Radiologists and Social Media: Would More Focus on Facebook Facilitate Better Physician Engagement?
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No disclosures
Purpose

• Social media increasingly serves as a platform for physician engagement
• Most studies about radiologists and social media have focused on Twitter
• Radiology-specific Facebook groups are another popular means for professional interaction
• Breast Imaging Radiologists, founded in 2015, is a Facebook group for radiologists and trainees with an interest in breast imaging
• The purpose of this study was to analyze 2 years of activity and engagement in the Breast Imaging Radiologists Facebook Group (BIRFG)
Methods

- Using both the Grytics (www.grytics.com) and Sociograph (www.sociograph.io) analytic engines, the activity of the BIRFG was analyzed retrospectively from its inception on 2/11/15 through 2/12/17
- Activity data were exported for further qualitative and quantitative analysis using Excel
How it Works

- Radiologists request to join the group or are added by a friend
- Once approved, they can create a POST which is a question, comment, link, image or video that they would like to discuss or share with peers

> Of those taking core biopsies of axillary lymph nodes, on average how many samples do you take and what gauge are you using?

- The post is visible to all group members, and anyone can respond by writing a COMMENT

> 14 gauge. 1 core sometimes 2. We leave clip.

- Group members may also respond with a REACTION
Results

• The group was founded on 2/11/15
• It grew from 1 to 774 members over a 2 year period
• Over the 2 year study period, there were 493 posts, 3,253 comments, and 1732 reactions
• 92% of posts received either comments or reactions
• Each post received an average of 6.6 comments
Results

422 (55%) of members were active over the 2 year study period

- 172 (22%) wrote posts
- 308 (40%) wrote comments
- 358 (46%) reacted to posts and comments
### 2 Year Analysis of Group Activity

<table>
<thead>
<tr>
<th>Measure</th>
<th>Year 1 (2/11/15 to 2/11/16)</th>
<th>Year 2 (2/12/16 to 2/12/17)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posts</td>
<td>149</td>
<td>344</td>
<td>130.9% increase</td>
</tr>
<tr>
<td>Authors</td>
<td>66</td>
<td>135</td>
<td>104.5% increase</td>
</tr>
<tr>
<td>Commenters</td>
<td>106</td>
<td>283</td>
<td>167% increase</td>
</tr>
<tr>
<td>Reactors</td>
<td>129</td>
<td>325</td>
<td>151.9% increase</td>
</tr>
</tbody>
</table>

From Year 1 to Year 2, there was greater than 100% increase in all measures of activity.

![Graph showing the increase in posts, authors, commenters, and reactors over two years.](image)
## Types of Posts

<table>
<thead>
<tr>
<th></th>
<th>Year 1 (2/11/15 to 2/11/16)</th>
<th>Year 2 (2/12/16 to 2/12/17)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photos</td>
<td>4</td>
<td>37</td>
<td>825% increase</td>
</tr>
<tr>
<td>Videos</td>
<td>0</td>
<td>2</td>
<td>200% increase</td>
</tr>
<tr>
<td>Links</td>
<td>20</td>
<td>36</td>
<td>125% increase</td>
</tr>
<tr>
<td>Statuses</td>
<td>125</td>
<td>269</td>
<td>115.2% increase</td>
</tr>
<tr>
<td>Events</td>
<td>0</td>
<td>0</td>
<td>No change</td>
</tr>
</tbody>
</table>

- There was a greater than 100% increase in sharing of photos, videos, links and statuses from Year 1 to Year 2.
- Users did **not** use the Facebook group for event sharing.
Topics of Posts in Breast Imaging Group

Number of Posts

Topics of Posts

Advocacy  BI-RADS  Education  Employment  Equipment or Software  Guidelines  Imaging Protocol and Clinical Practice  Introductions  Social Networking  Procedures  Quality Assurance and Accreditation  Specific Case Question  MRI  Other
## Most Common Categories of Posts

<table>
<thead>
<tr>
<th>Category</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imaging Protocols and Clinical Practice Questions (non-MRI, non-procedure) (20%)</td>
<td>Hi there! I was interested in knowing how many of you out there do a 6 month follow up mammo or ultrasound for biopsies you feel are concordant. And also the reasoning behind your protocol. Thanks in advance!</td>
</tr>
<tr>
<td>Introductions/Social/Networking (14%)</td>
<td>Hi everyone! Glad to join this group. I think this will be a wonderful resource for the breast imaging community. I did my training at X. I'm currently a breast and body imager in private practice in X.</td>
</tr>
<tr>
<td>Education (11%)</td>
<td>Does anyone know any good breast MRI courses for MRI technologist that would help improve their skills?</td>
</tr>
</tbody>
</table>
Post Activity by Day of the Week

- 88% of posts were written Monday through Friday
- Tuesday was the most popular day for posting (21% of posts were written on Tuesday)
- Post activity was lowest on the weekend (12% written on Saturday and Sunday)
Post Activity by Time of Day

- 2 pm, 9 am, and 10 pm EST were the most popular hours for posting. 24% of all posts were written during those hours.
- Only 2% of posts were written between the hours of 2 to 6 am EST
Conclusions

• Given the popularity and accessibility of Facebook for personal use, it may be a more comfortable social medium for radiologists to interact professionally.

• Our analysis showed increased membership, activity and engagement comparing the first to the second year of the BIRFG.

• Results suggest subspecialty-specific Facebook groups are a valuable forum for professional interaction.
Conclusions

• Posting activity was much higher on weekdays than weekends, and the most common category of post was “Imaging Protocols and Clinical Practice Questions.” This indicates that members are seeking real-time advice about issues encountered in daily practice.

• With an average of 6.6 comments per post, breast imagers likely get timely feedback about their questions/concerns from colleagues in this group.