Implementing a Physicist-Patient Communication Program

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Karmanos Cancer Center
Visualizing Our Target
Our Patients’ Needs

Patient-Centered Care

- Informed, activated, participatory patient and family
- Accessible, well-organized, responsive health care system

Patient-centered communicative clinician

Improved Communication

Improved Health Outcomes

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

PATIENT COMMUNICATION for MEDICAL PHYSICISTS

Workshop Feb. 8-9, 2019
UC San Diego Health
Training Program

KCI 'Medical Physics Direct Patient Care Initiative' Communication Training

November 6, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter(s)</th>
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</thead>
<tbody>
<tr>
<td>8:00-9:00</td>
<td>Introduction to Clinical Patient-Provider Interactions</td>
<td>Lauren Hamel</td>
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<tr>
<td>9:00-9:45</td>
<td>Patient Communication for Medical Physicists</td>
<td>Jay Burmeister</td>
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<tr>
<td>9:45-10:15</td>
<td>Exercise 1: Designing Ideal Physician-Patient Interactions</td>
<td>Mara Jelich</td>
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<tr>
<td>10:15-10:30</td>
<td>Exercise 2: First Treatment Interaction Questions</td>
<td>Jelich, Hamel, Burmeister</td>
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<tr>
<td>10:30-11:15</td>
<td>Analysis of Provider-Patient Interactions</td>
<td>Burmeister, Hamel, Jelich, Dominello</td>
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<tr>
<td>11:15-12:30</td>
<td>Simulated Patient Interactions</td>
<td>Hamel, Jelich, Dominello, Joiner, Burmeister</td>
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<tr>
<td>1:00-2:00</td>
<td>Review of Patient Interactions</td>
<td>Hamel, Jelich, Dominello, Joiner, Burmeister</td>
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<td>2:00-3:00</td>
<td>Review of KCI MPORCI Protocol / Implementation Plan</td>
<td>Burmeister, Hamel, Jelich</td>
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Simulated Patient Interactions Session:

<table>
<thead>
<tr>
<th>Time</th>
<th>South Nursing Station Exam Room 1 (Mr. *****)</th>
<th>South Nursing Station Exam Room 2 (Ms. *****)</th>
<th>South Nursing Station Exam Room 3 (Ms. *****)</th>
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<tbody>
<tr>
<td>11:15-11:35</td>
<td>***** *****</td>
<td>***** *****</td>
<td>***** *****</td>
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<tr>
<td>11:40-12:00</td>
<td>***** *****</td>
<td>***** *****</td>
<td>***** *****</td>
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<tr>
<td>12:05-12:25</td>
<td>***** *****</td>
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<thead>
<tr>
<th>Time</th>
<th>Academic Conference Room 1</th>
<th>Academic Conference Room 2</th>
<th>Mike Joiner's Office</th>
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<tbody>
<tr>
<td>11:15-11:35</td>
<td>Patient - *****/Physicist - *****</td>
<td>Patient - *****/Physicist - *****</td>
<td>Patient - *****/Physicist - *****</td>
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<tr>
<td>11:40-12:00</td>
<td>Patient - *****/Physicist - *****</td>
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<td>Patient - *****/Physicist - *****</td>
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<td>Patient - *****/Physicist - *****</td>
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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

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

<table>
<thead>
<tr>
<th>Category (number of questions, percent of total)</th>
<th>Common Questions</th>
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<tbody>
<tr>
<td>Treatment Planning and Delivery Questions (54, 61.4%)</td>
<td>What type of radiation am I getting?</td>
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<td></td>
<td>Is my treatment plan customized for me?</td>
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<tr>
<td></td>
<td>How is my treatment plan created?</td>
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<td></td>
<td>Does the radiation go everywhere or just to my tumor?</td>
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<td></td>
<td>How does the treatment machine work?</td>
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<tr>
<td>General Radiation Questions or Concerns (15, 17.1%)</td>
<td>Are there different types of radiation?</td>
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<td></td>
<td>Can radiation cause cancer?</td>
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<tr>
<td></td>
<td>Will radiation make me radioactive?</td>
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<td></td>
<td>How does radiation kill tumor cells?</td>
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<td></td>
<td>How does the body dispose of the tumor cells after they die?</td>
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Safety and Quality Assurance Questions (13, 14.3%)

- 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]?
Logistics / Resources

COMMUNICATING RADIATION RISKS IN PAEDIATRIC IMAGING

Information to support healthcare discussions about benefit and risk

RADIATION THERAPY FOR CANCER

Your Partners in Cancer Treatment

ASTRO
TARGETING CANCER CARE
AMERICAN SOCIETY FOR RADIATION ONCOLOGY
Logistics / Resources

Treatment Delivery

Linear Accelerator Rotates Around Patient to Deliver Treatment

Set-Up Patient Using On-Treatment Imaging

Shape Radiation to Deliver Dose to Target

Deliver Radiation from Multiple Angles

UC San Diego Health
Evaluation of Success

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