

12TH ANNUAL MEETING OF ISMPP

# MEDICAL PUBLICATIONS IN A DATA-RICH WORLD: ENHANCING QUALITY AND TRANSPARENCY

Gaylord National Harbor Resort & Convention Center  
April 11-13, 2016 • National Harbor, MD, USA



12TH ANNUAL MEETING OF ISMPP

## ENHANCED CONTENT: PROS, CONS, PROCESSES AND TRENDS

April 12, 2016 • National Harbor, MD, USA





## Disclaimer

The opinions expressed by the presenters are their own and do not necessarily reflect those of their individual employers or of ISMPP



## Faculty

- **Neil Adams, ISMPP CMPP™**, Publishing Manager, Springer Nature
- **Grahame Conibear, BSc**, Senior VP, Integrated Communications, Adelphi Communications
- **Catherine Skobe MPH, MT(ASCP)**, Director, Publications Management, Pfizer
- **Moderator: Terry Materese**, Executive Publisher, Health & Medical Sciences, Elsevier



## Session Goals

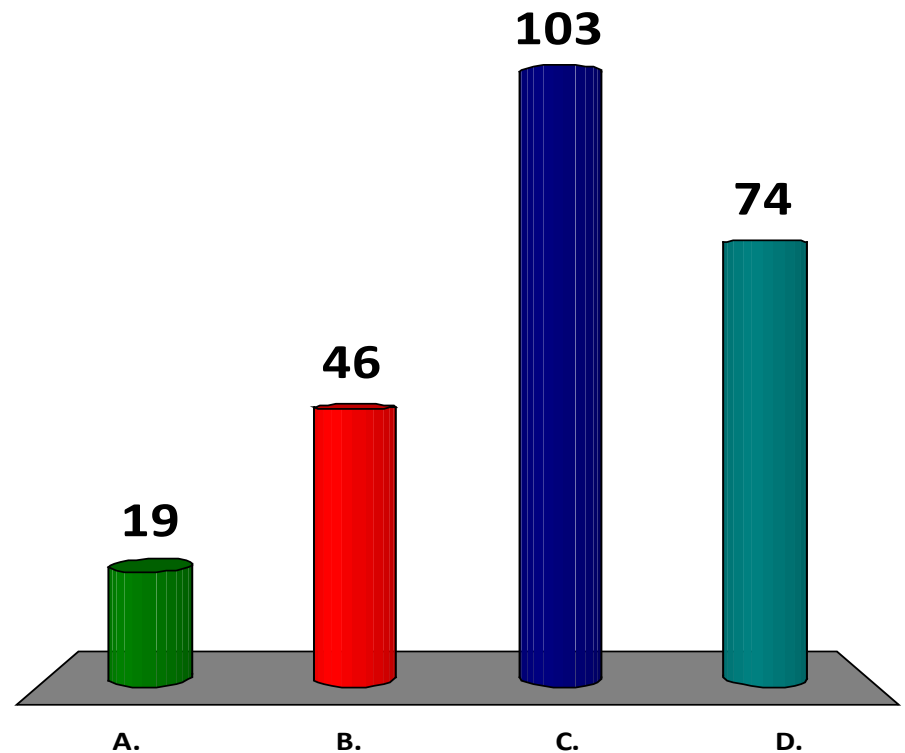
- Gain insights into why there is a need to create digital and enhanced content
- Learn about new trends in content development and be able to describe characteristics of a great digital/enhanced content product
- Be knowledgeable about key considerations as well as the publication process recommended for enhanced content

# AUDIENCE QUESTION



How much are you currently utilizing enhanced content in a journal submission or poster presentation?

- A.** Often
- B.** Some of the time
- C.** Rarely
- D.** Never



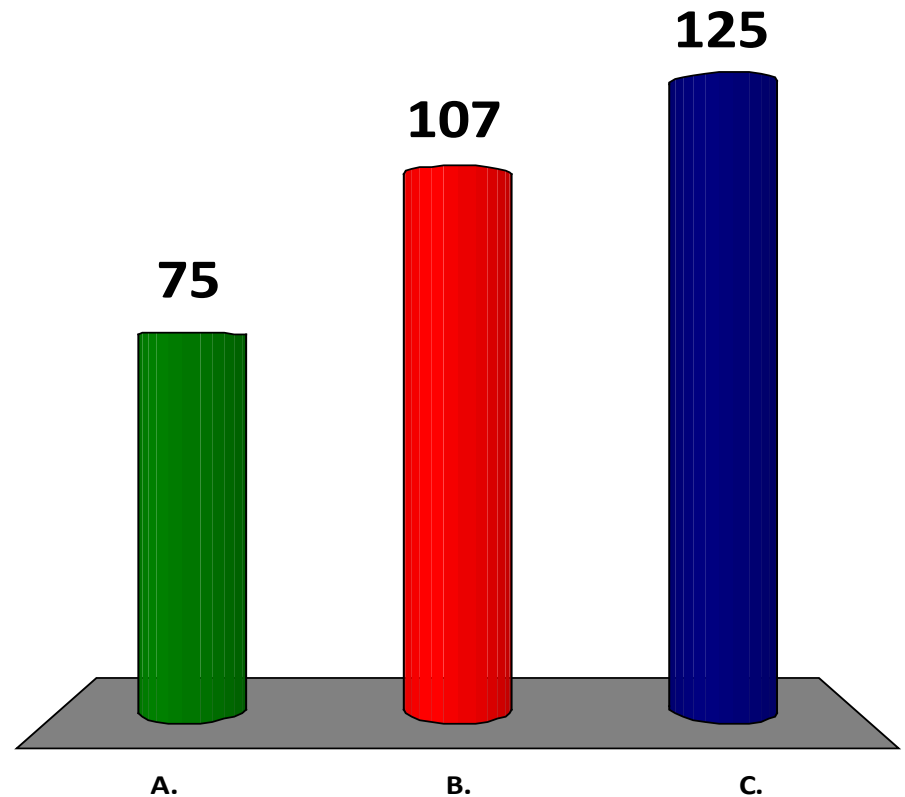
Bar graph represents raw n's

# AUDIENCE QUESTION



How familiar are you with augmented reality?

- A.** Very familiar
- B.** Somewhat familiar
- C.** Not at all familiar



Bar graph represents raw n's



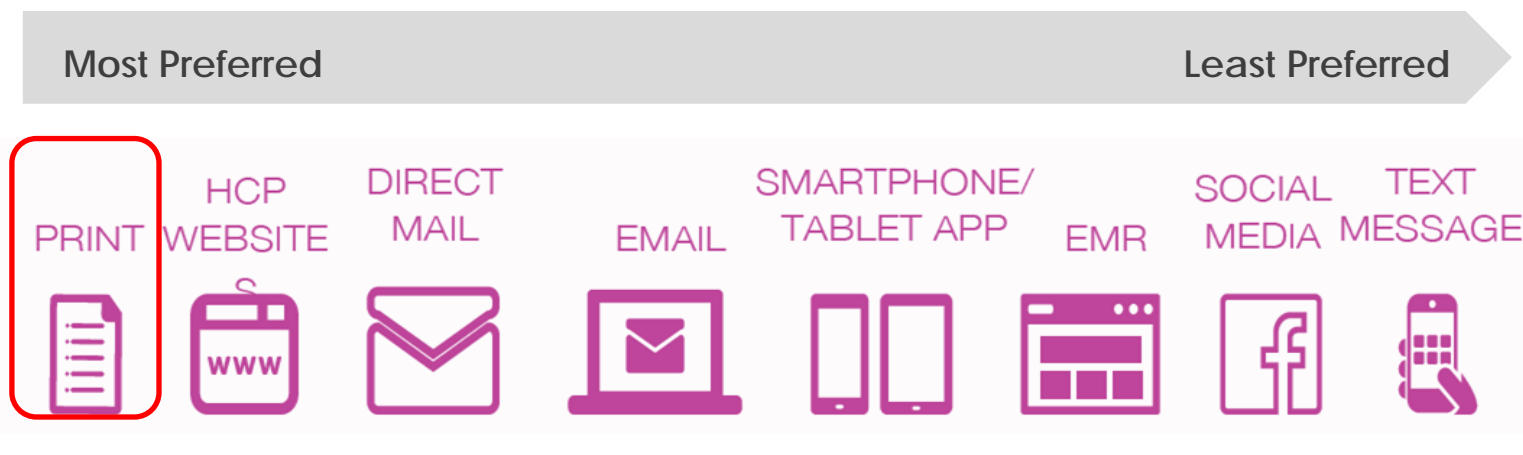
# ENHANCED CONTENT: THE WHAT, WHY AND HOW?

Grahame Conibear, BSc



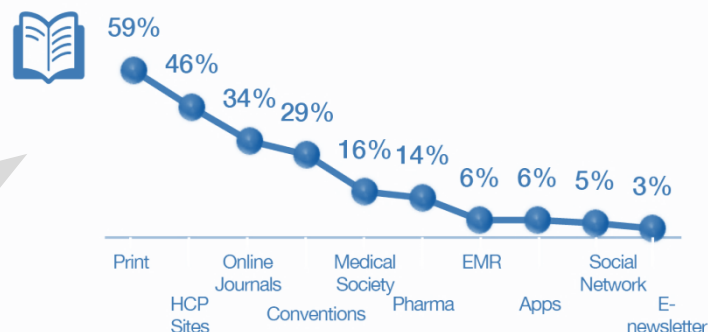
# Physicians Still Prefer Print for Info

## Top Ways Physicians Prefer to Receive Pharma Information

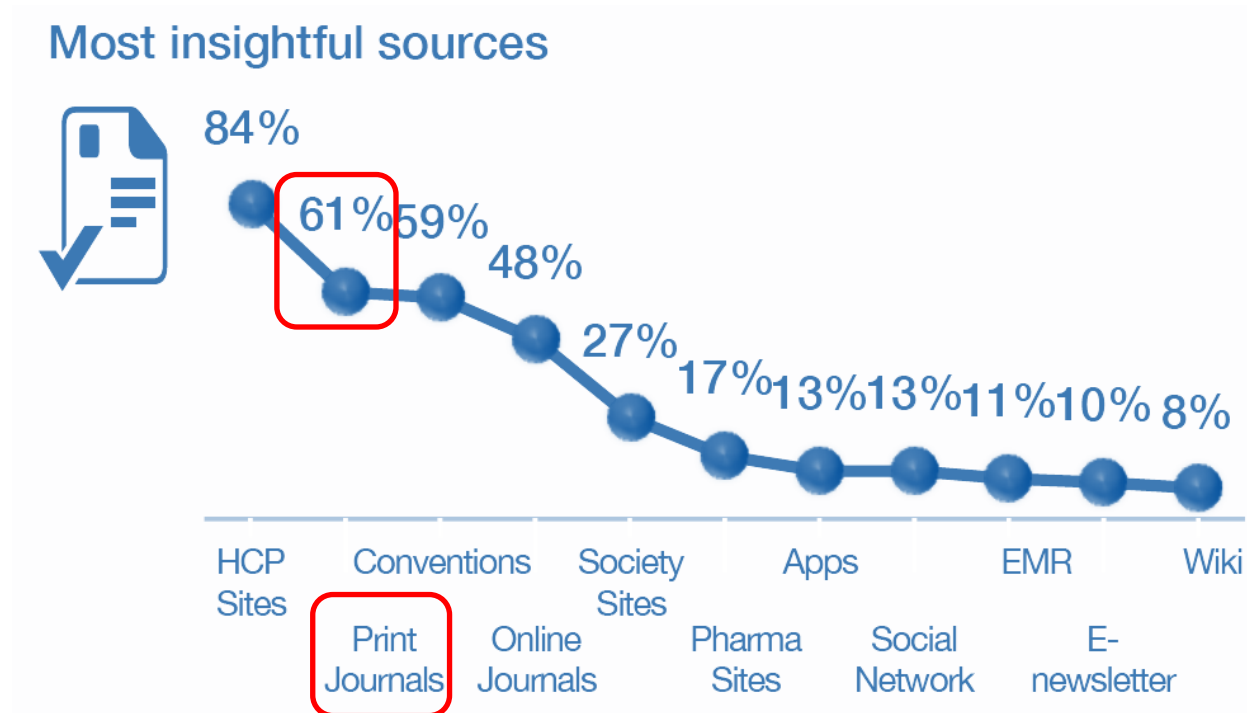


59% used print media  
for information about  
clinical trials

Top sources used for information about clinical trials



# Insights re Newly Launched Products



Also a top source used for newly launched products



# Multimedia in Medical Journals

Printed & Website

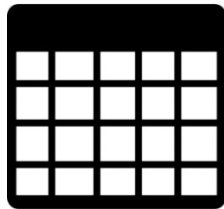


Table & Chart



Image



Audio

(i.e. audio interview)



Video

(i.e. video roundtable,  
video interview)



Slide show

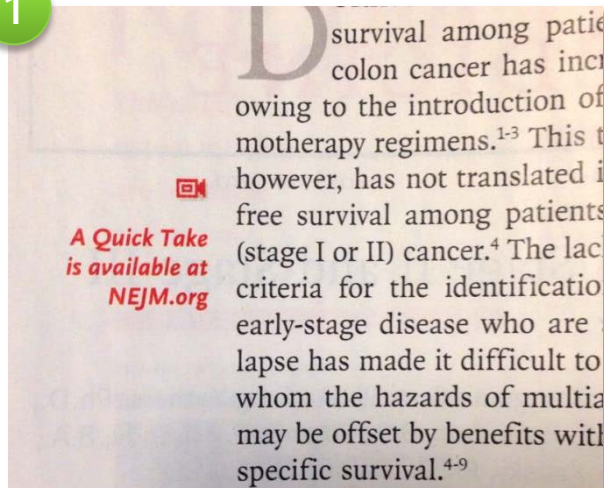


Interactive Media

(i.e. map, graphic,  
timeline, medical case)

# How to Access Multimedia

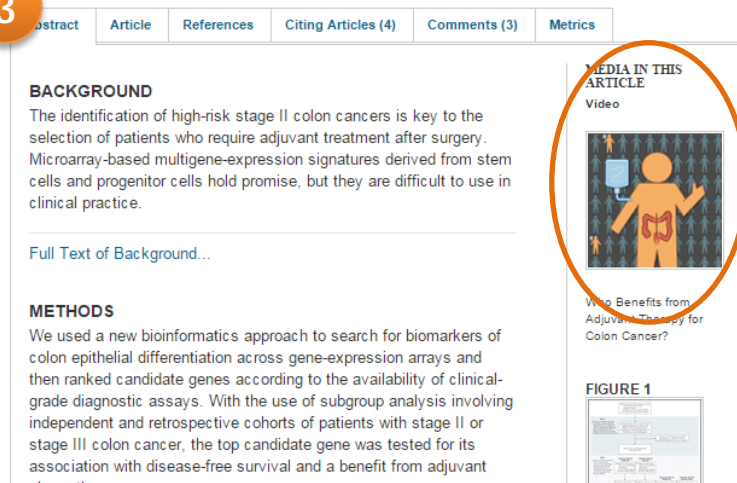
1



2



3



1. See a link in printed journal
2. Go to the website
  - >> Multimedia Section
  - >> Search for specific journal
3. Find a specific multimedia

## Slide Show

**MD Anderson Cancer Center**  
Making Cancer History

**Are you at risk for developing lung cancer?**

Are you a heavy smoker or ex-smoker over 50 years of age?  
If so, you are at risk for developing lung cancer.

More than **222,000** people in the U.S. will be diagnosed with lung cancer this year, according to the American Cancer Society's Cancer Facts & Figures 2010.

**Lung Cancer Screening**

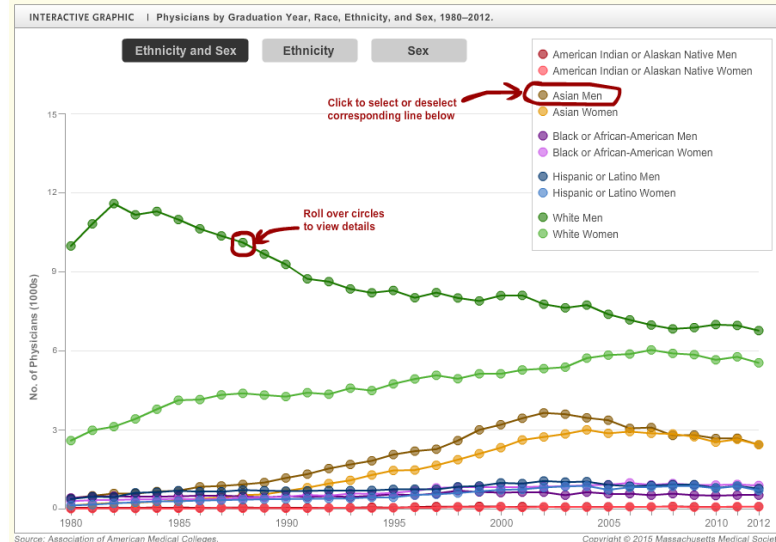
- Initial office consult and risk assessment
- CT Scan without contrast
- Follow-up appointment to review results

**\$375\*** (a \$1,000 value)

In fact, lung cancer accounts for more deaths than any other cancer, but if caught early enough, it can be treated.

## Interactive Media

Physicians by Graduation Year, Race, Ethnicity, and Sex, 1980-2012.



## Audio

**Interview with Dr. Scott Podolsky on the history of weak oversight of homeopathic remedies in the United States and what the future may hold.**

Supplement to the N Engl J Med 2016; 374:201-203

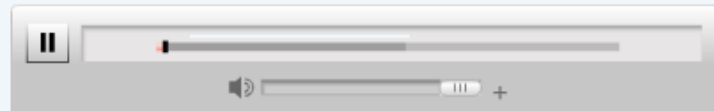


Scott Podolsky is an associate professor of global health and social medicine at Harvard Medical School.

Stephen Morrissey, the interviewer, is the Managing Editor of the *Journal*.

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# Augmented Reality (AR): Enhanced, Interactive Publication Feature

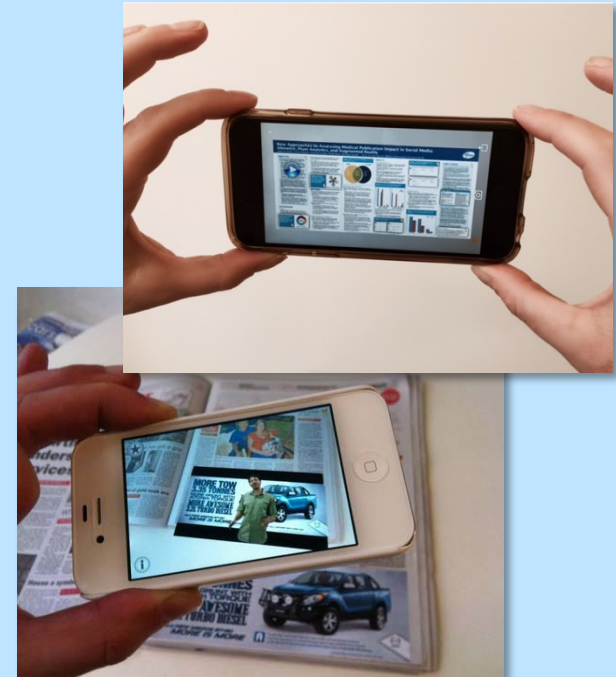
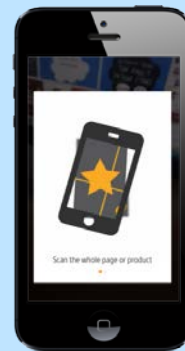


## Augmented reality



AR is a live view of a real-world environment whose elements are augmented by computer-generated input.

AR software uses object recognition through a phone's camera and/or GPS capabilities to gather information about the surrounding area.







# PROCESS & BEST PRACTICES

Catherine Skobe MPH, MT(ASCP)



# Enhanced Publication Guidelines at Pfizer

In 2012, when we initiated the Evolution of Publications from Print to New Media Workshop at the ISMPP Annual meeting, **our foremost concern was medical integrity and accuracy.**

- Worked externally with publishers to understand their process
- Worked internally to develop best practices and procedures

## **Established these guidelines:**

- ✓ All content must be within the underlying publication . No editorializing, no additional opinions, and no visual material or information outside of that publication
- ✓ No patients or patient identifiable information may be included in the recording or other digital media
- ✓ Relevant disclosures should be included
- ✓ Sunshine Act Transfer of Value must be assessed for agency support
- ✓ Approvals from the Pfizer Publication Owner, Presenting Author and Corresponding Author. Product Attorney is informed



# Enhanced Publication Experiences at Pfizer

- Journal podcast
- Audio Slides
- Video abstract
- Audio file for iPoster
- Author video
- Augmented reality poster – Blippar app





# PUBLISHER PERSPECTIVE

Neil Adams, ISMPP CMPP™

# Animation

nature  
REVIEWS CARDIOLOGY

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
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**Nature Reviews Cardiology**

Volume 13, No 3 March 2016

**ALSO THIS MONTH**

**Evolution of oral anticoagulants**

 Check out our new animation, made free to view with support from [Boehringer Ingelheim](#). Also download our accompanying [poster on anticoagulant drugs](#).

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**CURRENT ISSUE**

**Review**

**Comorbidity of atrial fibrillation and heart failure**

Liang-Han Ling, Peter M. Kistler, Jonathan M. Kalman, Richard J. Schilling & Ross J. Hunter

Atrial fibrillation (AF) and heart failure (HF) are evolving epidemics with increasing global prevalence. HF is known to promote AF, but how AF exacerbates or even causes HF is uncertain. In this Review, Ling and colleagues discuss the interplay between AF and HF, and the implications for clinical practice.

**CURRENT ISSUE**


**Review**




**Regulatory T cells in cardiovascular diseases**

Xiao Meng, Jianmin Yang, Mei Dong, Kai Zhang, Eric Tu, Qi Gao, Wanjun Chen, Cheng Zhang & Yun Zhang

Regulatory T (T<sub>REG</sub>) cells are important for the induction and maintenance of immune homeostasis and tolerance. Numerous experimental and clinical studies have suggested a role for T<sub>REG</sub> cells in cardiovascular diseases.

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**Associate Scientist / Scientist - Genetic Epidemiology**  
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**Tea plant molecular geneticists**  
State Key Lab of Tea Plant Biology and Utilization

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**Journal of Human Genetics**


# Animation

WEB ANIMATION

## The evolution of oral anticoagulants

[Reviews](#) > Web animation > The evolution of oral anticoagulants

### Animation: The evolution of oral anticoagulants



Blood clots can form where they aren't needed, and cause serious medical problems. This animation explores progress in the development of oral anticoagulants that target components of the blood coagulation cascade to inhibit blood clotting in high-risk patients, as well as recent advances with antidotes to reverse the effects of oral anticoagulants when necessary.

**Scientific advisers:** Roxana Mehran, Icahn School of Medicine at Mount Sinai, New York, USA; and Richard C. Becker, University of Cincinnati College of Medicine, Ohio, USA.

Animation by [Nucleus Medical Media](#).

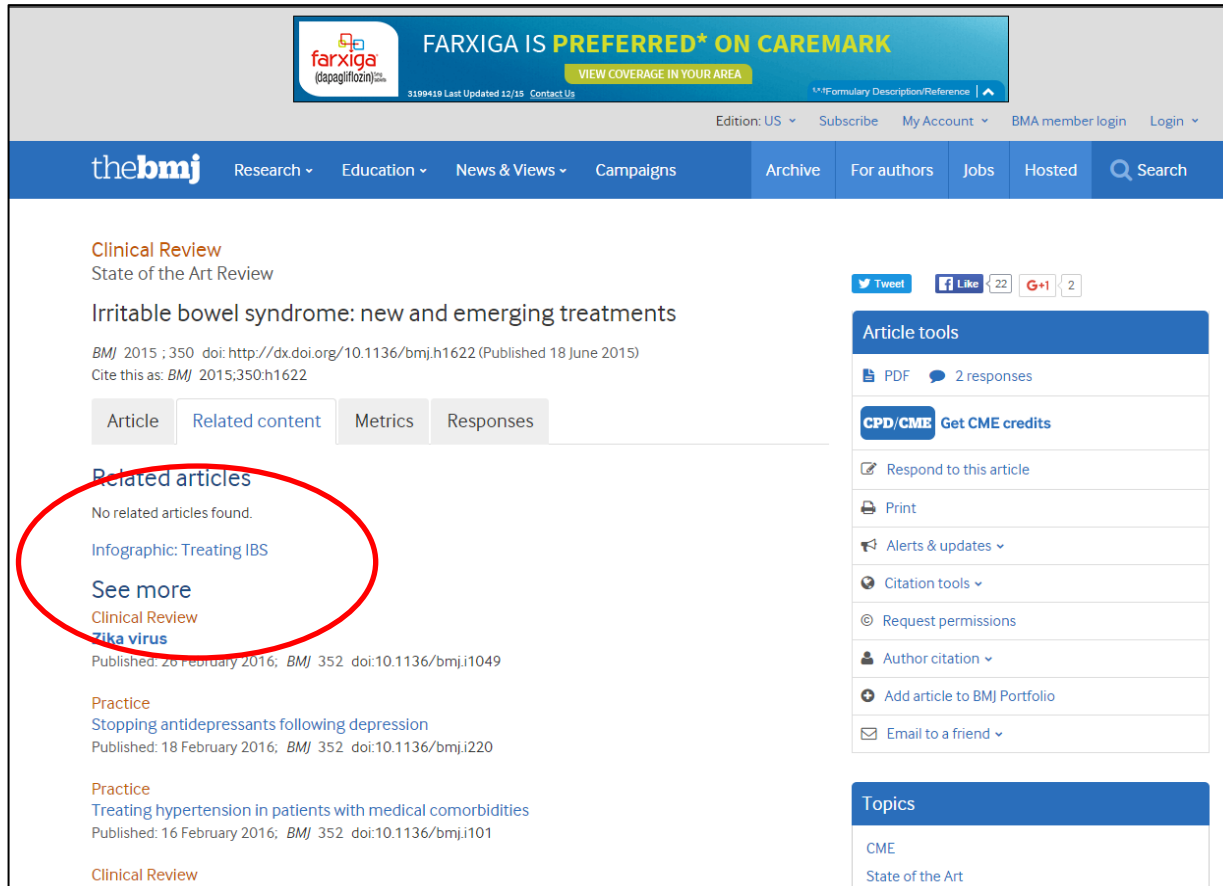
Produced with support from [Boehringer Ingelheim](#).

*Nature Reviews Cardiology* and *Nature Reviews Drug Discovery* have full responsibility for all editorial content, including NatureVideo content. This content is editorially independent of the sponsor.

**See also:** *Nature Reviews Cardiology* poster on 'Anticoagulant drugs' available at <http://www.nature.com/nrcardio/posters/anticoagulation/index.html>

- Produced with support from Boehringer Ingelheim
- Content is editorially independent of the sponsor
- Fully peer-reviewed
- NPG holds the copyright to this animation

# Interactive infographic



**farxiga**  
(dapagliflozin) tablet

FARXIGA IS **PREFERRED\*** ON CAREMARK

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**Clinical Review**  
State of the Art Review

**Irritable bowel syndrome: new and emerging treatments**

BMJ 2015 ; 350 : doi: <http://dx.doi.org/10.1136/bmj.h1622> (Published 18 June 2015)  
Cite this as: BMJ 2015;350:h1622

Article Related content Metrics Responses

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[Zika virus](#)  
Published: 26 February 2016; BMJ 352 doi:10.1136/bmj.i1049

**Practice**  
[Stopping antidepressants following depression](#)  
Published: 18 February 2016; BMJ 352 doi:10.1136/bmj.i1220

**Practice**  
[Treating hypertension in patients with medical comorbidities](#)  
Published: 16 February 2016; BMJ 352 doi:10.1136/bmj.i101

**Clinical Review**

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State of the Art

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State of the Art Review

## Irritable bowel syndrome: new and emerging treatments

BMJ 2015 ; 350 doi: <http://dx.doi.org/10.1136/bmj.h1622> (Published 18 June 2015)  
Cite this as: BMJ 2015;350:h1622

Article Related content Article metrics Rapid responses Infographic

### Treating IBS

[Tweet](#) [Like](#) 27 [G+](#) 1

**Treating IBS**  
(irritable bowel syndrome)  
By Will Stahl-Timmins  
Reviewed by Yuri A Salto

select subtype

**IBS-C**  
constipated

**IBS-D**  
diarrheal

**IBS-M**  
mixed

no subtype

reset


Potential IBS therapies

Pharmaceuticals	CNS therapies (Central nervous system)
<b>A</b> Chloride channel activators	<b>Guanylate cyclase C agonists</b>  Three large RCTs have assessed the laxative linaclotide. All three show reduction in abdominal pain and increased number of bowel movements. Long term treatment may be required for those with chronic symptoms.  <b>Sources:</b> Johnston JM, Kurtz CB, Macdougall ... Chey WD, Lembo AJ, Lavins BJ, et al. ... Rao S, Lembo AJ, Shiff SJ, et al. ...
<b>A</b> Guanylate cyclase C agonists	
<b>B</b> Serotonin receptor antagonists <b>IBS-D only</b>	
<b>B</b> Antibiotics <b>not IBS-C</b>	

Grades of recommendation

[Read the full article online](#)

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Marianne Davies,  
Smilow Cancer Hospital at Yale-New Haven Hospital  
New Haven, CT, USA




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ORIGINAL RESEARCHVIDEO

Antibiotic prescribing and resistance: knowledge level of medical students of clinical years of University Sultan Zainal Abidin, Malaysia




Haque M, Rahman NIA, Zulkifli Z, Ismail S

[Therapeutics and Clinical Risk Management 2016](#), 12:413-426

Published Date: 11 March 2016

ORIGINAL RESEARCHVIDEO

Opioids for chronic pain: a knowledge assessment of nonpain specialty providers




Pearson ACS, Eldridge JS, Moeschler SM, Hooten WM

[Journal of Pain Research 2016](#), 9:129-135

Published Date: 10 March 2016

ORIGINAL RESEARCHVIDEO

Kozhikode criteria for diagnosing systemic lupus erythematosus as a hematological disorder



Arathi N, Sasidharan PK, Geetha P



# Augmented Reality (AR)

The screenshot shows the Neurosurgery journal website. The header includes the journal title 'NEUROSURGERY' and the tagline 'THE REGISTER OF THE NEUROSURGICAL MEME'. Navigation links include Home, Current Issue, Previous Issues, Published Ahead-of-Print, Supplements, Collections, Podcasts, Video, and Journal Info. A search bar is present with the text 'Enter Keywords' and a 'Search' button. The article title is 'Simulation and Augmented Reality in Endovascular Neurosurgery: Lessons From Aviation'. The authors listed are Mitha, Alim P. MD, SM; Almekhlafi, Mohammed A. MD; Janjua, Major Jameel J. BEng, SM, CD; Albuquerque, Felipe C. MD; McDougall, Cameron G. MD. The article is marked as 'FREE'. The abstract text reads: 'Endovascular neurosurgery is a discipline strongly dependent on imaging. Therefore, technology that improves how much useful information we can garner from a single image has the potential to dramatically assist decision making during endovascular procedures. Furthermore, education in an image-enhanced environment, especially with the incorporation of simulation, can improve the safety of the procedures and give interventionalists and trainees the opportunity to study or perform simulated procedures before the intervention, much like what is practiced in the field of aviation. Here, we examine the use of simulators in the training of fighter pilots and discuss how similar benefits can compensate for current deficiencies in endovascular training. We describe the types of simulation used for endovascular procedures, including virtual reality, and discuss the relevant data on its utility in training. Finally, the benefit of augmented reality during endovascular procedures is discussed, along with future computerized image enhancement techniques. ABBREVIATIONS: AR, augmented reality VR, virtual reality'.

- The journal introduced AR into its pages in 2012 to enhance the reading experience
- Uses the Layar app (part of the Blippar group)
- This paper appeared in a supplement to *Neurosurgery*





# Key takeaways: Publisher's view

## PROS

- Can increase the educational value of journal content
- Encourages readership (app-based journals)
- Highlights journal innovation and new technology
- Enhances readership experience

## CONS

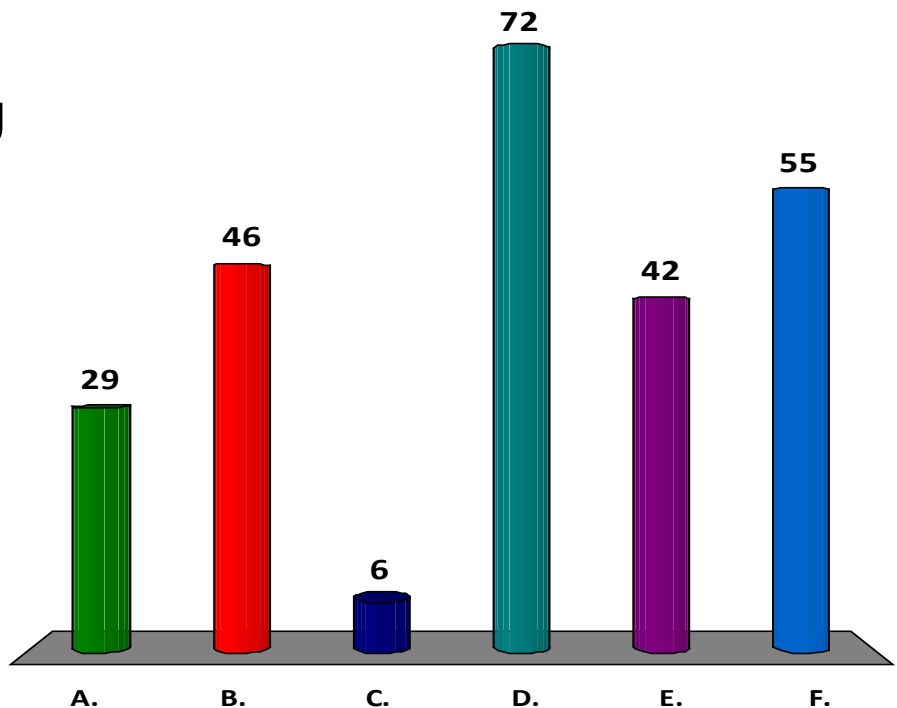
- Authors don't seem to care much about enhanced publications
- Cost to produce not accounted for in journal budget
- Not always appropriate for journal content
- Copyright problems?

# AUDIENCE QUESTION



If you have never included enhanced content in a journal submission or poster presentation, what's been the main reason for this?

- A. Author(s) not interested in it
- B. Commercial and/or marketing concerns
- C. Not appropriate for submission or poster
- D. Not a priority (question the value of it)
- E. Not worth the cost/ROI
- F. No budget for it



Bar graph represents raw n's



**“A lot of times, people don’t know what they want until you show it to them.”**

**Steve Jobs (1998)**



# **CASE EXAMPLE: PFIZER AUGMENTED REALITY POSTER VIA BLIPPAR**

Catherine Skobe MPH, MT(ASCP)

# Blippar Access Features

- Scan from paper (handout, letter, etc.), computer monitor, projector screen, Twitter image
- Save the image as a favorite
- Share via Twitter, Facebook, and Email



# Metrics of campaign success!

Total number  
of blipps

Unique users

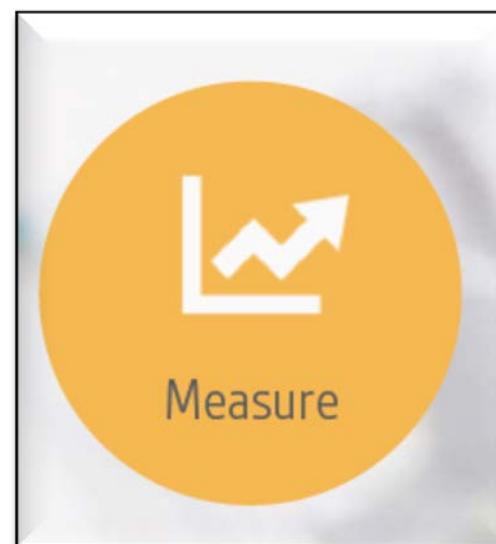
Average  
blipps per  
user

Tap-through  
rates

Direct  
responses

Timeline of  
when users  
blipped

Heat map  
where users  
blipped





# Pfizer AR Poster 2015

- Presented poster at Drug Information Association Annual Meeting in Washington, DC
- Research objectives were to present the functionality of two new alternative metric tools
  - To gauge the article-level impact of publications
  - To explore the potential advantages and limitations
  - To determine their ability to assess uptake in social media
- Embedded interactive AR content to enhance the article level metrics
  - Video introduction
  - Provide additional data (i.e., Altmetrics and Plum Analytics)
  - Conduct survey
  - Email/Contact



# AR Value: Transforming static communication into a dynamic experience

## New Approaches to Assessing Medical Publication Impact in Social Media: Altmetric, Plum Analytics, and Augmented Reality

Catherine Skobe,<sup>1</sup> LaVerne Mooney,<sup>1</sup> Shoshana Akabas,<sup>1</sup> Wendy Kopf,<sup>2</sup> and Hilary Carson<sup>2</sup> — <sup>1</sup>Pfizer, Inc., New York, NY; <sup>2</sup>Adelphi Communications Inc., New York, NY



### OBJECTIVE

- The objective of this research was to present new tools for gauging article-level metrics of publications in online academic and social media domains.
- Compared with traditional (journal citation) metrics, which accrue slowly and are usually viewed toward established publications, alternative metrics or article level metrics (ALMs) are available immediately upon publication and track how often data or research is cited in real time.
- Alternative metrics represent a progressive change in peer-reviewed scientific publishing that moves beyond traditional citation impact. ALMs measure the online interaction in research and track uptake in non-traditional forums, such as social media outlets.
- The goal was to assess two metrics aggregators and compare their output across two articles published in the New England Journal of Medicine.
- Metrics aggregators allow for quantification and visualization of article-level readership; a journal with both an established academic impact as well as a significant social media presence was chosen to obtain viable metrics data. Assessment of the two publications with two alternative metrics aggregators provided a quantitative overview of the advantages and limitations of each.
- The research presented here is enhanced with additional technological components in the form of augmented reality (AR). AR is a live view of a real-world environment whose elements are enhanced by computer-generated input.
- AR software uses object recognition through a smartphone or tablet's camera to gather information about the surrounding area.
- For the purposes of medical publication, AR has the ability to enrich static presentations with digital elements, increase visibility and access to data via embedded video presentations, and allow for further exploration of methods and results with embedded figures and slides.
- This poster is enhanced with AR powered by Blippar.

### BACKGROUND

#### Altmetric

- Altmetric captures new mentions from a curated list of 40,000 websites, blog mentions, Q&A forums, tweets, y!s on Google+, Reddit mentions, Mendeley reads, Cit@like saves, and Facebook shares and likes (Figure 1a).



Figure 1a. Altmetric

- Altmetric tracks metrics for any STM publication with a digital object identifier (DOI) or other persistent object identifier.
- Plum Analytics collects impact metrics in 5 major categories—usage, captures, mentions, social media, and citations. It tracks these metrics across the web via DOI, PubMedID, ArXiv ID and other persistent object identifiers that remain with an artifact for its life.
- The metrics are gathered around "artifacts"—which are defined as any research output available online. Artifacts range from abstracts and book chapters to source code and speeches. A complete listing is available on the Plum Analytics website ([www.plumanalytics.com/](http://www.plumanalytics.com/)) (Figure 1b).

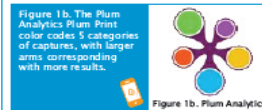


Figure 1b. Plum Analytics

### METHODS

- We selected two publications, "Oral Apixaban for the Treatment of Acute Venous Thromboembolism" and "Crisotinib versus Chemotherapy in Advanced ALK+ Positive Lung Cancer" for ALM assessment.
- Both were assessed via Plum Analytics and Altmetric to compare interest in the academic and social media domains (also considered non-traditional sources of citations).
- Articles were selected from the same journal to establish a baseline social media reach.
- Results were gathered from the date of publication through December 31, 2014.
- "Oral Apixaban for the Treatment of Acute Venous Thromboembolism" was first published on June 20, 2013 and was in the public domain for just over 18 months at the time of assessment.
- "Crisotinib versus Chemotherapy in Advanced ALK+ Positive Lung Cancer" was first published on August 29, 2013 and was in the public domain for just over 18 months at the time of assessment.

#### Holistic Approaches to Metrics

- Altmetric and Plum Analytics both capture a wide range of metrics, and there is overlap in their data. However, both tools also track metrics independent of each other.
- Blog and news source metrics are captured from individually curated lists maintained by each aggregator; thus, a comparative analysis is not feasible.
- Both aggregators capture data for Facebook, Twitter, Google+, and Mendeley. We can therefore make a comparative assessment between both tools in non-traditional sources of attention (Figure 2).

Figure 2. Metrics captured by Altmetric and Plum Analytics.



#### Advantages and Limitations

- Altmetric was founded in 2011; if an article was published before July 2011 the aggregator will not have captured Twitter results.
- Altmetric captures activity from non-traditional sources of attention; we do not track traditional academic citation and download sources via PubMed, Scopus, and EBSCO. Therefore it may not be as indicative of research uptake in the academic sector.
- Altmetric offers a free "bookmarklet" which allows for one click calculation of ALM; full access to mentions is available from publishers who have implemented Altmetric on their repositories. If a publisher is not a subscriber, an abbreviated version of mentions is available via the bookmarklet.
- Altmetric offers free accounts for academic libraries. Subscription services are available for the Altmetric E-scope, which allows users to search the publication database, and Altmetric for institutions.
- Plum Analytics was also founded in late 2011 and was subsequently acquired by EBSCO.
- Plum Analytics tracks citations from PubMed and Scopus and downloads from EBSCO. It should be noted that EBSCO data is provided by subscription publishers; peer-reviewed materials published by non-subscribers will not be captured in the download count.
- From a user standpoint, Plum Analytics currently has an institution-based research focus and a subscription service.
- The application can be purchased and implemented on large libraries of research, allowing the user to benchmark individual articles or researchers.
- Plum Analytics facilitates analysis at the researcher, group, department, and institutional level.

### RESULTS

#### Overlapping Metrics

- The volume of tweets for apixaban vs crisotinib as captured by Altmetric (187 vs 151) suggests a slightly greater social impact for the apixaban article.
- The number of Mendeley saves was greater for apixaban compared with crisotinib, as captured by Plum Analytics (185 vs 136) (Table 1).
- Results from both aggregators indicate that the apixaban article was more highly bookmarked on Mendeley, an application geared toward research sharing.
- In the strategy, Plum Analytics counted 133 Mendeley bookmarks for crisotinib compared with 0 from Altmetric, a fairly large discrepancy.
- Overall, the results indicate a higher impact for the apixaban article, but also demonstrate that aggregators return varying results when quantifying interaction from non-traditional sources of attention (Figure 3).

Figure 3. Altmetric and Plum Analytics metrics captured for a) apixaban and b) crisotinib.

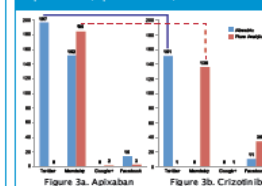


Figure 3a. Apixaban

Figure 3b. Crisotinib

- The Altmetric score for the apixaban article was higher than that of crisotinib (207 vs 180) (Figure 4).
- The Plum Print does not provide a numerical quantification of interaction; the overall impact of both articles results in similar "prints".
- It is discernible, however, that the greatest uptake was seen in captures, usage, and citations (Figure 5).

Figure 4. Overall Altmetric score for apixaban and crisotinib.



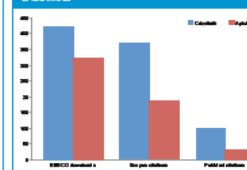
Figure 5. Overall Plum Analytics score for apixaban and crisotinib.



#### Singular Metrics

- Altmetric captures uptake in non-traditional sources of attention, whereas we look at Plum Analytics for an assessment of academic uptake (ie, citations and downloads).
- Contrary to findings from non-traditional sources, academic uptake was greater for the crisotinib article.
- Plum Analytics captured 418 vs 319 EBSCO abstract views, 364 vs 182 Scopus citations, and 96 vs 32 PubMed citations for crisotinib and apixaban, respectively (Figure 6).
- Altmetric captured slightly more mentions of apixaban in blogs compared with crisotinib (5 vs 2) as well as in Cit@like bookmarking (3 vs 1).
- A marginally greater uptake was seen for crisotinib via news outlets (5 vs 0) (Figure 4).

Figure 6. Academic metrics captured by Plum Analytics show a greater academic uptake for crisotinib.



### CONCLUSIONS

#### ALMs vs Traditional Citation Counts

- In our assessment, both Altmetric and Plum Analytics feature promising tools for gauging reader response in medical publications. These ALMs more accurately demonstrate the interaction with research output compared with the impact factor, which presents the mean value of the publishing journal.
- Whereas traditional citation metrics provide a average measure of a journal's influence, alternative metrics data provide an independent measure of interest in specific research.
- Although both types of metrics are subject to manipulation, ALMs provide a more timely assessment of uptake, whereas the slow process of citation counting accrues over time.
- New aggregators are tracking a wider range of interaction that is representative of the move toward open science sharing in traditional peer-reviewed material, they represent an evolving group for researcher.
- The social media sources also add a qualitative element to medical publications which is not reflected in traditional citation counts (Table 1).

#### Table 1. Metrics

Metric	Altmetric	Plum Analytics
Twitter	187	151
Facebook	185	136
Google+	185	136
Mendeley	185	136
Cit@like	185	136
Reddit	185	136
Blog	185	136
News	185	136
Outlets	185	136
PubMed	185	136
BibSight	185	136
Scopus	185	136
EBSCO	185	136
Abstract views	185	136
Citations	185	136
PubMed citations	185	136
Scopus citations	185	136
EBSCO citations	185	136
Bookmarking	185	136
News outlets	185	136
Usage	185	136
Captures	185	136
Interactions	185	136
Downloads	185	136
Views	185	136
Clicks	185	136
Impressions	185	136
Engagements	185	136
Shares	185	136
Comments	185	136
Retweets	185	136
Reposts	185	136
Plays	185	136
Click-through rates	185	136
Conversion rates	185	136
Cost per click	185	136
Cost per acquisition	185	136
Return on investment	185	136
Customer lifetime value	185	136
Churn rate	185	136
Net promoter score	185	136
Brand awareness	185	136
Brand loyalty	185	136
Brand equity	185	136
Brand reputation	185	136
Brand image	185	136
Brand personality	185	136
Brand voice	185	136
Brand identity	185	136
Brand positioning	185	136
Brand strategy	185	136
Brand architecture	185	136
Brand management	185	136
Brand marketing	185	136
Brand communication	185	136
Brand experience	185	136
Brand perception	185	136
Brand attitude	185	136
Brand behavior	185	136
Brand loyalty	185	136
Brand advocacy	185	136
Brand ambassador	185	136
Brand community	185	136
Brand ecosystem	185	136
Brand network	185	136
Brand platform	185	136
Brand ecosystem	185	136
Brand network	185	136
Brand platform	185	136

#### Future Considerations

- The choice of metric tool may depend on whether scientific citations, social reactions, or both, are of interest. Alternative metrics are rapidly evolving, although their potential has not been fully explored in the field of medical publications due to non-normalized source data, the inability to integrate relative differences in baseline aggregated metrics, and varying interpretation of the utility.
- Measurement of publication impact is changing, and a compilation of metrics may provide a holistic view of article-level uptake compared with the narrow scope of citation counts indicative only of journal-level impact.
- Leading peer-reviewed medical journals are increasingly incorporating alternative metrics with the online versions of their journals. Researchers and research institutions are also progressively focusing on the immediate availability of alternative metrics as social media becomes an integral part of our daily culture.
- How the reach of medical publications through non-traditional sources of attention will influence clinical practice has yet to be fully elucidated.

#### Reader Survey

Reference: 1. Carson H, et al. *Journal of Clinical Pharmacy and Therapeutics*. 2015;40:1-16. doi:10.1111/jcpt.12116. Received 10 May 2015; accepted 10 May 2015. Published online 10 May 2015. © 2015 Blackwell Publishing Ltd. This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

51st Annual Meeting of the Drug Information Association, June 14-18, 2015, Washington, DC

To experience the benefits of AR technology:

- ✓ Download the **Blippar App** on your smart phone or tablet
- ✓ Scan the full poster image above
- ✓ View interactive features (also noted by phone icon)



# Challenges

- Reader/viewer needs smartphone or ipad
- Reader/viewer needs to download app
- Wifi access
- Recommend limiting the number of AR features added to a poster
- Lightning Cable
  - Ability to view AR in presentation mode, but not via WebEx





# Augmented Reality FAQs

**Do I need a wifi connection for Blippar to work?**

- Blippar requires a 3G, 4G or WiFi connection

**Where is the info housed for the AR elements?**

- It is housed on a secure cloud based server. Blippar uses AWS (amazon web services), which is very secure.

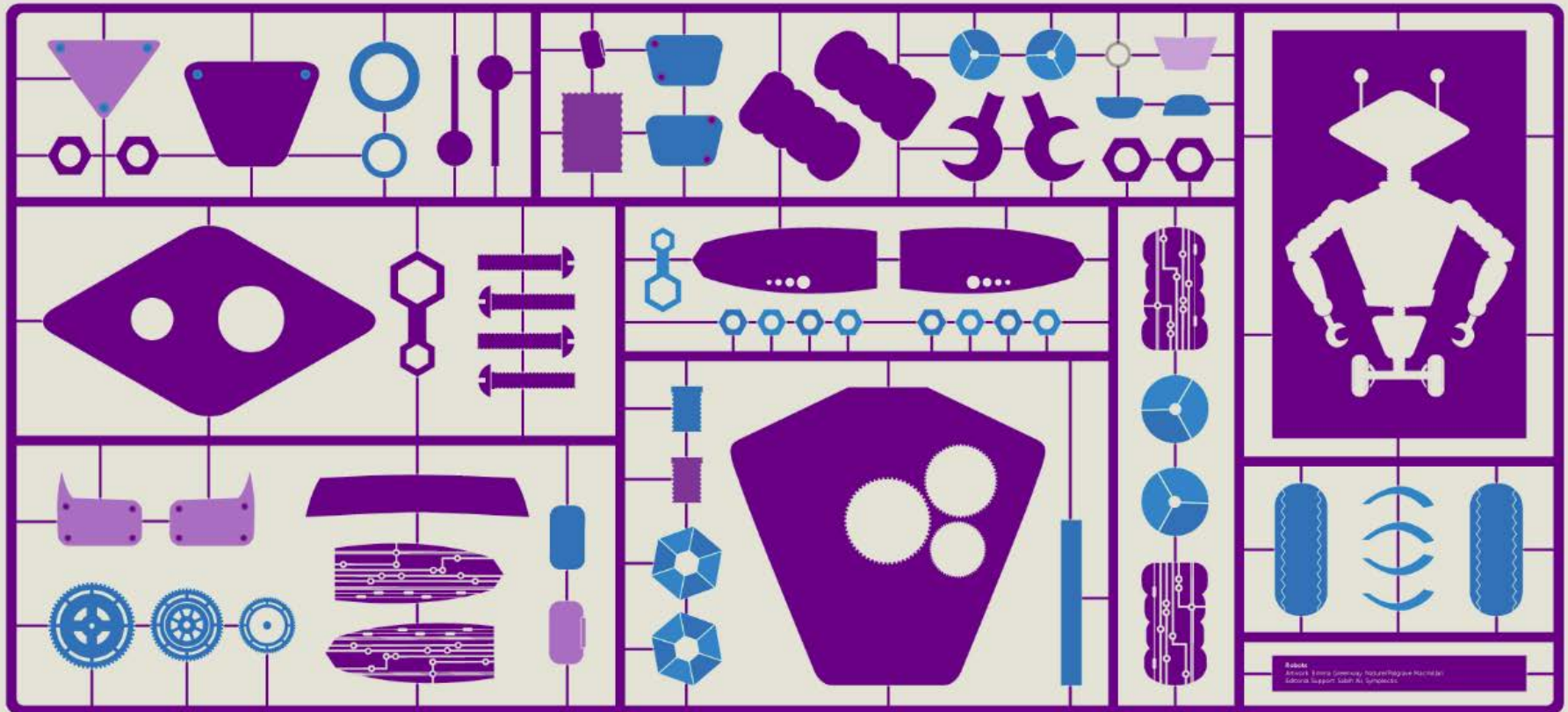
**How long can an AR initiative be maintained?**

- It can be on the Blippar server as long as you want it to be

**Can I limit user access to a certain audience?**

- Yes, Blippar allows for an access code to be entered to view the additional content

AR poster is located at NPG HQ in London





## Key Takeaways

- Identify value added uses for augmented reality that are medically driven and not commercially bent
  - Multi-lingual video abstracts
  - MOA videos
  - Additional tables and figures
    - Drill down into the data
- Ensure transparency through disclosures
- Consider Sunshine Act TOV

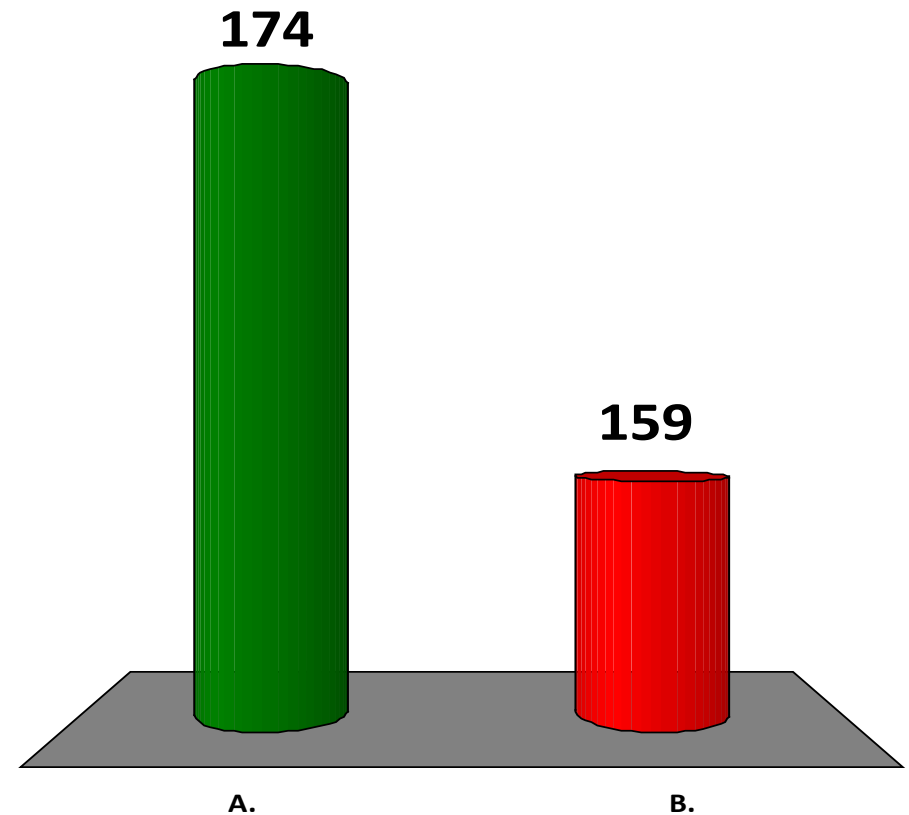
# AUDIENCE QUESTION



Have you had any AR experiences or seen it employed in other ways?

A. Yes

B. No



Bar graph represents raw n's

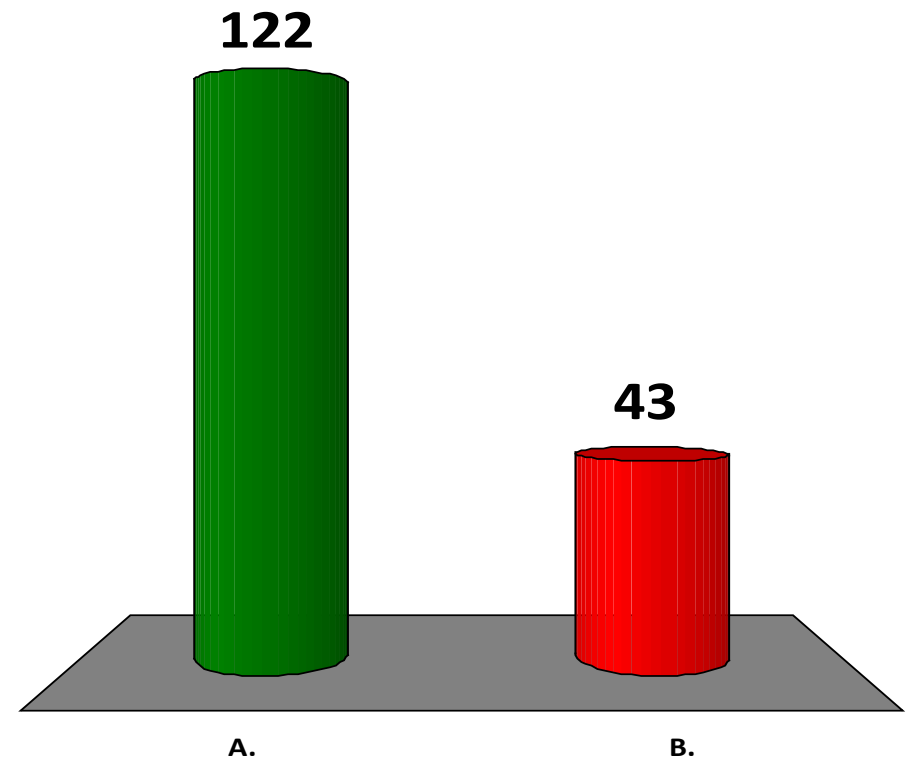
# AUDIENCE QUESTION



If YES, did you find it improved the content or learning experience?

A. Yes

B. No



Bar graph represents raw n's



# AUGMENTED REALITY EXAMPLES

Grahame Conibear, BSc



# What is Augmented Reality?

Users can see all this with a smartphone device which almost everyone has one already





# AR in Pharmaceutical Area



Education /  
Training



Diagnose /  
Surgery



Publication /  
Congress



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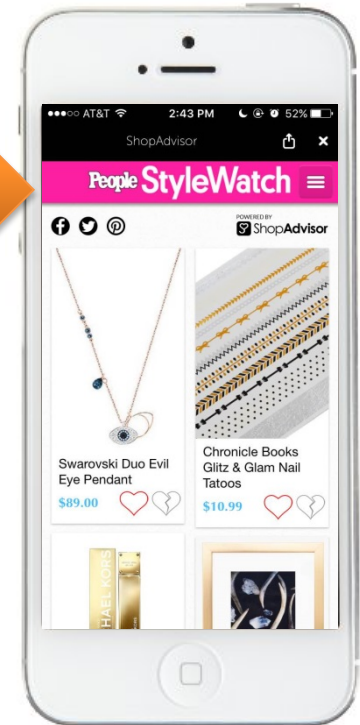


# Blippar in *People Style Watch*



USE THE **BLIPPAR** APP TO SHOP THESE PAGES, GET MORE GIFT IDEAS AND WATCH A FESTIVE WRAPPING DIY! FOR DETAILS, SEE PAGE 14.

1. Download Blippar App
2. Scan on a page
3. Click on a button
4. Start to shop





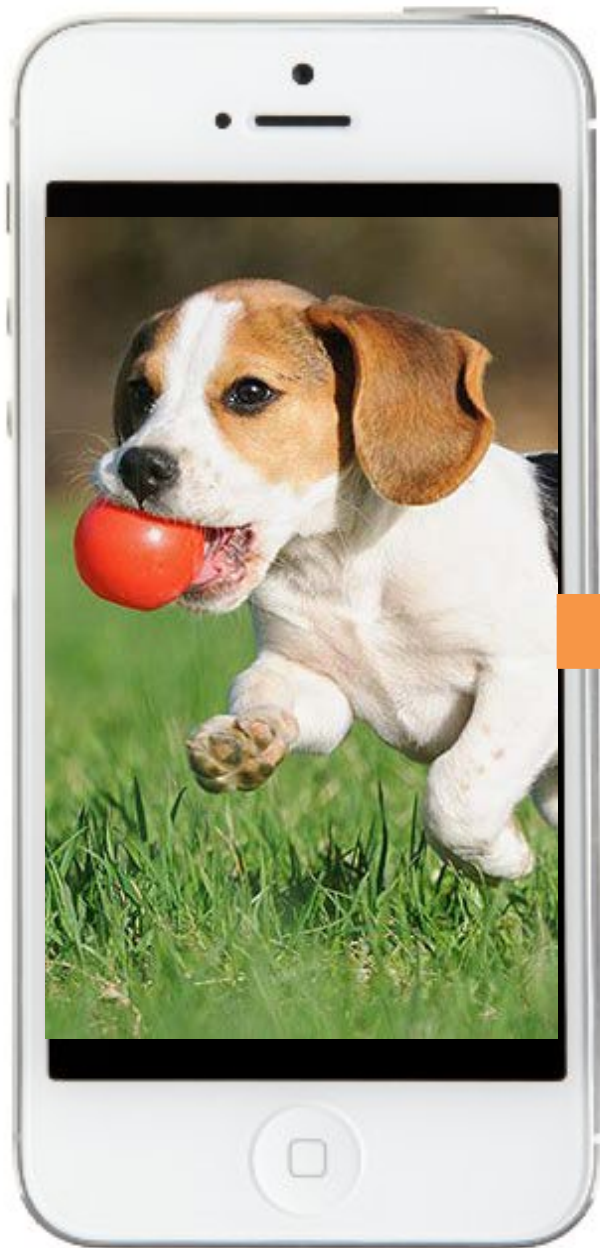
“a visual search engine for the world.”



Ambarish Mitra  
Blippar chief executive

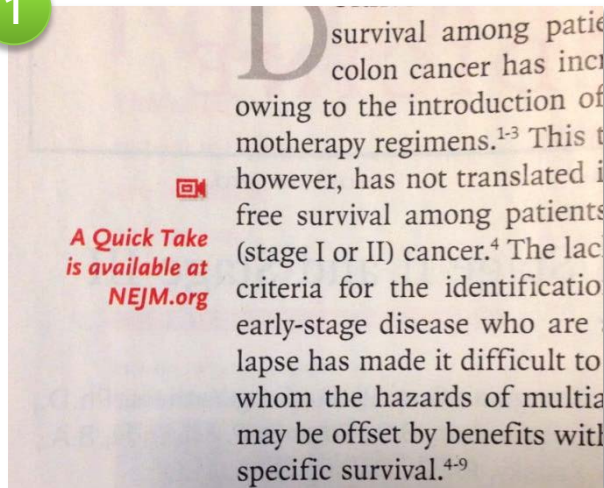






# How to Access Multimedia

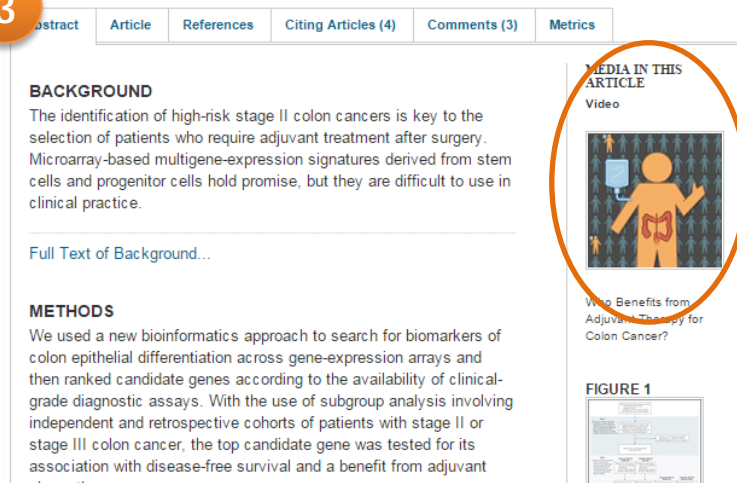
1



2



3



1. See a link in printed journal
2. Go to the website
  - >> Multimedia Section
  - >> Search for specific journal
3. Find a specific multimedia





## Key Takeaways

- Print journals will remain our most effective way of informing HCPs and enhanced media will increasingly be used to improve education and understanding
- New technologies (like AR) can *dramatically* accelerate the availability and convenience of access to additional information
- Transparency and medical integrity when implementing enhanced publication content is paramount to ensure a line is not crossed into promotional
- It's a question of when we seize these opportunities to better inform our audiences – not if
- Make sure your authors understand the need for the enhanced content and the benefits that will result from it



QUESTIONS?



THANK YOU

12TH ANNUAL MEETING OF ISMPP

# MEDICAL PUBLICATIONS IN A DATA-RICH WORLD: ENHANCING QUALITY AND TRANSPARENCY

Gaylord National Harbor Resort & Convention Center  
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