What to Do: Medical Physicist Assistant

Why the Medical Physicist Assistant Model is Inappropriate

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Memorial Sloan-Kettering Cancer Center

- Main campus in NY City, plus 5 Regional Sites (plus 3 new sites in preparation, to be open soon)
- MSKCC has a Medical Physics Department: 180 members: medical physicists, dosimetrists, engineers and supporting staff.
- Responsible to provide Medical Physics services (including Radiation Safety) to the entire Memorial Sloan Kettering Cancer Center Departments of: Radiation Therapy, Radiology, and Nuclear Medicine.

At Main Campus, plus all Satellites.

W/O MPA's
Medical Physics Profession: Before and Now

– At the beginning (1950’s?): On the job training
  (Just like MPA’s?)
– 1997: CAMPEP Medical Physics Residency programs are created (Washington University was the first!)
After about 67 years:
– Back to “On the job training”: Med Phys Assistants (MPA’s) were brought into the field

Present CAMPEP Programs
• Radiation Therapy  87
• Diagnostic Imaging  15
• Minimum of 102 new MP graduating/year looking for positions.
• Will compete with MPA’s.
  (Less qualified? Lower salary?)

• Licensure for medical physicists was established in Texas, Florida, New York and Hawaii by creating a process with analogous guidelines as those of physicians and other medical professions.
• However, there were also members of this profession with different views about the effect of certain decisions on medical physicists’ future.
The (MPA) is an individual who:
• Has completed “relevant didactic education”:
  (Bachelor’s or higher college degree from an accredited
  college or university and/or certification as a
  Radiologic Technologist or Radiation Therapist).
• Has attained practical clinical medical physics
  knowledge through specific training and technical
  experience in a program supervised by a QMP.
• The MPA performs tasks in support of a QMP in the
  professional practice of clinical medical physics.

All medical physics tasks performed by the MPA
must be reviewed in a timely manner, and reports
must be co-signed by the QMP supervisor, who
assumes full responsibility and liability for the
submitted content.
(same policy as for medical physics residents)

The MPA must be appropriately supervised and the range
of tasks must be carefully defined by a QMP who is certified
in the same subfield of practice in which the MPA is
working.
• Levels of supervision provided (personal, direct, or general)
  will vary depending on
  • the specific task,
  • experience of the MPA and
  • professional judgment of the QMP supervisor
  in accordance with guidance of the forthcoming Medical
  Physics Practice Guideline on this subject.
• Most junior medical physicist and MPA’s advertisements cite the same expected responsibilities.

• According to some ads, the MPA is expected to take on the duties previously assigned to Qualified Medical Physicists (QMP), including acquisition of data to be used in patient care.

• Hopefully, under the supervision of a QMP.

Salaries
(from a sample of job position advertisements)

<table>
<thead>
<tr>
<th>Medical Phys. Assistants</th>
<th>Junior Medical Physicist</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Avg. $97,000</td>
<td>National Avg. $129,000</td>
</tr>
<tr>
<td>Min $84,000</td>
<td>Min $78,000</td>
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<tr>
<td>Max $106,000</td>
<td>Max $180,000</td>
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<td>Avg $102,000</td>
<td>Avg $154,000</td>
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<tr>
<td>Min $96,000</td>
<td>Min $98,000</td>
</tr>
<tr>
<td>Max $110,000</td>
<td>Max $188,000</td>
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</tbody>
</table>

Our responsibilities

• Focus: practicing medical physics should be entrusted only to those who are duly qualified.

• Aim: To maintain the profession at a level of recognition equivalent to other professions in the patient care field.

• The AAPM formally accepted MPA’s and recognized the need to formalize this new position’s priorities and values.
Why I disagree with MP Assistants

- Facilities seeking institutional funding to add or augment residency programs struggle with a job market that could shrink as junior QMPs are replaced by MPAs.

Justification:

- Some decision-making senior medical physicists experience extreme pressure from administrative budget restrictions to convert junior medical physics positions to cheaper MPAs.

The loss of medical physicist positions is not the only issue: there is the unavoidable, effect on the quality of services provided by our profession and the resulting benefit to patient care.

Deeply troubling is the contrast between the MPA position’s educational requirements and the associated duties and responsibilities.

Some MPA advertisements list Bachelor’s degree in Physics as the education requirement.

Why I disagree with MP Assistants

Concern:

- Some senior medical physicists do work with MPA’s and do a great job!
  
  However,

- Accepting that we can replace a medical physicist by a MPA will certainly contribute to weakening the medical physicist position in the clinical field.
MPPG-7 (as of March 2016)  
Task Group No.259 - MP Exenders PG#7  

- Just by recognizing the “MPA” we are legitimizing their existence.  
- Take a lesson from the Medical Dosimetrists – assign physics services to non-physicists.  
- Now there are more dosimetrists than physicists!  
- We are creating less MP’s and opening the market for MPA’s.

Students and Trainees Subcommittee & Working Group to Promote Non-Clinical Career Paths for Medical Physicists  

- Over the past 4 years, both working groups (under AAPM Ed. Council) have worked at improving information access to medical physics student/trainees, providing students with professional development workshops at the AAPM annual meetings to improve understanding that non clinical careers are available to young medical physicists.

Main issues and challenges some of the brightest and most enthusiastic young members of our profession encounter:

- Limited job opportunities and residency were at the top of the list of concerns.

I would encourage those senior physicists who are advocating for the medical physics assistant model to attend one of the Annual Student and Trainee Sub Committee and solicit the feedback from those who are most likely to be affected.
Also, on the last meeting of SDAMP there were representatives of Varian and Electa presenting their new opportunities for Internship Programs for junior medical physicists, that could offer opportunities for non-clinical jobs.

**Reasons to support MPA’s (?)** (contributions from the AAPM Bulletin)

- Is there a Physicist shortage??
- Even when a department has 2 or 3 physics assistants?
- We cannot morally suggest that now is the time for exploring a Physics Assistant model as a profession when we have unfinished business for our young members seeking a career.

**Motion brought to the Board at the 2014 (!) AAPM Annual Meeting (approved)**

- “The American Association of Physicists in Medicine (AAPM) work to develop an appropriate policy and guidance related to the role, training and supervision of Medical Physicist Assistants (MPAs) in supporting clinical medical physics work under the supervision of a Qualified Medical Physicist.”
• Some decision-making senior medical physicists may experience extreme pressure from administrative budget restrictions to convert junior medical physics positions to cheaper MPA's.

• However, accepting that we can replace a medical physicist by a MPA (how many?) will certainly contribute to weakening the medical physicist position in the clinical field.

Final Thoughts

• Under proper direction MPA's can perform at a very good level (which is a reflection of his/her mentor).

• However, MPA's reduce the availability of new positions for graduating residents from the CAMPEP Residency Programs, but do not represent an improvement over this option.

• May be only a less expensive option?

• In recognizing the value of the medical physics profession, I do not think this should be the determining factor!

• I am talking of MP's just graduating from residencies programs who are starting to look into work in the Medical Physics field and find out that they are being displaced by MPA's.

• They need junior positions, to work and grow professionally under the direction of a senior MP (even after completing a residency program).

• We should not reduce their opportunities and replace them by a less expensive option.

• Even when this could be highly welcomed by administrators it does not represent the better for MP profession.