Spine surgeons using Instagram aim to reach patients with #endoscopicspinesurgery

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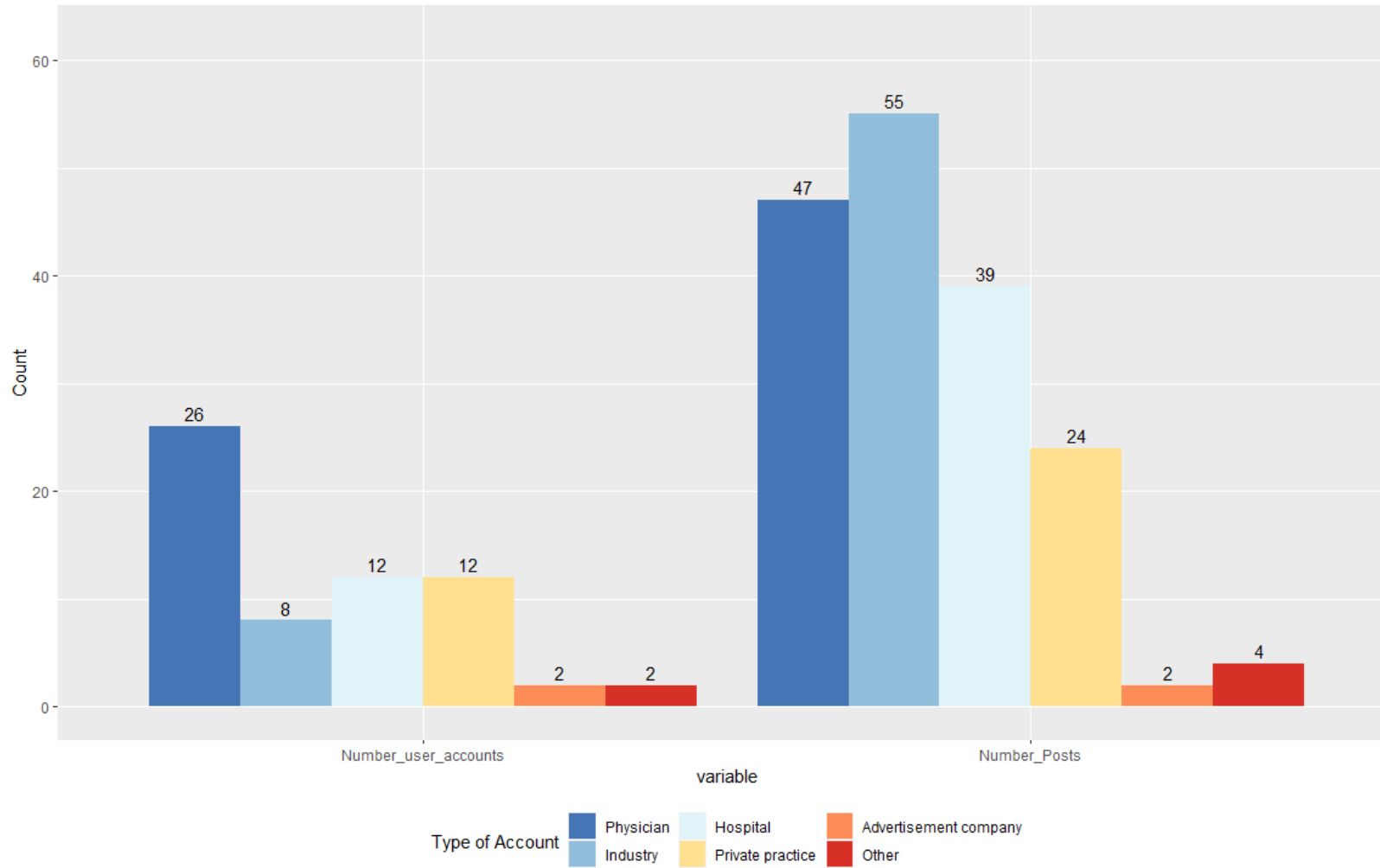
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Intro / Aims

- Social media is becoming increasingly popular within healthcare
  - Potential Benefits:
    - Increasing provider accessibility
    - Connecting with patients
    - Spreading accurate medical knowledge
    - Advertising healthcare provider education
    - Curating surgeons' and medical facilities' reputations

- Aims:
  1. To understand the ways medical professionals currently use Instagram
  2. Create guidance for medical professionals wanting to better utilize social media

- We specifically looked at **#endoscopicspinesurgery** to analyze content related to endoscopic spine surgery

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Methods

- Public Instagram posts tagged with **#**endoscopicspinesurgery, published between Jan 1-March 31, 2022
- 171 posts created by 62 unique Instagram accounts
  - Data collected:
    - Number of followers
    - Number of users they follow
    - Type of account
    - Type of medical professional
    - Post content
    - Hashtags
    - Number of likes
    - Number of comments

- Engagement calculated two ways:
  1. Engagement Rate = [(likes + comments)/(number of followers)] * 100
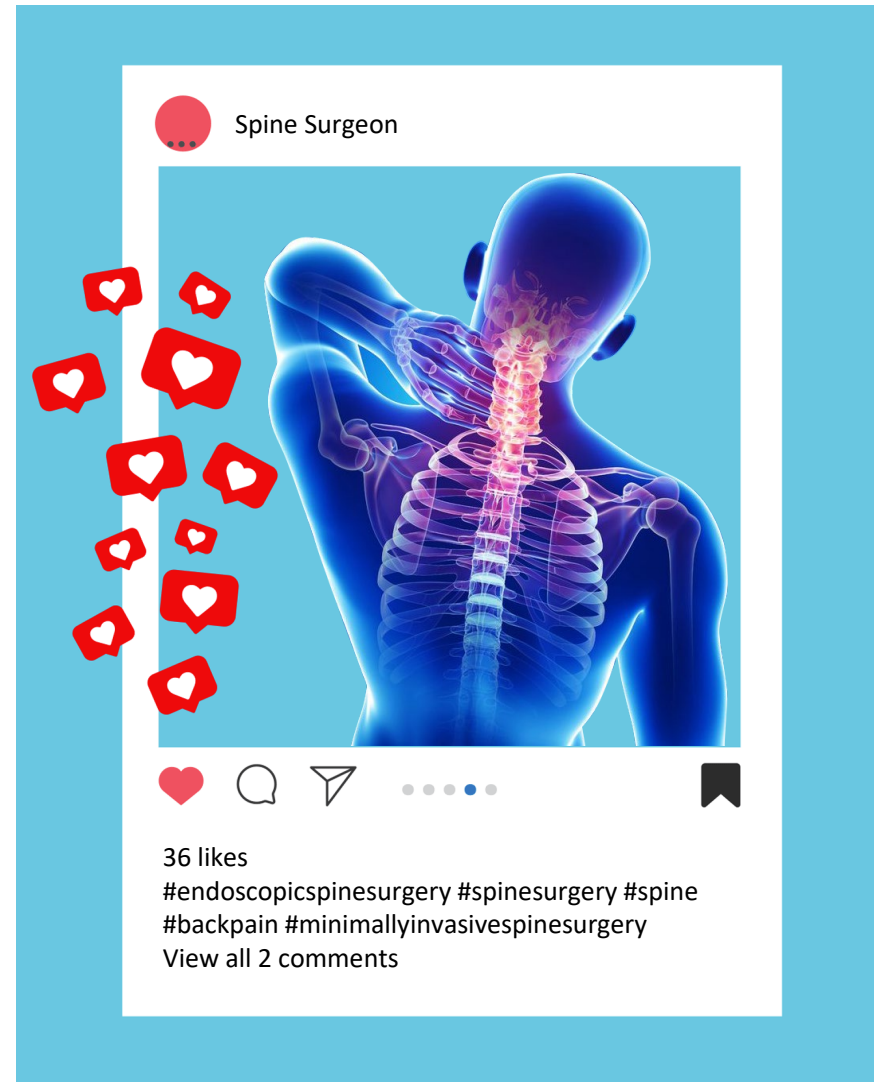 2. Sum of likes and comments

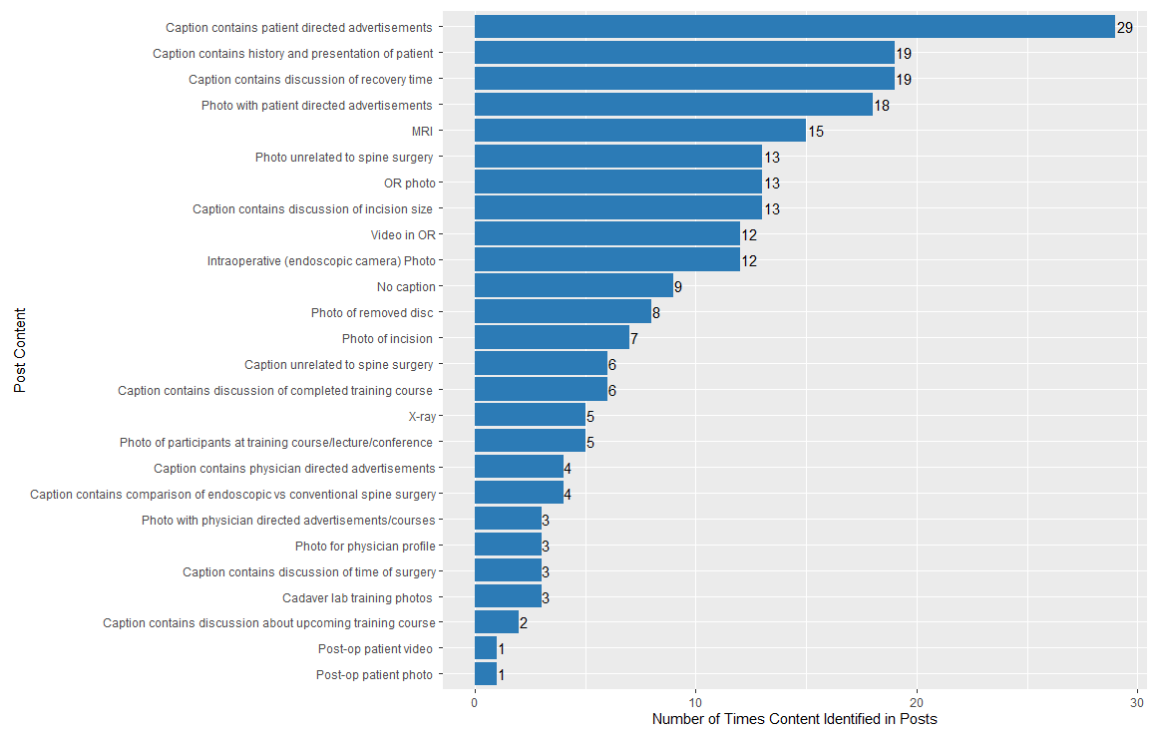# Medical Professionals use #endoscopicspinesurgery

- The majority of <u>accounts</u> posting with #endoscopicspinesurgery are physicians
  - 60% spine or orthopedic surgeons, 25% neurosurgeons, 10% pain management, 5% other

- The majority of <u>posts</u> are from industry

- Medical professionals published an average of 1.85 [SD 1.76] posts per user (range 1-8 posts)

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Engaging Posts
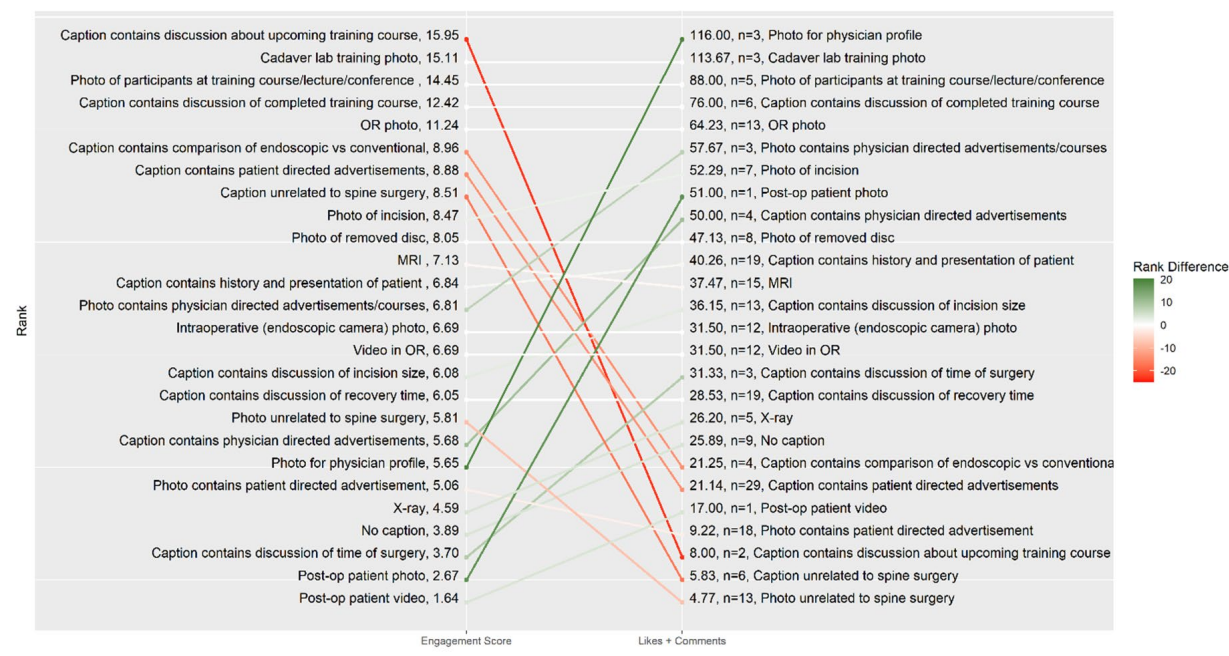
- Average of 35.84 [SD 53.39] likes and 1.47 [SD 2.37] comments

- Number of comments positively associated with the number of likes (p< 0.001)

- Commonly co-occurring hashtags included:
    - #spinesurgery
    - #spine
    - #backpain
    - #minimallyinvasivespinesurgery

- Rarely co-occurring hashtags included:
    - #patientswhoflourish
    - #bestspinesurgeon
    - #teamwork
    - #runchangesyourbrain

Spine Surgeon

36 likes
#endoscopicspinesurgery #spinesurgery #spine
#backpain #minimallyinvasivespinesurgery
View all 2 comments

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Average engagement score

Average likes + comments

Caption contains discussion about upcoming training course, 15.95 — 116.00, n=3, Photo for physician profile
Cadaver lab training photo, 15.11 — 113.67, n=3, Cadaver lab training photo
Photo of participants at training course/lecture/conference , 14.45 — 88.00, n=5, Photo of participants at training course/lecture/conference
Caption contains discussion of completed training course, 12.42 — 76.00, n=6, Caption contains discussion of completed training course
OR photo, 11.24 — 64.23, n=13, OR photo
Caption contains comparison of endoscopic vs conventional, 8.96 — 57.67, n=3, Photo contains physician directed advertisements/courses
Caption contains patient directed advertisements, 8.88 — 52.29, n=7, Photo of incision
Caption unrelated to spine surgery, 8.51 — 51.00, n=1, Post-op patient photo
Photo of incision, 8.47 — 50.00, n=4, Caption contains physician directed advertisements
Photo of removed disc, 8.05 — 47.13, n=8, Photo of removed disc
MRI , 7.13 — 40.26, n=19, Caption contains history and presentation of patient
Caption contains history and presentation of patient , 6.84 — 37.47, n=15, MRI
Photo contains physician directed advertisements/courses, 6.81 — 36.15, n=13, Caption contains discussion of incision size
Intraoperative (endoscopic camera) photo, 6.69 — 31.50, n=12, Intraoperative (endoscopic camera) photo
Video in OR, 6.69 — 31.50, n=12, Video in OR
Caption contains discussion of incision size, 6.08 — 31.33, n=3, Caption contains discussion of time of surgery
Caption contains discussion of recovery time, 6.05 — 28.53, n=19, Caption contains discussion of recovery time
Photo unrelated to spine surgery, 5.81 — 26.20, n=5, X-ray
Caption contains physician directed advertisements, 5.68 — 25.89, n=9, No caption
Photo for physician profile, 5.65 — 21.25, n=4, Caption contains comparison of endoscopic vs conventional
Photo contains patient directed advertisement, 5.06 — 21.14, n=29, Caption contains patient directed advertisements
X-ray, 4.59 — 17.00, n=1, Post-op patient video
No caption, 3.89 — 9.22, n=18, Photo contains patient directed advertisement
Caption contains discussion of time of surgery, 3.70 — 8.00, n=2, Caption contains discussion about upcoming training course
Post-op patient photo, 2.67 — 5.83, n=6, Caption unrelated to spine surgery
Post-op patient video, 1.64 — 4.77, n=13, Photo unrelated to spine surgery

Rank

Engagement Score   Likes + Comments

Rank Difference
20
10
0
-10
-20

Physician profiles received the highest average likes + comments

Photos and captions about training course(s), lecture(s), and conference(s) received the highest average engagement rate and were among the top 5 content categories for both types of engagement

OR photos ranked 5th for top average engagement and likes and comments

Conclusion:

- Medical professionals published the majority of **#endoscopicspinesurgery** Instagram posts

- Posts with cadaver labs, ORs, courses/conferences received the greatest numbers of likes and comments

- The most published content was patient-directed advertising
  - Suggests medical professionals post public content on Instagram to connect with new patients

- This study helps reveal how individual medical professionals use Instagram specifically regarding endoscopic spine surgery