Clinical Physicist and Trials

Efforts by physicist supporting trials are generally not ‘officially’ recognized.

FTE requirements for clinics by industry publications do not list clinical support.

Not explicitly mentioned is:
- AAPM Scope of Practice
- The Abt Study of Medical Physicist Work Values for Radiation Oncology Physics Services
- ASTRO report titled "Safety is No Accident (SINA)"
- EFOMP. (1997). Criteria for the staffing levels in a Medical Physics Department; (September).

No Data on Physics Support for Trials Exists so….

The NRG decided to take a survey.

- IROC Houston provided the database of ‘contact’ physicists of 1,996 institutions.
- After three weeks, 451 institutions responded
15 Question Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>Details</th>
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<tbody>
<tr>
<td>1</td>
<td>In what year did your radiation oncology program start?</td>
</tr>
<tr>
<td>2</td>
<td>What is your current number of patients enrolled in clinical trials?</td>
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<td>3</td>
<td>How many dedicated clinical trial staff does your department or institution have?</td>
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<td>4</td>
<td>How many hours per week do you spend supervising or interacting with the clinical trial staff?</td>
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<td>5</td>
<td>Who performs the electronic data submission for each protocol patient?</td>
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<td>6</td>
<td>On average, how many hours per week do you get involved in the simulation process for protocol patients?</td>
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<td>7</td>
<td>On average, how many hours per week do you spend reviewing treatment plans for protocol patients?</td>
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<tr>
<td>8</td>
<td>On average, how many hours per week do you spend maintaining your DICOM server?</td>
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<td>9</td>
<td>Are you credentialed in the Continuing Research Education Credit Program (CREC)?</td>
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<td>10</td>
<td>If yes, how many hours per year are required of you to become credentialed and maintain the CREC?</td>
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<tr>
<td>11</td>
<td>How many hours per year do you or your physics group spend for Protocol credentialing process?</td>
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<tr>
<td>12</td>
<td>Number of Radiotherapy Clinical Trials per Clinic</td>
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<tr>
<td>Average</td>
<td>9 trials per clinic</td>
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Number of Patients in Trials

Average: 41 / clinic
Who performs the electronic data submission for each protocol patient?

- Dosimetrist 24.2%
- Clinical study staff 17.8%
- Physicist 52.6%
- Other 6.4%

Hours per year Protocol credentialing process

The average respondent spends 32 hours per year maintaining personal institution credentials for protocols.

Reviewing Plans

1.8 hr. per week

Extra protocol demands additional plan review to meet criteria.

[Graph showing average hours per week reviewing plans]
Reading & Support
2.1 hr. per week

While widely understood, rarely acknowledged

Monthly Meetings
1.2 hr. per week

Physicists are taken out of the clinic routinely, lost time.

Supervising Clinical Trial Staff
2.4 hr. per week
Maintaining Server
0.6 hr. / week

...Also known as IT support

Simulations
1.2 hr. per week

Weekly Summary
9 hr. / 10 protocols
A First Attempt…

This is the first effort to put a number on the physicist contributions to clinical trials.

We present the results of a survey of IROC database only.

Our results clearly show the need for a serious look at this obviously sizeable demand on our time.

These trials are important enough that they should not be taken for granted by resource managers.

Acknowledgements

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