos
CANCER INSTITUTE
Wayne State University

Training Program

BARBARA ANN Karmanos CANCER INSTITUTE Wayne State University

KCI 'Medical Physics Direct Patient Care Initiative' Communication Training

November 6, 2019

8:00-9:00	Introduction to Clinical Patient-Provider Interactions	Lauren Hamel
9:00-9:45	Patient Communication for Medical Physicists	Jay Burmeister
9:45-10:15	Exercise 1: Designing Ideal Physicist-Patient Interactions	Mara Jelich
10:15-10:30	Exercise 2: First Treatment Interaction Questions	Jelich, Hamel, Burmeister
10:30-11:15	Analysis of Provider-Patient Interactions	Burmeister, Hamel, Jelich, Dominello
11:15-12:30	Simulated Patient Interactions	Hamel, Jelich, Dominello, Joiner, Burmeister
1:00-2:00	Review of Patient Interactions	Hamel, Jelich, Dominello, Joiner, Burmeister
2:00-3:00	Review of KCI MPDPCI Protocol / Implementation Plan	Burmeister, Hamel, Jelich

Simulated Patient Interactions Session:

	South Nursing Station Exam Room 1 (Mr. ***)**	**South Nursing Station Exam Room 2 (Ms. *****)**	**South Nursing Station Exam Room 3 (Ms. *****)**
11:15-11:35	***** *****	***** *****	***** *****
11:40-12:00	***** *****	***** *****	***** *****
12:05-12:25	***** *****	***** *****	***** *****
	Academic Conference Room 1	**Academic Conference Room 2**	**Mike Joiner's Office**
11:15-11:35	Patient – *****/ Physicist - *****	Patient – *****/ Physicist - *****	Patient – *****/ Physicist - *****
11:40-12:00	Patient – *****/ Physicist - *****	Patient – *****/ Physicist - *****	Patient – *****/ Physicist - *****
12:05-12:25	Patient – *****/ Physicist - *****	Patient – *****/ Physicist - *****	Patient – *****/ Physicist - *****

WAYNE STATE UNIVERSITY SCHOOL OF MEDICINE

BARBARA ANN Karmanos CANCER INSTITUTE Wayne State University

Logistics / Resources

- Who, how, when, and where?
- Impact on departmental workflow
- Consultation forms
- Questionnaires
- Resources for patient discussion

Logistics / Resources

- Physician presents protocol during NPC
- Nurse provides patient info to POW
- POW provides patient info to CTO
- Pre-simulation – consent, baseline survey
- Treatment simulation

Logistics / Resources

- First interaction with physicist after simulation
- Post-interaction survey (patient & physicist)
- Second interaction prior to first treatment
- Post-interaction survey (patient & physicist)
- Third interaction after last treatment

Logistics / Resources

TECHNICAL NOTE

WILEY

A review of patient questions from physicist–patient consults

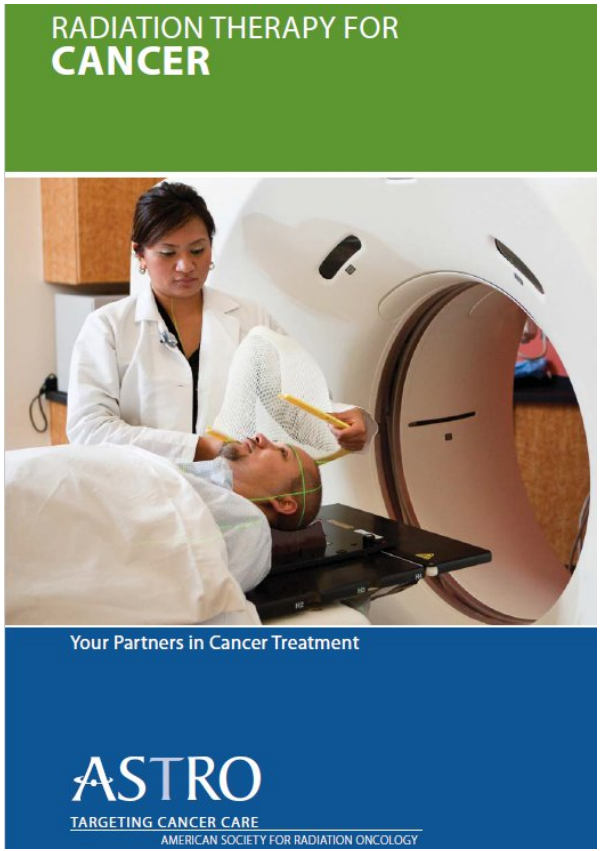
Todd F. Atwood | Derek W. Brown | Titania Juang | Kevin L. Moore | Kristen A. McConnell | Jennifer M. Steers | James D. Murphy | Arno J. Mundt | Todd Pawlicki

TABLE 1 Patient question categories and common questions

Category (number of questions, percent of total)	Common Questions
Treatment Planning and Delivery Questions (54, 61.4%)	• What type of radiation am I getting? • Is my treatment plan customized for me? • How is my treatment plan created? • Does the radiation go everywhere or just to my tumor? • How does the treatment machine work?
General Radiation Questions or Concerns (15, 17.1%)	• Are there different types of radiation? • Can radiation cause cancer? • Will radiation make me radioactive? • How does radiation kill tumor cells? • How does the body dispose of the tumor cells after they die?
Safety and Quality Assurance Questions (13, 14.8%)	• How do you know the treatment machine is delivering the correct dose? • Do you check my status as I go through treatment? • How often does something go wrong during treatment? • Does anyone check the treatment machine? • Has anyone else reviewed my treatment plan to make sure it's correct?
Medical Questions (6, 6.8%)	• What kind of side effects can I expect? • When will I start to feel the side effects? • When will I start to notice a difference from the treatment? • Can I continue eating/taking [*insert any number of foods/supplements*]? • Can I continue [*insert any number of activities*]?

Atwood – A Review of Patient Questions from Physicist-Patient Consults, JACMP (2020)

Logistics / Resources

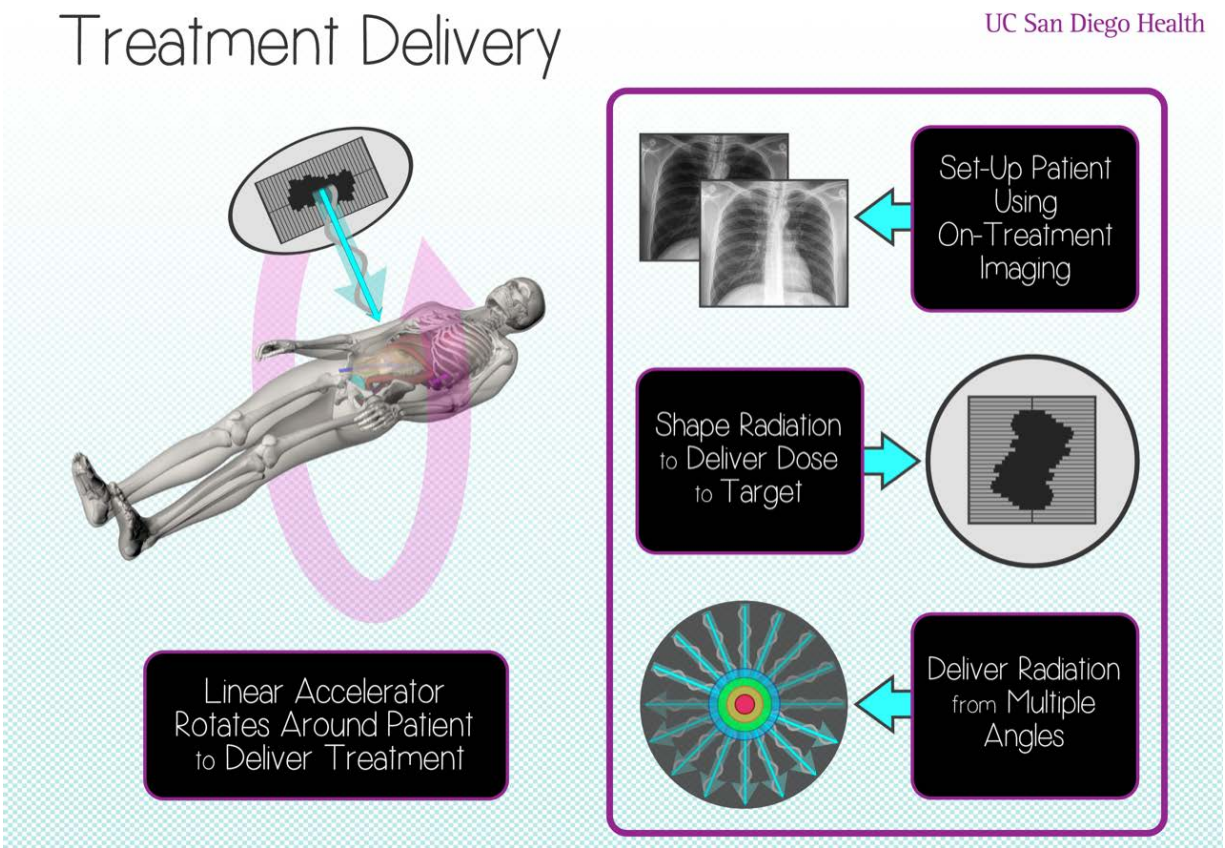


WAYNE STATE UNIVERSITY SCHOOL OF MEDICINE

World Health Organization

BARBARA ANN Karmanos CANCER INSTITUTE Wayne State University

Logistics / Resources



Evaluation of Success

- Patient demographics, health literacy
- Efficacy in interactions, activation measures
- Satisfaction, anxiety
- Understanding of treatment / participation
- Perception of patient-centeredness
- Treatment adherence