Writing a Practice Guideline: From Conception to Birth

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Chair, MPPG#2
Evaluation and Quality Assurance of X-ray Based Image Guided Radiotherapy Systems

Chair Selection

• One Wednesday afternoon in January...

Chair Selection

• My thought process...
  – What is purpose of an MPPG?
  – What is the charge and scope of this MPPG?
  – Why are existing TG reports not sufficient?
  – What is the timeline?
  – How much of my time will be required?
MPPG #2 Charge, Scope, Timeline

- Succinctly state the minimum acceptable standards for using x-ray based IGRT, similar to ACR-ASTRO technical standards
- "Clinical recipe" for the solo physicist
- Inform the reader of the needs of this particular technology (time, effort, resources)
- Provide necessary references for further investigation
- Final report by end of 2012 – less than 12 months (!!!)

Member Selection

- Key member attributes
  - Collective expertise with different systems
    - Metrics: personal knowledge, committee recommendations, vendor recommendations
  - Engaged
    - Metric: AAPM activity
  - Responsive/available
    - Metric: response time/quality to personal email/phone call queries
- Key committee attributes
  - Balance of small and large practices
  - Balance of academic and private practices

Member Selection

MPPG#1: Evaluation and Quality Assurance of X-ray Based Image Guided Radiotherapy Systems

Committee Members:
- Jonas Fontenot (chair) – Mary Bird Perkins Cancer Center
- Andrew Jensen – Mayo Clinic
- Jack Yang – Monmouth Medical Center
- Hassaan Alkhalib – Richland Memoria Hospital
- Jeff Garrett – Mississippi Baptist Medical Center
- Steve McCullough – Methodist Richardson Cancer Center
- Brent Parker – University of Texas Medical Branch at Galveston
- Art Olch (TPC rep) – Children’s Hospital of LA
Practice Data Collection

• Compile and summarize existing TG recommendations
  — TG 75, 104, 111, 142, 135, 179

• Practice questionnaire sent to MPPG members
  — Staffing/time requirements
  — Equipment
  — Training
  — Commissioning procedures
  — Quality assurance activities

Practice Data Collection

• Practice questionnaire data collected and summarized

• Initial draft of major elements of the report, incorporating survey data
  — Substantial variability in some areas

• Members writing assignments
  — Process descriptions
  — Chair writes most general sections

Elements of MPPGs

• Introduction
  — Goals and rationale
  — Intended users
• Definitions/abbreviations
• Staff Responsibilities
• Implementation Guidelines
  — Required resources
    • Staffing
    • Equipment
  — Staff training
  — Process descriptions
• Recommended minimum requirements
• Conclusions
Timeline to this point...

- 1/18/12: Initial invitation
- 2/13/12: MPPG TG members identified
- 3/19/12: Scope and Timeline submitted to SPG
- 3/27/12: IGRT program questionnaire submitted to MPPG member institutions
- 5/15/12: IGRT program data collected from MPPG member institutions
- 7/01/12: Working draft of report submitted to SPG

Consensus Building

- Discussion and debate
  - 7/29/12: AAPM face-to-face meeting
  - 8/21/12: Teleconference
  - 8/28/12: Teleconference
  - 9/11/12: Teleconference
  - 9/18/12: Teleconference
  - 10/2/12: Teleconference
  - 10/7/12: Draft report submitted to SPG

Review (round 1)

- Report submitted for internal review – 10/7/12
  - SPG, PC, TPC, QASC, EXCM
  - Chairs of TG 75, 104, 111, 135, 142, and 179

- Comments received (95) – 11/13/12
  - General: were physicians consulted for this report?
  - Specific: vigorous objection(s) to 2 mm isocenter tolerance for SBRT applications

- Adjudication amongst MPPG members
  - Teleconference – 12/3/12
  - Teleconference – 12/7/12

- Revised report submitted – 12/9/12
Review (round 2)

- Report submitted for public comment – 12/15/12
- Comments received (34) – 1/28/13
  - General: Increase all time requirements by 5 minutes
  - Specific: "I hate Las Vegas phantoms"
- Adjudication amongst MPPG members
  - Teleconference – 2/5/13
- Revised report submitted – 3/11/13

Review (round 3)

- Report submitted to SPG and CPC (again) for review - 3/19/13
- Additional comments received (8) – 4/6/13
- Revised report submitted – 4/30/13
- Report submitted to JACMP – 5/10/13
- Comments from JACMP 6/6/13
- Revised report submitted – 6/12/13
- Additional comments from JACMP – 7/21/13
- Revised report submitted – 8/20/13
- Accepted for publication in JACMP – 11/14/13
- Published in JACMP – 1/6/14

Final Result
Summary

- MPPG writing requirements
  - Clearly stated scope
  - Motivated MPPG chair
  - Motivated SPG chair
  - Engaged MPPG members
  - Engaged AAPM staff
  - Discipline and patience