RO-SSI’s Role in Facilitating Safety Improvements in Radiotherapy

R. Alfredo C. Siochi, PhD, DABR
Department of Radiation Oncology
West Virginia University
Conflicts of Interest

• Not related to this topic
  • Co-founder of Infondrian, LLC
    • Gap fund and Iowa based Grant to Infondrian
    • STTR phase I Grant
  • Various TG, committees, leadership positions in AAPM, ASTRO, RO-SSI, Penn-Ohio Chapter of the AAPM

• Related to topic
  • NONE
Outline

• Introduction
• Brief History of RO-SSI
• Identifying Issues of Interest
• Formation of Working Groups
• Document Lifecycle
• Vendor Adoption of Recommendations
RO-SSI

- Radiation Oncology Safety Stakeholders Initiative
  - Grassroots initiative
  - No membership fee
  - Limited budget (thank you ASTRO, AAPM, MITA and Advamed!)
  - Donors and volunteers
  - Open to all stakeholders – physicists, MDs, administrators, therapists, dosimetrists, vendors
  - Members come from AAPM, ASTRO, Advamed, MITA, ASRT, SROA, AAMD, FDA
Mission Statement

To recommend and facilitate safety improvements in radiotherapy through a common, independent and impartial VISION broadly based on diversity of experience and knowledge among radiation oncology professionals.
Philosophy and structure

- Vendors
- Physicians
- Physicists
- Therapists
- Dosimetrists
- Administrators

FDA

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Structure - 2

Vendors

- Engineers
- Human Factors
- Software
- Hardware

Physicists
Designers
Managers
Trainers
Compliance

Accuray, Elekta, IBA, Philips, RaySearch, Reflexion, ScandiDos, Siemens, Sun Nuclear, Varian, Xcision, MITA, Advamed, ....
http://info.radoncssi.org/membership

Membership

Who Can Join
RO-SSI is open to all radiation oncology healthcare professionals and manufacturers of radiotherapy related devices and applications. We encourage participation from physicians, nurses, therapists, dosimetrists, physicists, IT professionals, service engineers, researchers, administrators, product development team members, technical writers, sales, marketing, regulatory, management, manufacturing, training...you get the idea.

How To Join
Enter your contact information in the Member Profile here. That's it!

Dues
Currently, there are NONE. This is a volunteer organization. We rely on members to donate their time and resources.

Meetings
There are two face to face meetings every year. These occur at the annual meetings of the American Association of Physicists in Medicine (AAPM) and the American Society for Radiation Oncology (ASTRO). Working groups also arrange teleconferences. The general membership will have a couple of teleconferences as well.
Brief History

First Stakeholder’s Meeting; 4 WGs formed

First two documents on Error Messages published (6/15/13)

Public website launched

MITA and ADVAMED presentation on radiation oncology safety initiatives to AAPM Therapy Physics Committee

Third document on Error Messages published (5/25/14)

Introduced 3 yr co-chair terms

Secretary, webmaster, and domain administrator positions created

3 additional WGs for a total of 7 WGs

The New York Times
Radiation Offers New Cures, and Ways to Do Harm

ASTRO participates in FDA meeting on radiation safety

June, 2010

June, 2010

November, 2010

July 31, 2012

July 2, 2013

Sept. 27, 2016

Sept. 26, 2017

Jan. 19, 2018

August 2, 2016

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Identifying Issues of Interest

**Ideas**
- Safety meetings
- Safety Databases
- Surveys
- Proposals via website

**Discussion**
- Add to agenda
- On the fly at meeting
- Does this fit the mission?

**Definition**
- Form group to study issue
- Proposed work
Operating principles

• Things happen “organically”
  • Flexibility
  • Adaptability
  • Responsive
  • Freedom to explore and brainstorm
• Anyone can raise issues
• We rely on volunteers – attend a meeting and speak up!
• We rely on champions to move ideas through
• Tackle problems that benefit from multidisciplinary approach
  • Otherwise, suggest that the appropriate professional society handle it
Formation of Working Groups

• Created to study the identified issues
• 2 WG co-chairs
• Organic – members just volunteer to be in the group
• Put a call out to membership about the group
• Advertise to Non-members
• New members with expertise and interest sign up
• Schedule periodic meetings
• Report on progress at the all members meetings
Output from Working Groups

• Reports
• Training
• Presentations at various professional societies
• Feedback to professional societies and vendors on issues
• Support for vendor adoption of initiatives
Working Groups

• Error Messages
• Quality Assurance
• Training
• Usability
• Risk Management
• Rx Consistency
• Workplace Safety & Culture
Meetings

• All members
  • AAPM annual meeting
  • ASTRO annual meeting
  • Teleconferences (January, April/May)

• Working Groups
  • Arranged by co-chairs
Document Life Cycle

1. WG draft
   - WG members edit, comment, and vote to move the draft forward to general membership

2. Member Comments
   - General Membership will be given commenting access to documents in stages 2 and 4
   - This stage is open for 60 days

3. WG revision
   - WG members resolve comments and move the draft and responses to comments forward to general membership

4. Member Vote
   - Commenting Access and Polls will be available
   - If not approved, cycle through steps 2-4 until approved
   - The voting period is 30 days

5. Public Release
   - Publications are placed in http://info.radoncssi.org/publications
   - Open for public comments for 1 year
   - Comments will be used to make a new version and the cycle starts over at step 1.
Vendor Adoption of Recommendations

• We need safety evangelists!
• Example: Cristina Negrut and Art Olch – Error Messages.
• Adoption of the recommendations in the publications
• Incorporation of recommendations into IEC standards
Examples...

Error messages should be
1. User Centered
2. Clear
3. Actionable
4. Concise
5. Specific
6. Courteous

ERROR AND MESSAGE DIALOGS
Content Usability Guidelines

2. Clear

Use plain language so that users can easily understand the problem and the solution. A helpful message quickly steers the users to the correct solution.

Incorrect message: The word 'select' is used in three different ways in one short sentence making the message confusing. It is hard for users to understand what action they need to take.
Conclusion

• RO-SSI gathers the issues from a broad base of stakeholders
• Issues involve collaboration across various stakeholder groups
• Working Groups tackle the issues
• Recommendations are shared to the public
• Made freely available to all
• Vendors incorporate recommendations into products
• Users incorporate recommendations into practice
Shameless plug....

Our Next Meeting
AAPM Annual Meeting, Nashville, TN

Tuesday, July 31st, 2018
7:00 AM - 9:00 AM

Omni Nashville Hotel
Room: Music Row 3 Level 2