APPO 2015 INFECTION PREVENTION LIVE ON STAGE

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What do Infection Preventionists want to know? Queries of IP Talk and apic.org

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APIC Research Committee





Disclosures

The authors have nothing to disclose.



Learning Objectives

- Identify common topics for more information in APIC data collected from members using IP talk and searches on APIC.org
- Discuss how this data reflects priorities of APIC and the APIC Research Committee
- Apply this information to develop facility and chapter-specific research ideas

Request from APIC Board of Directors

Identify steps to address key gaps in:

- » Information
- » Research
- » Practice

Request from APIC Board

• Using IP list serve, identify priority clinical questions from IPs and develop consensusbased responses to questions that lack standard guidelines or an evidence base.

 Research Committee will report back to the Board with questions and responses for review/input.





Methods

- 1. Classified IP Talk contents
- 2. Classified apic.org searches
- 3. Compared IP Talk and apic.org content
- Developed and prioritized research topics

Background: IP Talk



15,556 members

34,400 discussions

1,300 Library items

community.apic.org/home/

2 Questions for EVS Cleaning - Mop Bucket Labeling and Using Vinegar for Mirrors/Windows

22. 1. OSHA's rule on secondary containers (i.e.,...

Identfication of Clean Equipment

- 23. We are using a sticker that has tabs for clean,...
- 24. our ventilators are cover w/ a clear bag and...
- 25. We use a band of white tape, loosely around the ...
- 26. We were using a green clean sticker. Just...

Vascular catheter (Cath Lab) and pre-procedure antisepsis guidelines

27. Hi Heather, I have attached a document that is...

Ambulatory Care Infeciton Control Training

28. Mary: do you have some type of computer based...

Does APIC have recommendations for maximum hang time post processing?

- 29. Another reference you should read is the new...
- 30. We did a brief assessment of this issue using...

Profile My Settings Demographics Mentor Profile Mentee Profile My Posts My Shared Files My Blog

Eligible Discussion	Real Time				Un Subscribe
APIC Annual Conference subscribed as landers.37@osu.edu change	0	0	0	0	0
IIPW subscribed as landers.37@osu.edu change	0	\circ	\circ	0	0
IP Talk landers.37@osu.edu change	0	\circ	\circ	0	0
Section Leaders subscribed as landers.37@osu.edu change	0	\circ	\circ	0	0

IP Talk Sample Presentation



Statistics

9 Favorited 1117 Views 1 Files 4 Shares

1652 Downloads

IP Talk Sample Video



Statistics

19 Favorited 576 Views

1 Files

10 Shares

428 Downloads

IP Talk Sample Document



CENTRAL LINE BLOODSTREAM INFECTION WORKSHEET

+	Name			M#		Age	Admit date
	Adm Dx			Physician			Disch date
	Type of line	Insert date	DC date	Checklist used? Yes No	Inserted Location		

Culture Date	# bottles positive	Pathogens

Statistics

5 Favorited 909 Views 3 Files

1 Shares

1727 Downloads

Background: www.apic.org



apic.org

Daily

Monthly

1,511 visitors4,533 page views

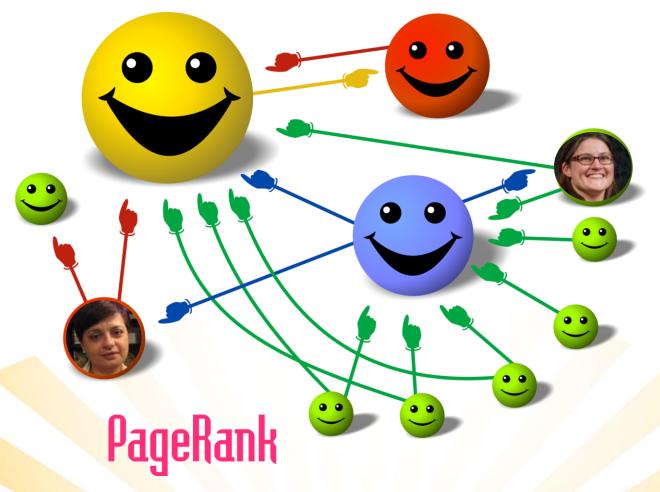
37,728 visitors

404,407 page views

AlexaRank: 477,739

PageRank: 6

Sources: D. Saunders (APIC) & www.statsurf.net



Lalli, FM. PageRank. Available:

https://en.wikipedia.org/wiki/PageRank#/media/File:PageRank-hi-res.png

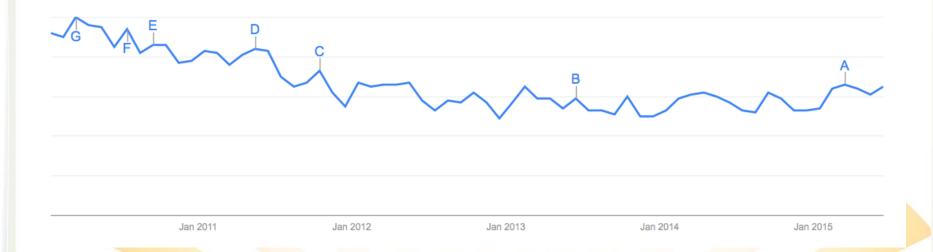
apic.org International Interest



Source: www.google.com/trends

Searches for "apic" over time

(Relative to highest point on graph)



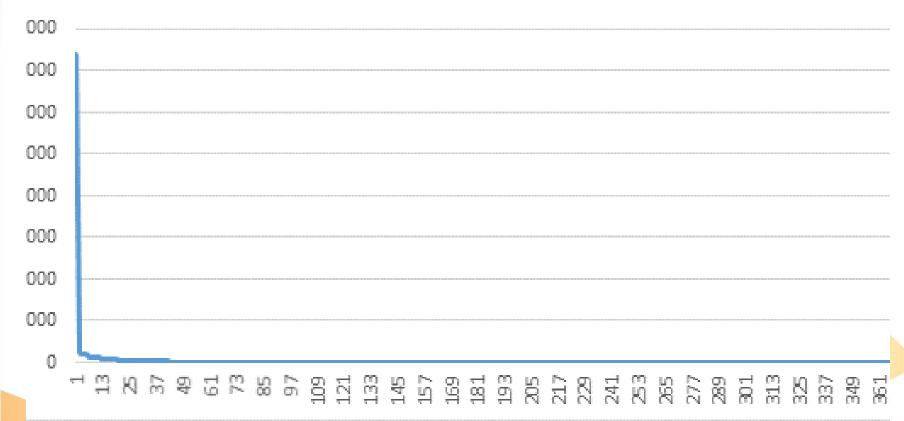
Source: www.google.com/trends





Popularity of apic.org pages

APIC.org pages by unique pageviews, 2015 YTD



Source: D. Saunders (APIC IT)

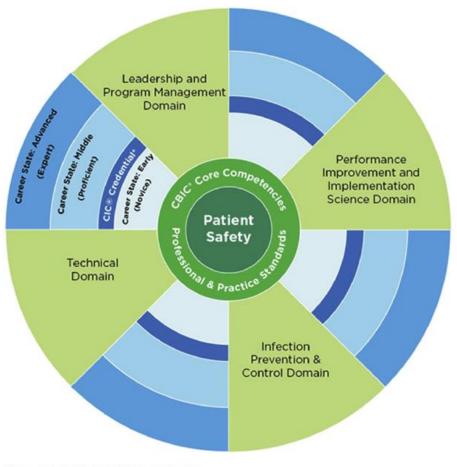
Methods

- 1. Conduct a search, manually if necessary, of IP Talk to trace recurring and trending questions raised on topics identified
- 2. Track landing sites on the APIC website, download types, time-spent, and clicks for the six topics to determine type of information being sought
- 3. Compare and reconcile the two searches to the extent possible in order to narrow down questions being raised, information being sought, knowledge gaps being revealed
- 4. Revise and refine the list for priorities through committee member discussion and consensus

1. Postings on IP Talk

- 9-month period
 - Jan 2014 Sep 2014
- Two reviewers identified key topics
 - IP Competency Model
 - "Other" categories
- Reviewed by members of Research Committee

APIC Competency Model for the Infection Preventionist



Green areas indicate critical competencies required for the expanding IP role.



The CIC* Credential is available from CBIC®
 The Certification Board of Infection Control and Epidemiology, Inc.

Other categories

- Infection-organism
- Infection-type
- Practice-hand hygiene
- Practice-isolation

Results: IP Talk

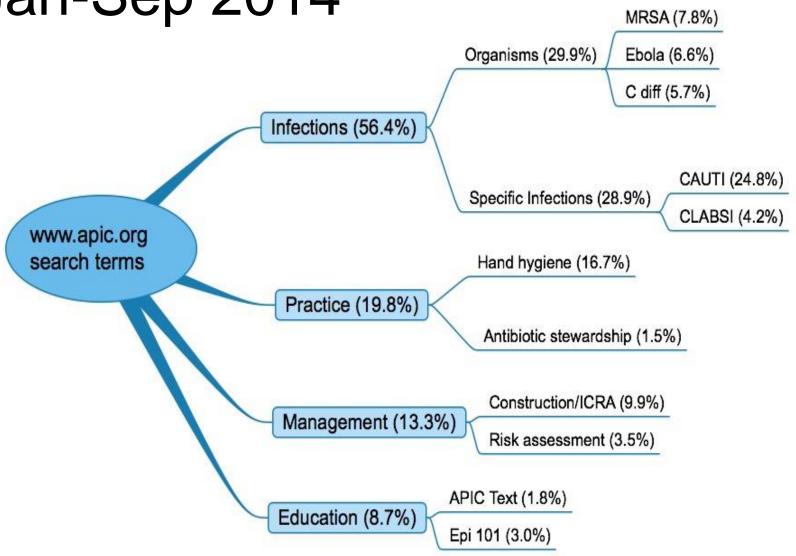
- 34,683 keywords
- Some entries indexed in more than one category
- Most frequent keywords only accounted for 14% of all occurrences (4,833)

Torm	NI.	Doroont
Term	N	Percent
Risk assessment	223	11.7%
Bed bugs	220	11.6%
MRSA	135	7.1%
Ebola	131	6.9%
Library	114	6.0%
Construction	109	5.7%
CAUTI	102	5.4%
Hand hygiene	98	5.2%
Rounds	93	4.9%
Infection Control Plan	91	4.8%
Ultrasound gel	90	4.7%
Stethoscopes Infection	89	4.7%
Prevention Week	66	3.5%
SSI	65	3.4%
Steriplex	64	3.4%
Fans	56	2.9%
Artificial nails	53	2.8%
Gel nails	51	2.7%

2. Searches of apic.org

- Two periods
 - Jan 2014 Sep 2014
 - April 2015 May 2015
- Two reviewers identified key topics

Jan-Sep 2014



Results: apic.org

- 1,905 searches
- Top 20 search terms accounted for 98.5% of searches (1,878)



apic.org Jan - Sep, 2014

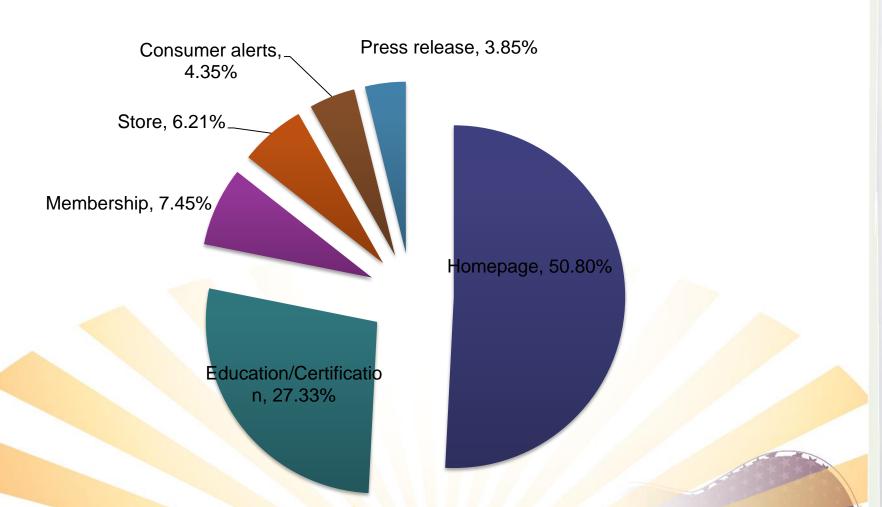
Term	N	Percent
CAUTI	466	24.8%
Hand Hygiene	314	16.7%
Construction	152	8.1%
MRSA	147	7.8%
Ebola	124	6.6%
ESBL	106	5.6%
CLABSI	78	4.2%
Risk Assessment	65	3.5%
Clostridium difficile	107	5.7%
Epi 101	56	3.0%
Library	43	2.3%
APIC Text	33	1.8%
ICRA	33	1.8%
Bioterrorism	33	1.8%
Emerging Infections	32	1.7%
Certification	32	1.7%
Antibiotic stewardship	29	1.5%
Ebola Patient Care	->	2.070
Protocol	28	1.5%

Top 10 apic.org pages by views

Page	Number of views	Percent
Homepage	76567	50.80%
Education/Certification course detail	15131	10.04%
Education/Certification Overview page	10923	7.25%
Store product detail page	9355	6.21%
Education/Certification CIC Certification	8804	5.84%
Monthly alerts for consumers detail	6563	4.35%
Education/Certification Online learning overview	6338	4.21%
Press release detail page	5797	3.85%
Member Benefits overview page	5636	3.74%
About Membership page	5597	3.71%

Source: D. Saunders (APIC IT)

Top apic.org pages, May 2015



Top downloads, apic.org May, 2015

- 1. Novice Roadmap Infection Preventionist
- 2. New member brochure
- 3. IP Competency Model quick reference guide
- 4. CAUTI implementation guide
- 5. Duodenoscopes and other endoscopes FDA letter

Source: D. Saunders (APIC IT)

3. Compare topics

• Data summarized and reviewed by members of the APIC Research Committee



apic.org

CAUTI

Hand Hygiene

Construction

MRSA

Ebola

ESBL

CLABSI

Risk Assessment

Clostridium difficile

Epi 101

Library

APIC Text

ICRA

Bioterrorism

Emerging Infections

Certification

Antibiotic stewardship

Ebola Patient Care Protocol

IP Talk

Risk assessment

Bed bugs

MRSA

Ebola

Library

Construction

CAUTI

Hand hygiene

Rounds

Infection Control Plan

Ultrasound gel

Stethoscopes

Infection Prevention Week

SSI

Steriplex

Fans

Artificial nails

Gel nails

Conclusions

- The top 20 keywords on IP Talk accounted for a small percentage of all content (14%)
- In contrast, the top 10 search terms on apic.org accounted for 37.3% of all searches
- There was a high level of congruence between topics identified through both methods

Conclusions

- IP Talk and apic.org search terms vary over time
- With some limitations, the IP Competency Model is a useful framework to organize research needs

Conclusions

- Congruence between topics identified through both methods
- Two topics identified for future work by APIC Research Committee:
 - -Hand hygiene
 - Catheter-Associated Urinary TractInfection

Limitations

- Potential for error with manual indexing of terms
- Did not account for "click-through" where users used the apic.org navigation bar
- Only addresses what many IPs want to know – not what an individual IP needs to know

Limitations

- IP Talk users may not be representative of all APIC members
- We did not account for seasonal variations in information needs
 - Annual Conference season
 - Flu season
- Special topics emerged during study period
 - Ebola

Limitations

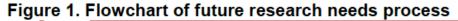
- Except for when items were cross-listed from IP Talk or apic.org to AJIC, these topics were not included
- This is especially important given that AJIC is the primary venue for scientific and research dissemination

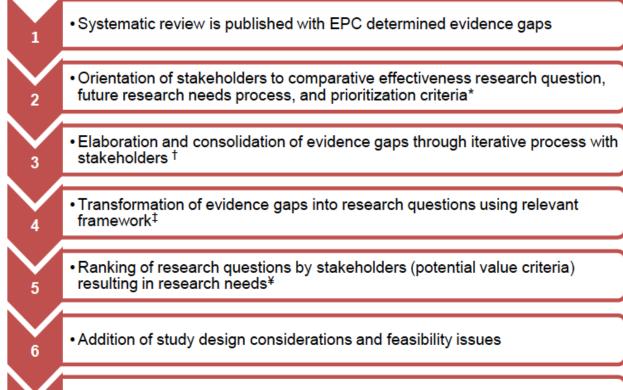
Next steps

- Coordination with other APIC committees to address education, practice and implementation gaps, as opposed to research gaps
- Research committee will periodically monitor IP Talk and apic.org for emerging topics
- APIC Research Committee work plan 2015-2016

Next steps

Category	Potential data sources	Possible solutions
Practice-related	Identified from list serves, APIC site searches, APIC consultancy requests and requests made to staff	Practice guidelines and dissemination vehicles
Scientific gaps	Identified from review of existing scientific literature, gaps identified in published guidelines, expert input	Formal research projects sponsored or coordinated by APIC
Policy and structure	Board-directed or developed in conjunction with other professional societies	Expert panels or work groups, development of complimentary research agenda





Robinson K, Saldanha I, Mckoy N. 2011. Frameworks for Determining Research Gaps During
Systematic Reviews Methods Future Research Needs Report Frameworks for Determining Research
Gaps During Systematic Reviews. Available: http://www.ncbi.nlm.nih.gov/books/NBK62478/

Publication of future research needs document

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