

2014 CAS CONTINUING EDUCATION & PROFESSIONAL DEVELOPMENT NEEDS STUDY

Final Report

July 2014



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INTRODUCTION

STUDY BACKGROUND AND PURPOSE

- ❑ In its ongoing efforts to ensure its continuing education and professional development programming are in-line with the needs of its members, the Canadian Anesthesiologists' Society conducted a survey of its members' education requirements in May and June 2014. The CEPD Needs survey was conducted for CAS by the Association Resource Centre Inc.

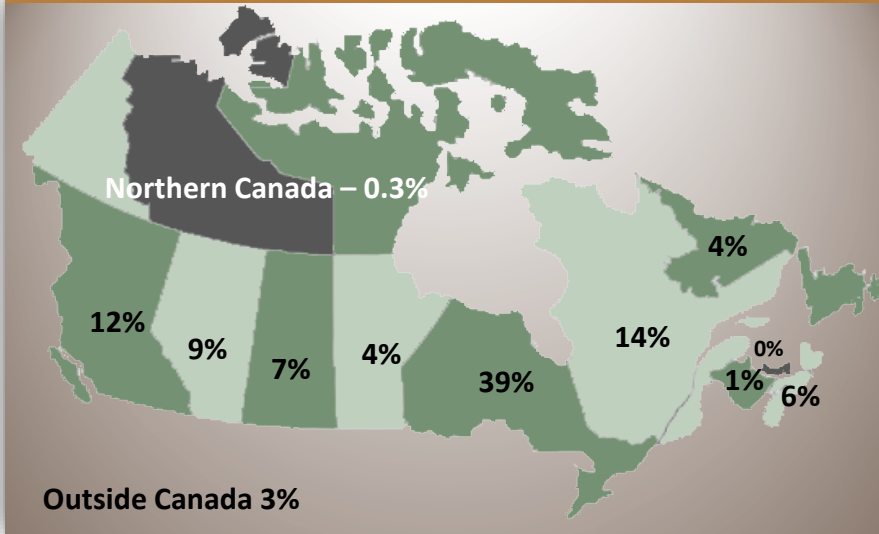
- ❑ The purpose of the study is to obtain an understanding of what member needs are with respect to continuing education and professional development and to find out how CAS is doing in this area. The specific research questions include:
 - What are the satisfaction levels with the current learning options?
 - How do members want to learn (delivery channels)?
 - What topics are members interested in learning about?
 - What level of learning do members require for different topics?
 - How do learning needs differ across key segments?

- ❑ As a preliminary step, a series of ten in-depth interviews were conducted to aid in the development of the study questionnaire and to provide qualitative background to some of the responses. This information is incorporated where applicable.
- ❑ The CEPD Needs Survey was sent to all current members (as of May 2014) for whom CAS had an email address. In all, 2,561 CAS members were invited to participate in the survey in May 2014. Four hundred and twenty-nine (429) responses had been received by the cut-off date for an overall response rate of 17%. The response rate is acceptable for an organization of CAS' size.
- ❑ Results from the sample of 429 are considered to be accurate to within $\pm 4.3\%$ nineteen times out of twenty (95% confidence interval).
- ❑ The results have been weighted by membership category and region to more accurately reflect the true distribution of CAS members. Weighting the results removes much of the sampling bias, thereby making the results truly representative of the full membership.
- ❑ Differences between sub-groups are only presented where they are statistically significant and relevant.

DEMOGRAPHICS

RESPONDENT PROFILE

Region (N=401)



Survey Questions

- Q32. In which region/ province are you based?
- Q37. What is your gender?
- Q36. What is your age?
- Q30. Which of the following best describes your professional activity?
- Q31. Which of the following best describes your work setting?

Respondent Profile

Gender (N=389)

Male	70%
Female	30%

Age (N=394)

Under 25	0.3%
25-34	19%
35-44	24%
45-54	24%
55-64	23%
65 and Over	9%
Over 74	1%

Professional Activity (N=402)

Specialist Anesthesiologist - academic hospital	40%
Specialists Anesthesiologist - community hospital	28%
Resident	22%
Family Practice Anesthetist	3%
Retired	3%
Anesthesia Assistant	2%
Researcher/scientist	1%
Other	2%

Work Setting (N=392)

University/teaching hospital	71%
Other hospital/healthcare facility	24%
Private practice	4%
Other	2%

RESPONDENT PROFILE (CONT'D)

Respondent Profile

Community Size (N=401)

Rural (population of less than 50,000)	8%
Semi-urban (population of 50,000 to 100,000)	7%
Small city (population of 100,001 to 500,000)	31%
Large city (population of 500,001 to 1,000,000)	22%
Major city (population of greater than 1,000,000)	33%

Length of Membership (N=397)

Less than one year	4%
1 to 2 Years	7%
3 to 5 Years	22%
6 to 10 Years	12%
11 to 20 Years	23%
More than 20 Years	33%

Number of Years in Practice (N=397)

0-5 years	26%
6-10 years	16%
11-20 years	18%
21-30 years	26%
More than 30 years	14%

Survey Questions

Q33. Which of the following best describes the size of the community in which you work?

Q34. How long have you been a member of CAS?

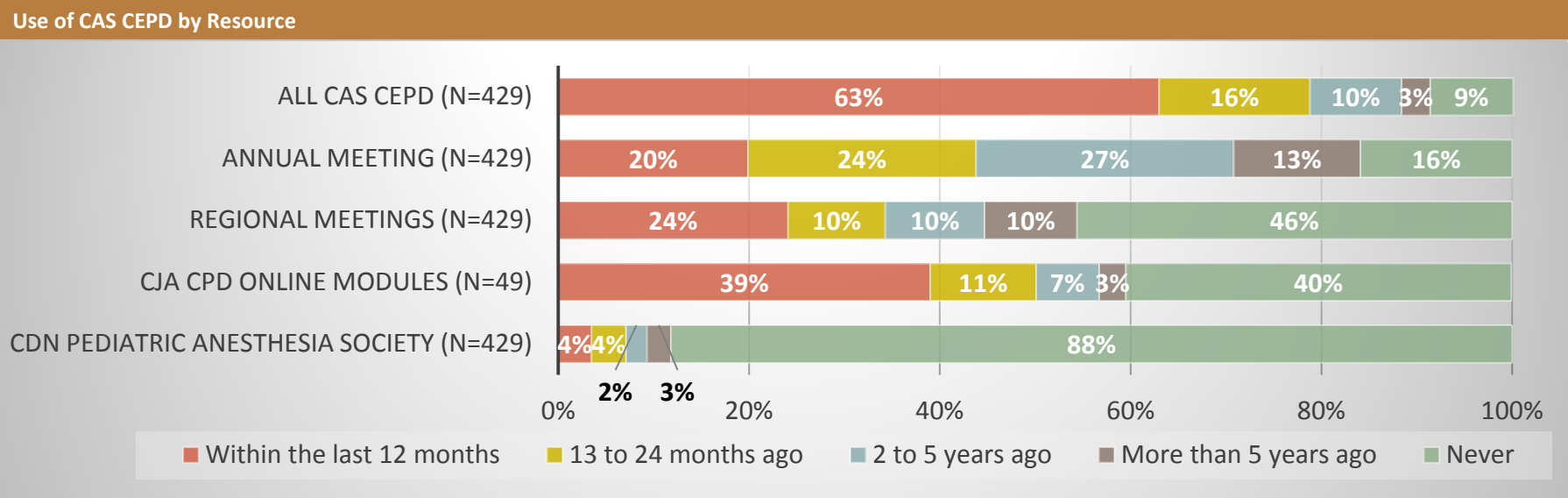
Q35. Number of years in practice?

- The tables on this page and the previous page present a summary of the demographic characteristics of the respondents to help provide context to the results in the report.

EVALUATION OF CURRENT CAS EDUCATION PROGRAMMING

USE OF CAS CEPD RESOURCES

- ❑ On the whole, there is good penetration for the CAS CEPD offering among members. The vast majority (89%) of members have accessed at least one of CAS' CEPD offerings in the past five years. In fact, almost four in five (79%) have accessed in the past 24 months and 63% have done so in the past year. In other words, members are making use of the CEPD opportunities provided by CAS.
- ❑ According to the survey, the CJA CPD online modules are the most widely used CEPD resource with 39% of respondents indicating that they have accessed them in the past 12 months and a further 11% on the past two years. However, with 40% having never accessed, there is considerable potential for growth.
- ❑ In evaluating the attendance at CAS Annual Meeting, it is important to keep in mind that the 2013 meeting in Calgary was cancelled due to flooding. Accordingly, the results for the meeting are likely low compared to normal. That said, 44% indicated that they have attended an annual meeting in the past 24 months.
- ❑ Regional meetings were attended by one quarter (25%) of members in the past year. The results do not account for the fact that some regions do not have Regional meetings.
- ❑ Given its specialized nature, it is not surprising that the CPAS has only ever been accessed by 13% of members.



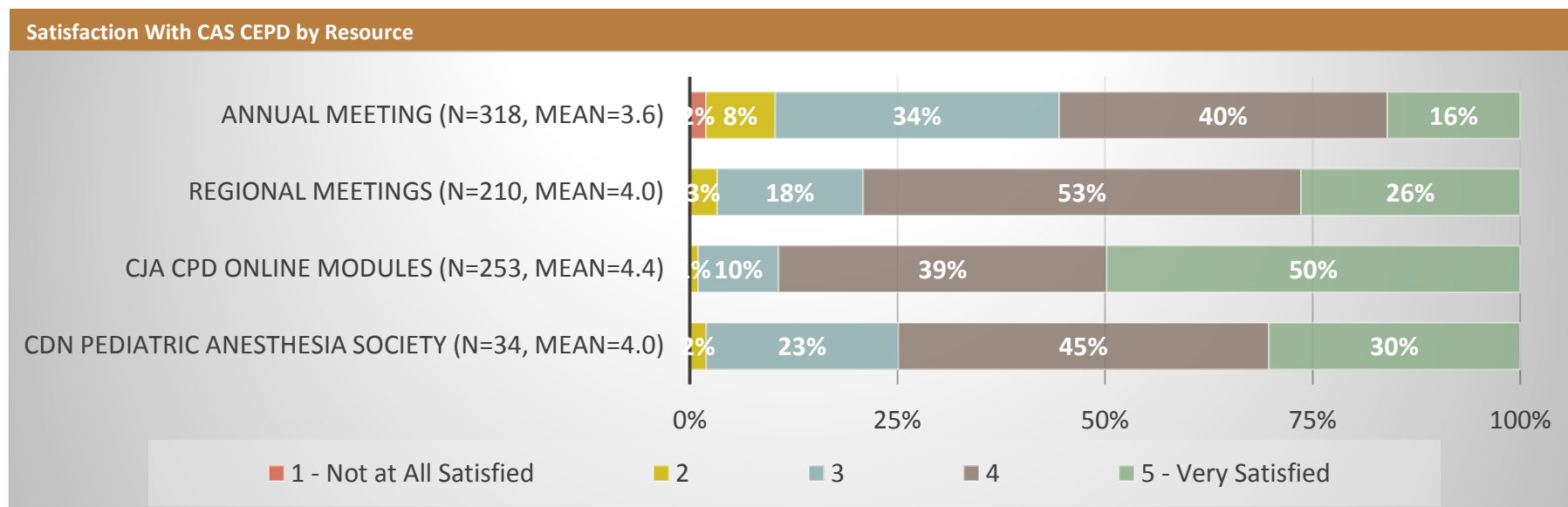
USE OF CAS CEPD RESOURCES (CONT'D)

□ Following is a summary of the significant differences between subgroups:

- Nine in ten members in Quebec have participated in at least one CAS CEPD activity in the past two years (and 74% in the past year). In fact, Quebec is the only region where all respondents have participated in at least one activity at some point in time. Members located west of Ontario are less likely than others to have attended an annual meeting in the last 12 months.
- Not surprisingly, attendance at regional meetings is dictated by availability of these meetings. Regional meetings are most likely to have been attended by members in Ontario (39% have attended in the past 12 months and 67% have attended at some point). Regional meeting attendance in the past 12 months is lowest in the Alberta (14%) and Prairies (15%) regions.
- All Active members have participated in CAS CEPD activities at some point, 88% of which have done so in the past two years. More generally, Active members are more likely than others to have participated in each of the CAS CEPD activities in the past two years.
- Specialist Anesthesiologists (both academic and community hospital) are more likely than residents and others to have participated in the CAS CEPD activities in general in the past two years. Interestingly, annual meeting attendance in the past two years is significantly higher among Specialist Anesthesiologists working in academic hospitals while those in community hospitals are the most likely to have used the CJA CPD online modules.
- Members working in a University/Teaching hospital are somewhat less likely than others to have participated in CAS CEPD activities in general in the past 12 months, but are the most likely to have attended an annual meeting in the past two years. Attendance at Regional Meetings and use of the CJA CEPD modules is highest among those in Other Hospital/Healthcare Facilities.
- Not surprisingly, the likelihood of having used the different CAS CEPD activities increases with age. However, recent use tends to be highest among those aged 35 to 54. Recent use is lowest among those aged 25 to 34. Not surprisingly, a similar pattern is seen with length of membership where the highest use is among members of 6 to 20 years.
- Interestingly, the highest use of the CJA CPD online modules is among those who have been practicing for more than 10 years. On the other hand, those practicing for 6 to 10 years are the most likely to have attended a regional meeting in the past year.

SATISFACTION WITH CAS CEPD

- ❑ Satisfaction with CAS CEPD is reasonably strong, but does leave room for improvement. Only those who have used the offerings in the past five years were asked to rate them.
- ❑ Importantly, satisfaction is highest with the most often used offering - the CJA CPD online modules. The average rating was 4.4 out of 5 with half (50%) awarding full marks and 39% awarding a rating of 4 out of 5. This is a very strong rating for a key offering and is something that can be used the help promote the offering.
- ❑ At 4.0 and 3.9 out of 5 respectively, regional meetings and CPAS were the next highest rated CEPD offerings.
- ❑ The 3.6 rating for the Annual Meeting is respectable, but is considerably weaker than others. Only 16% awarded top marks while 40% gave a rating of 4 out of 5 rating. Again, it is important to keep in mind that the cancellation of the 2013 Annual Meeting may be having an impact on this result.



Q2. Following are the CAS CEPD events/resources that you have attended/accessed in the past 5 years. Please indicate your level of satisfaction with each on the 1 to 5 scale.

Note: Base is those who have used the resource in the past 5 years.

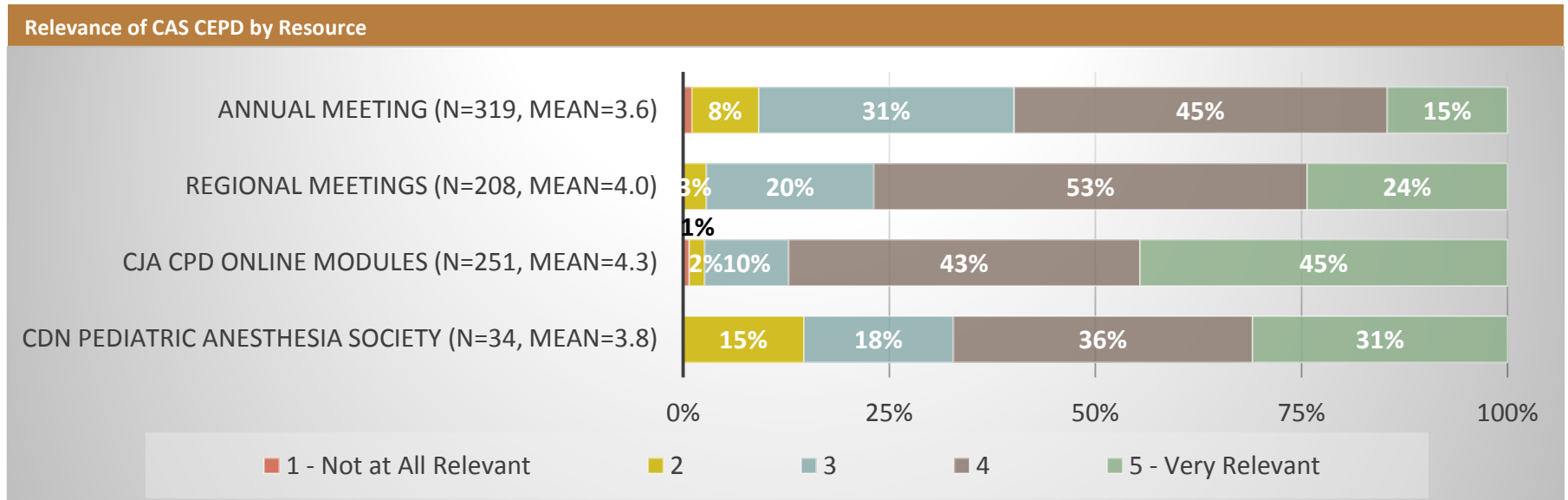
USE OF CAS CEPD RESOURCES (CONT'D)

□ Following is a summary of the significant differences between subgroups:

- Satisfaction with the annual meeting is highest in the Prairie region and lowest in Ontario. The reverse is true for regional meetings. Quebec members also awarded higher than average marks to regional meetings. Satisfaction with the CJA CPD online modules is lowest in BC.
- Satisfaction with the annual meeting is higher among Active members than others.
- Specialist Anesthesiologists (in both academic and community hospitals) awarded slightly lower satisfaction marks than others for the CJA CEPD online modules.
- Members of 5 years or less expressed higher than average satisfaction with the regional meetings.
- Those in practice for more than 30 years and members aged 65 or older are more satisfied than others with the annual meeting.

RELEVANCE OF CAS CEPD

- ❑ Overall, those who access CAS CEPD feel the offerings are generally relevant to their needs. Members have however indicated that there is room to improve.
- ❑ Not surprisingly, the degree to which members find the various CAS CEPD offerings relevant to their needs is correlated to their level of satisfaction. Relevance was rated highest for the CEPD offering with the greatest satisfaction - the CJA CPD online modules - at 4.3 out of 5. In fact, 88% awarded a relevance rating of 4 or higher.
- ❑ As seen with satisfaction, relevance ratings are slightly lower for regional meetings (4.0) and CPAS (3.8).
- ❑ The Annual Meeting is the offering with the lowest relevance at an average of 3.7 and only 15% awarding full marks.



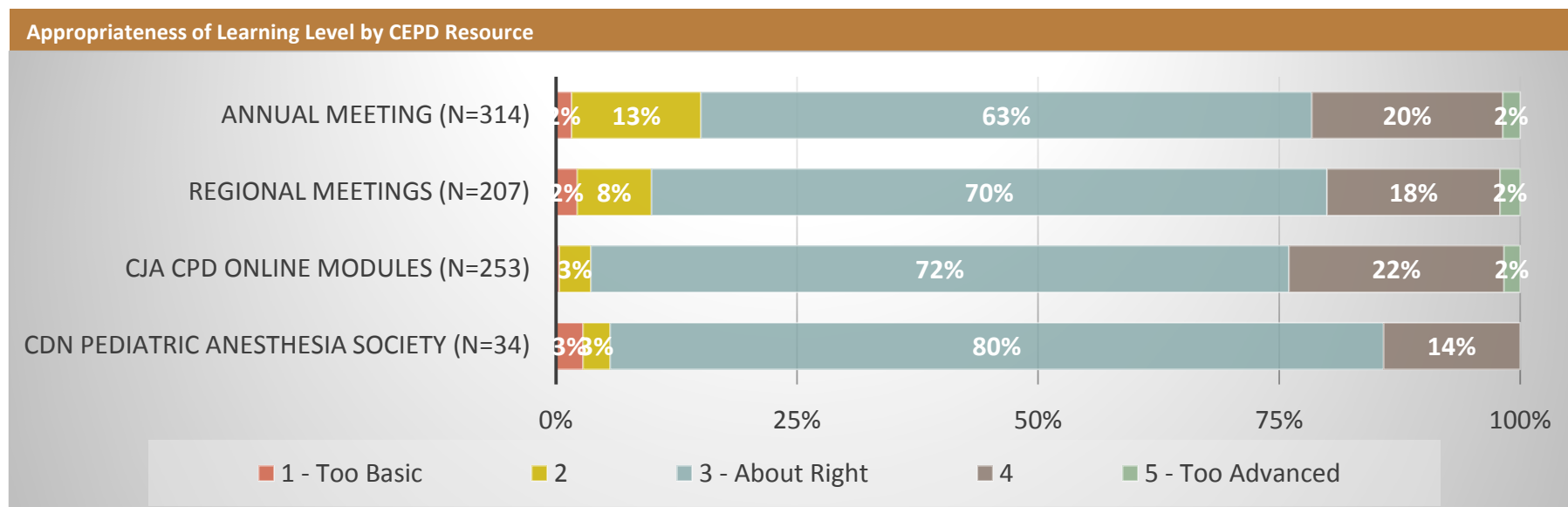
RELEVANCE OF CAS CEPD (CONT'D)

□ Following is a summary of the significant differences between subgroups:

- Similar to satisfaction, the relevance of the annual meeting was rated lowest in Ontario. The reverse is true for regional meetings. Again Quebec members also awarded higher than average marks to regional meetings.
- Given that satisfaction with the CJA CPD online modules is lower among Specialist Anesthesiologists (in both academic and community hospitals), it is not surprising that this group awarded slightly lower relevance ratings than others.
- Members of 5 years or less awarded higher than average relevance ratings to the CJA CPD online modules.
- The perceived relevance of regional meetings generally increases with years in practice and age.

APPROPRIATENESS OF LEARNING LEVEL OF CAS CEPD

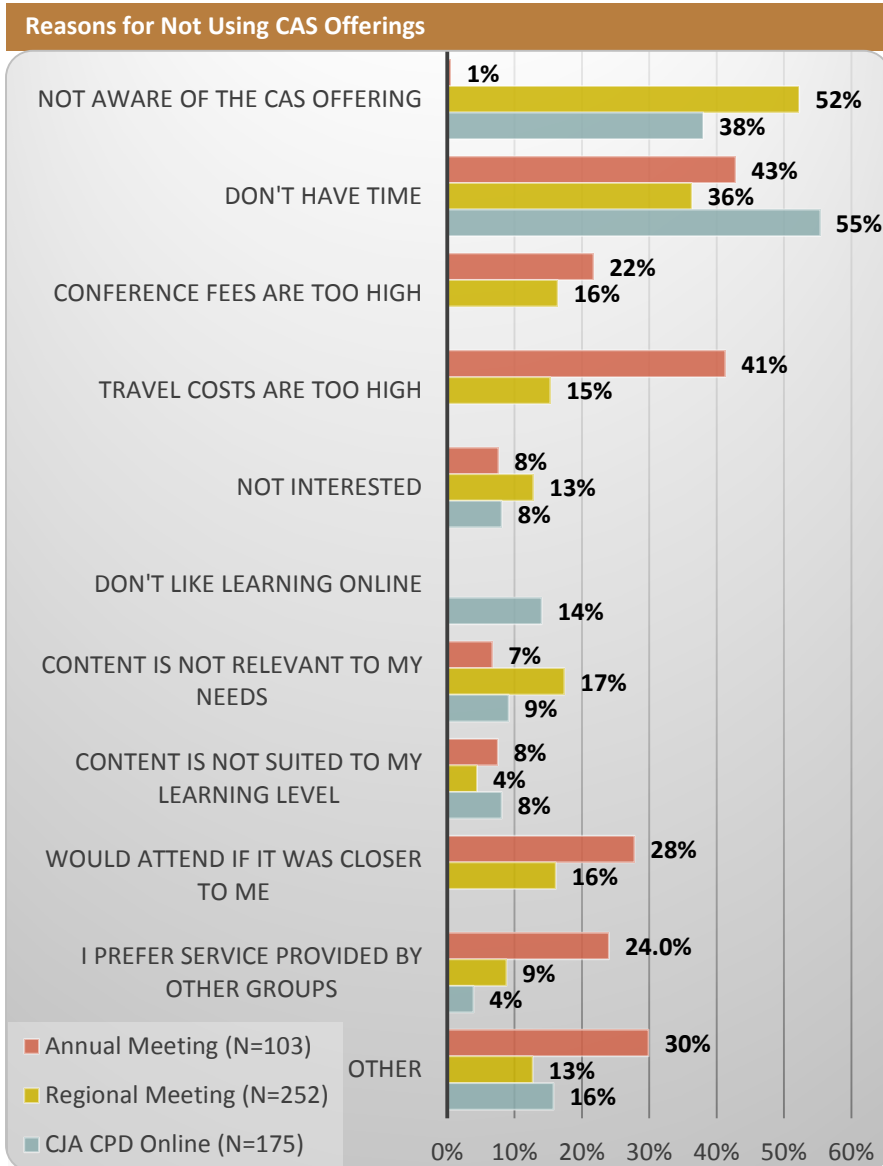
- ❑ In addition to being relevant, the majority of CEPD users feel that the learning level of the various resources is about right. Those that don't agree with this generally feel the learning level is a bit too advanced (4 out of 5) for their needs.
- ❑ The CPAS is the resource where respondents were most likely to feel the learning level was right with 80% indicating so. At the other end of the spectrum, only 63% feel the learning level of the annual meeting is appropriate. A key challenge in making adjustments to the learning level for the annual meeting is that those who feel the learning level is not right are split between too basic (15%) and too advanced (22%).
- ❑ For regional meetings and the CJA CPD online modules, approximately seven in ten users indicated that the learning level is about right while most of the rest feel it is too advanced.
- ❑ In making changes to the learning level of the various offerings, it is important to note that few respondents gave ratings at the extremities (1 or 5). This indicates that while the level may not be perfect for all, it is not far off.
- ❑ While there are some minor variances among the different subgroups, the message for each group is consistent – CEPD options are generally at the right learning level.



Q4. To what extent does the content delivered through the following CAS CEPD events and resources match your learning level?

Note: Base is those who have used the resource in the past 5 years.

REASONS FOR NOT USING CAS OFFERINGS



- ❑ Top reasons for not attending an annual conference (within 5 years) focus on cost and convenience factors. Specifically, not having time is the top reason at 43% with “would attend if it were closer” at 28%. Cost barriers include travel cost (41%) and conference fees (22%).
- ❑ Key themes cited in the “other” reasons for not attending the annual meeting include poor timing/doesn’t fit schedule, can’t get the time off and better/different learning opportunities elsewhere. Several members also mentioned that had planned to go to the cancelled Calgary meeting.
- ❑ The top reason for not attending regional meeting is a lack of awareness at 52%. While the overall result does not take into account the fact that some region don’t have these meetings, this was a top reason given in all regions. At 36%, a lack of time is the second most common reason for not attending regional meetings.
- ❑ Key themes cited in the “other” reasons for not attending regional meetings include inconvenient/can’t get time off and other commitments.
- ❑ Thirty-eight percent (38%) of those not using CJA CPD online are not aware of the program. Communicating its existence and benefits could help improve use. The top reason for not using this service is a lack of time (55%).
- ❑ Key themes cited in the “other” reasons for not CJA CPD online modules include “just haven’t tried” and technical challenges.

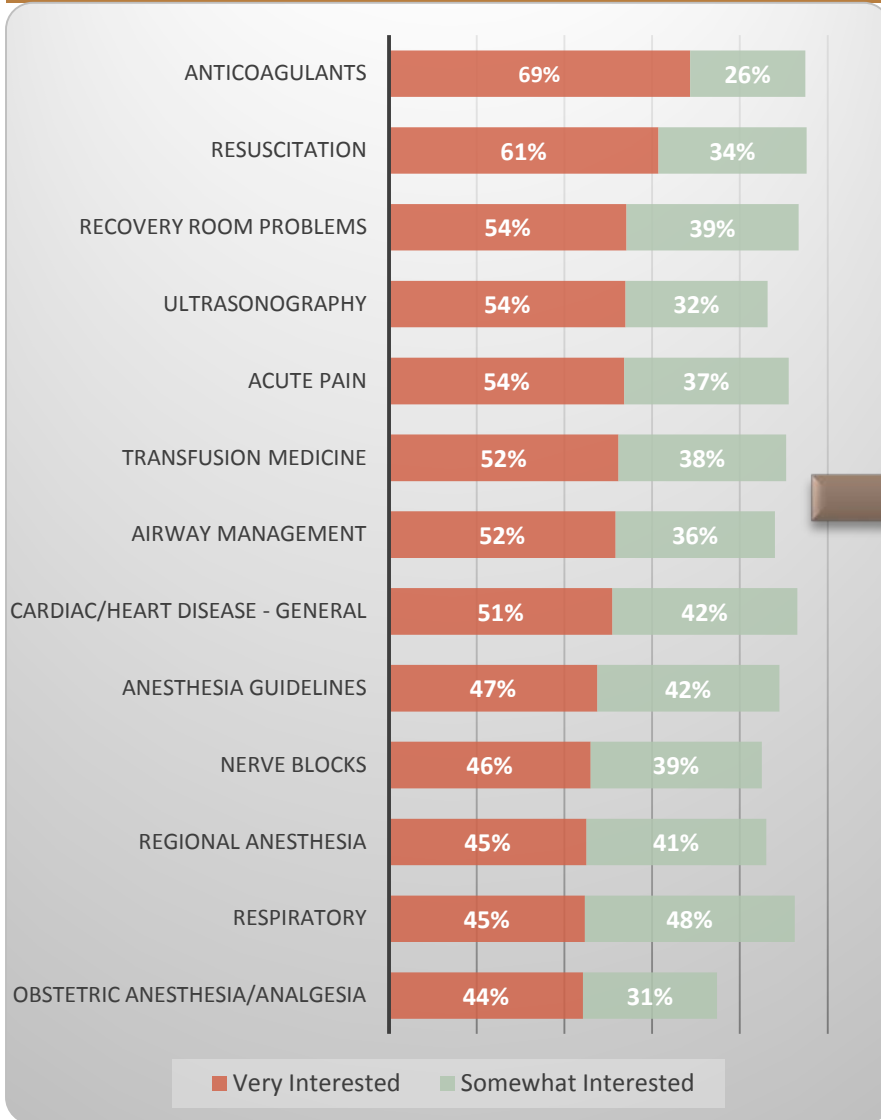
CEPD NEEDS

DESIRED LEARNING TOPICS AND LEVELS – ANESTHESIA-SPECIFIC TOPICS

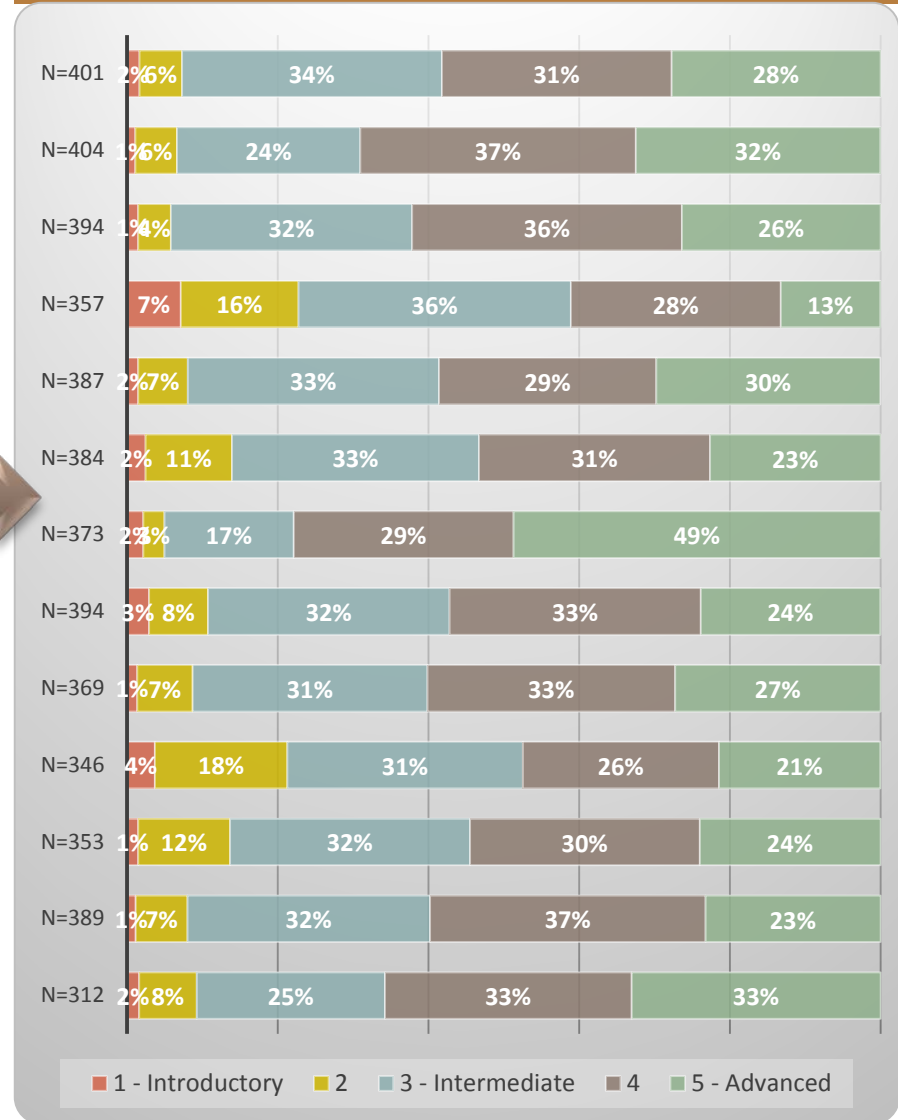
- ❑ The results on the following pages show the degree of interest among members in 27 learning topics specific to anesthesia. Those who indicated that they were very or somewhat interested were also asked to indicate the what level of learning they are interested in for that topic. Topics are ordered by percent indicating they were “very interested”.
- ❑ In looking at the combined “somewhat” plus “very” interested, there is not a huge range of variation for most topics. In fact, 83% or more indicated they have at least some interest in 19 of the 27 learning topics. Between 63% and 75% indicated some interest in a further six topics. In fact, only chronic pain and office-based anesthesia have interest levels below 50% when based on “somewhat” plus “very” interested. However, if only the “very” interested category is considered, there is a high degree of variance and topics can be divided into four tiers as follows:
- ❑ *Critical Topics (more than 60% rated very interested):* Attributes in this tier group are of some interest to almost all members and of great interest to a strong majority. Offered at the right learning level, offerings of CEPD for these are topics will likely have high usage. These are topics that should be mainstays on the curriculum. The two topics in this category are Anticoagulants (69%) and Resuscitation (61%).
- ❑ *High Value Topics (50% to 59% rated very interested):* These are topics are also of some interest to most members and over half have significant interest. CEPD offerings for these topics should be well received and are elements that could be considered for the core curriculum. Six topics fall in this category including Recovery room problems (54%), Ultrasonography (54%), Acute Pain (54%), Transfusion Medicine (52%), Airway management (52%) and Cardiac/heart disease - general (51%).
- ❑ *Rotational Topics (30% to 49% rated very interested):* There is a high degree of interest in these topics, but less than half of members are "very" interested. Since not all topics can always be on the curriculum, these are prime candidates to rotate in and out as space permits. This topic group includes Anesthesia guidelines (47%), Nerve blocks (46%), Regional anesthesia (45%), Respiratory (45%), Obstetric Anesthesia/Analgesia (44%), Other Coexisting disease (44%), Preoperative assessment (43%), Ambulatory anesthesia (43%), Pharmacology (41%), Aging patients (40%), Anesthesia for the geriatric patient (39%), Cardiovascular Anesthesia (37%) and Monitoring (33%).
- ❑ *Niche Topics (less than 30% rated very interested):* While some of these topics are of some interest to a large portion of members, only a select group are highly interested. Interest in these topics is high enough that they should not be dismissed, but usage will be lower than for others. These topics may be better suited to smaller in-person events or targeted online channels. If offered, CAS may wish to considered more targeted marketing and communications efforts for these topics. The six niche topics include Intensive Care (27%), Pediatric anesthesia (27%), Neuroanesthesia (21%), Care management (19%), Chronic pain (17%) and Office-based Anesthesia (14%).
- ❑ *NOTE: The cut off points for each of the four tiers are arbitrary. While they are set based on our experience, the cut offs can be shifted as based on CAS' own views.*
- ❑ Space was provide in the survey in an open-ended format for additional topics of interest. The responses were largely very specific suggestions rather than broader topic areas. In many cases, they were elaborations on the topics listed in the survey. A detailed list sorted but broad topic is provided in **Appendix A**.

DESIRED LEARNING TOPICS AND LEVELS – ANESTHESIA-SPECIFIC TOPICS (CONT'D)

Interest in CEPD Topics (N=429)



Desired Learning Level (among those somewhat or very interested)

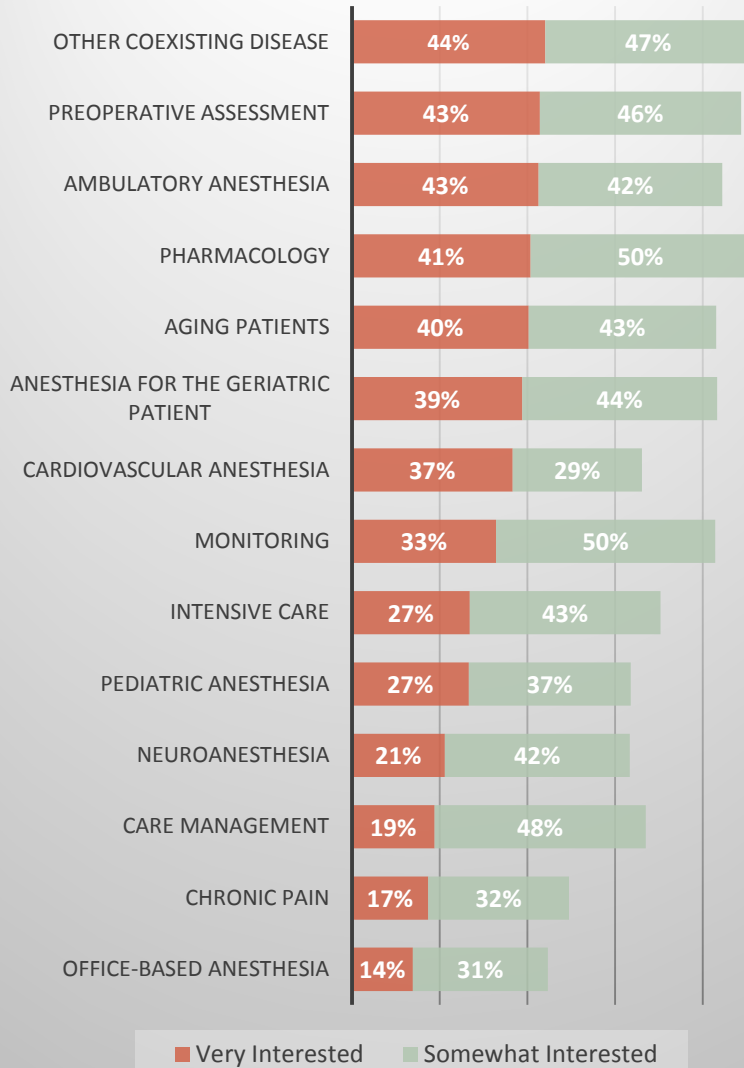


Q8. Please indicate your level of interest in learning about these topics over the next 24 months.

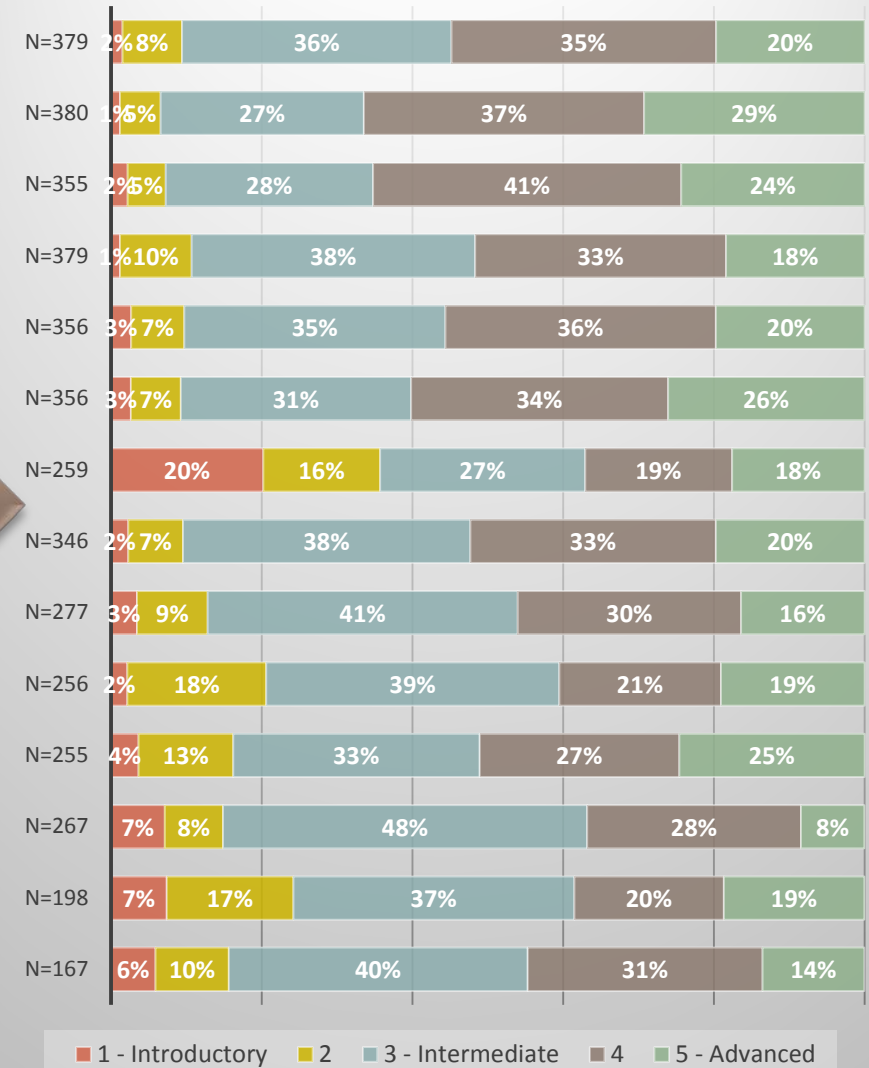
Q10. Please use the 1 to 5 scale to indicate the level of learning that is most appropriate to meet your current learning needs.

DESIRED LEARNING TOPICS AND LEVELS – ANESTHESIA-SPECIFIC TOPICS (CONT'D)

Interest in CEPD Topics (N=429)



Desired Learning Level (among those somewhat or very interested)



Q8. Please indicate your level of interest in learning about these topics over the next 24 months.

Q10. Please use the 1 to 5 scale to indicate the level of learning that is most appropriate to meet your current learning needs.

DESIRED LEARNING TOPICS AND LEVELS – ANESTHESIA-SPECIFIC TOPICS (CONT'D)

- ❑ In addition to their level of interest, respondents (who were interested) were also asked to indicate their desired learning level for each topic. Ratings were given on a five point scale where 1 equals introductory, 3 equals intermediate and 5 equals advanced. The detailed responses can be seen on the previous pages. For almost all topics, the desired level range focuses primarily on intermediate (3) to advanced (5). That said, the desired learning levels for the topics can be grouped into the following classifications:
- ❑ *Advanced (ratings of primarily 4 and 5 out of five):* These are areas where those interested tend to be looking for higher level learning opportunities. The only topic in this group is Airway management.
- ❑ *Advanced Intermediate (ratings of primarily from 3 to 5 out of five, leaning to 5):* CEPD opportunities in these topics should span the intermediate to advanced range with a slight lean to the advanced. Topics in this group include Obstetric Anesthesia/Analgesia and Resuscitation.
- ❑ *Intermediate Advanced (ratings of primarily from 3 to 5 out of five, leaning to 3):* CEPD opportunities in these topics should span the intermediate to advanced range with a slight lean to the intermediate. Topics in this group include Anticoagulants, Anesthesia guidelines, Recovery room problems, Anesthesia for the geriatric patient, Neuroanesthesia, Ambulatory anesthesia, Regional anesthesia, Cardiac/heart disease - general, Respiratory and Transfusion Medicine. Six other topics also belong to this category, but have an even stronger lean to the intermediate level. These include Aging patients, Monitoring, Other Coexisting disease, Pediatric anesthesia, Chronic pain and Pharmacology.
- ❑ *Balanced Intermediate to Advanced (ratings distributed from 3 to 5 out of 5):* This is another intermediate to advanced group, however preferences do not lean one way or the other. Rather the demand is balanced across the spectrum. Topics included in this group are Acute Pain and Preoperative assessment.
- ❑ *Balanced (ratings distributed across all learning levels):* The only topics in this group are Cardiovascular Anesthesia and Nerve blocks. For the latter, desired learning levels only range from 2 to 5.

DESIRED LEARNING TOPICS AND LEVELS – ANESTHESIA-SPECIFIC TOPICS (CONT'D)

- ❑ The chart on the next page provides a detailed summary of topic interest and learning levels for anesthesia specific topics by age. Notable differences by age group, years in practice and length of membership include:
 - Interest in Aging patients and Anesthesia for the geriatric patient increases with age. The reverse holds true for Intensive Care and Ultrasonography. Interest in learning about Anesthesia guidelines and Cardiovascular Anesthesia is highest among those aged 25 to 34 while Neuroanesthesia is greatest interest to those under the age of 45. By contrast, Preoperative assessment is of least interest to those aged 25 to 34. Nerve blocks and Pediatric anesthesia are of lower interest to members aged 55 and older.
 - Interest in learning about Aging patients, Anesthesia for the geriatric patient and Preoperative assessment increases with years in practice. The reverse holds true for Neuroanesthesia. Those who have been in practice for five years or less expressed higher interest than others in learning about Cardiovascular Anesthesia, Intensive Care and Regional anesthesia. Ultrasonography is of least interest to members who have been in practice for more than 20 years.
 - Chronic pain, Intensive Care, Neuroanesthesia, Nerve blocks, Office-based Anesthesia, Pediatric anesthesia, Regional anesthesia and Resuscitation are all of greatest interest to members of five years or less. Interest in learning about aging patients increases with length of membership while the reverse holds true for Cardiovascular Anesthesia and Ultrasonography.
 - For most topics, the desired learning level is considerably lower among those aged 25 to 34 and then relatively stable across other age groups. Not surprisingly, a similar pattern is seen for years of experience and length of membership where the desired learning level tends to be lower for those in “newer” groups (5 years or less in practice or as a CAS member) before stabilizing for longer practicing members or those who have been members for longer.

- ❑ Other notable subgroup differences include:
 - Interest in Neuroanesthesia is highest in regions east of Ontario. In contrast, interest in learning about Nerve blocks and Ultrasonography is lower than average in Ontario. Desired learning levels for Ambulatory anesthesia and Anesthesia for the geriatric patient are lowest in regions east of Ontario. Preferred learning levels are highest in Ontario for Cardiac/heart disease – general, Cardiovascular Anesthesia, Care management and Monitoring. Desired learning levels for Recovery room problems and Ultrasonography are lowest in regions west of Ontario.
 - Active members expressed higher interest than others in learning about Acute pain and Preoperative assessment. The reverse is true for Anesthesia guidelines, Cardiovascular Anesthesia, Chronic pain, Intensive Care, Nerve blocks, Office-based Anesthesia, Pediatric anesthesia and Regional anesthesia. The desired learning level for all topics is considerably higher among active members.
 - Aging patients, Ambulatory anesthesia, Anesthesia for the geriatric patient, Obstetric Anesthesia/Analgesia, Other Coexisting disease and Preoperative assessment are all of greatest interest to those working in Community Hospitals. Residents are more interested than others in learning about Anesthesia guidelines, Cardiovascular Anesthesia, Chronic pain, Intensive Care and Neuroanesthesia. On the other hand, those working in Academic Hospitals expressed lower interest than others in learning about Nerve blocks, Office-based Anesthesia, Pediatric anesthesia and Regional anesthesia. Not surprisingly, the desired learning level for all topics is considerably higher among Special Anesthesiologists than Residents.
 - Interest is higher in Other Hospital/Healthcare Facilities than University/Teaching hospitals in learning about Acute Pain, Aging patients, Ambulatory anesthesia, Anesthesia for the geriatric patient, Nerve blocks, Obstetric Anesthesia/Analgesia, Office-based Anesthesia, Other Coexisting disease, Pediatric anesthesia, Preoperative assessment, Recovery room problems and Regional anesthesia. Conversely, interest is higher in University/Teaching Hospitals in learning about Cardiovascular Anesthesia and Neuroanesthesia. The desired learning level tends to be slightly lower in University/Teaching Hospitals than elsewhere.
 - Anesthesia/Analgesia and Pediatric anesthesia is of greatest interest to those in smaller communities. The desired learning level for Care management and Pharmacology is considerably higher in major cities than elsewhere.

DESIRED LEARNING TOPICS AND LEVELS – ANESTHESIA-SPECIFIC TOPICS BY YEARS IN PRACTICE

	0 to 5 Years				6 to 10 Years				11 to 20 Years				21 to 30 Years				More Than 30 Years			
	Interest	Learning Level			Interest	Learning Level			Interest	Learning Level			Interest	Learning Level			Interest	Learning Level		
		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced
Resuscitation	96%	13%	19%	68%	93%	4%	22%	74%	99%	3%	28%	69%	94%	1%	19%	80%	96%	2%	34%	65%
Anticoagulants	99%	16%	50%	34%	93%	6%	21%	73%	99%	2%	30%	68%	91%	4%	24%	72%	91%	2%	36%	62%
Recovery room problems	92%	17%	37%	47%	88%	5%	37%	57%	95%	1%	29%	70%	94%	1%	24%	75%	99%	0%	20%	80%
Cardiac/heart disease - general	92%	30%	31%	38%	94%	3%	31%	66%	95%	4%	37%	60%	89%	1%	27%	72%	97%	3%	35%	62%
Respiratory	92%	21%	38%	41%	88%	3%	30%	67%	96%	2%	34%	64%	91%	1%	21%	78%	93%	2%	38%	60%
Acute Pain	91%	21%	40%	40%	88%	4%	42%	55%	93%	2%	24%	74%	90%	4%	25%	71%	94%	5%	25%	70%
Other Coexisting disease	94%	19%	44%	38%	87%	4%	35%	61%	92%	1%	38%	60%	87%	2%	32%	66%	97%	4%	31%	64%
Pharmacology	94%	24%	42%	33%	83%	12%	32%	56%	94%	4%	39%	57%	86%	2%	32%	66%	99%	2%	36%	63%
Transfusion Medicine	92%	32%	25%	43%	92%	11%	33%	56%	93%	9%	35%	56%	87%	2%	31%	67%	91%	5%	39%	56%
Anesthesia guidelines	91%	24%	19%	57%	87%	2%	26%	72%	93%	3%	42%	55%	87%	1%	34%	65%	85%	0%	34%	66%
Preoperative assessment	79%	25%	26%	49%	92%	2%	29%	69%	94%	1%	22%	77%	88%	0%	21%	79%	94%	0%	23%	77%
Airway management	89%	13%	15%	71%	84%	2%	17%	82%	89%	0%	13%	87%	86%	0%	10%	90%	92%	3%	16%	80%
Ultrasonography	96%	38%	27%	35%	88%	15%	39%	46%	87%	19%	32%	49%	82%	15%	40%	45%	77%	18%	44%	38%
Regional anesthesia	93%	27%	28%	45%	78%	10%	35%	54%	88%	11%	28%	61%	80%	6%	30%	64%	88%	10%	26%	64%
Nerve blocks	96%	26%	29%	44%	79%	15%	38%	47%	87%	19%	25%	56%	81%	17%	31%	52%	77%	24%	25%	51%
Ambulatory anesthesia	85%	19%	28%	53%	83%	7%	23%	71%	84%	0%	26%	74%	83%	4%	18%	78%	85%	0%	28%	72%
Anesthesia for the geriatric patient	78%	29%	30%	41%	74%	4%	28%	68%	89%	5%	33%	62%	84%	2%	24%	74%	96%	2%	27%	71%
Aging patients	72%	24%	36%	40%	75%	7%	38%	55%	88%	4%	39%	58%	87%	4%	30%	66%	96%	0%	21%	79%
Monitoring	82%	30%	47%	23%	76%	6%	35%	59%	84%	1%	37%	61%	81%	2%	32%	66%	88%	0%	31%	69%
Obstetric Anesthesia/Analgesia	82%	27%	19%	54%	72%	3%	22%	75%	82%	1%	19%	80%	74%	2%	16%	82%	62%	2%	49%	48%
Intensive Care	92%	22%	47%	30%	71%	10%	38%	53%	71%	3%	37%	60%	57%	10%	34%	56%	60%	7%	43%	50%
Care management	61%	34%	50%	16%	68%	8%	54%	38%	73%	10%	42%	48%	65%	7%	39%	54%	70%	11%	60%	29%
Cardiovascular Anesthesia	87%	63%	20%	17%	66%	26%	22%	52%	63%	29%	17%	54%	52%	12%	37%	51%	51%	23%	54%	23%
Pediatric anesthesia	71%	45%	37%	18%	66%	5%	41%	54%	69%	14%	39%	47%	61%	12%	32%	57%	51%	19%	39%	42%
Neuroanesthesia	78%	20%	39%	41%	69%	11%	40%	49%	60%	9%	32%	59%	49%	14%	20%	65%	59%	6%	34%	60%
Chronic pain	53%	49%	31%	20%	46%	25%	24%	51%	48%	13%	43%	43%	40%	16%	30%	55%	47%	9%	46%	45%
Office-based Anesthesia	47%	29%	43%	29%	33%	12%	22%	65%	45%	5%	47%	48%	44%	7%	48%	45%	47%	9%	25%	66%

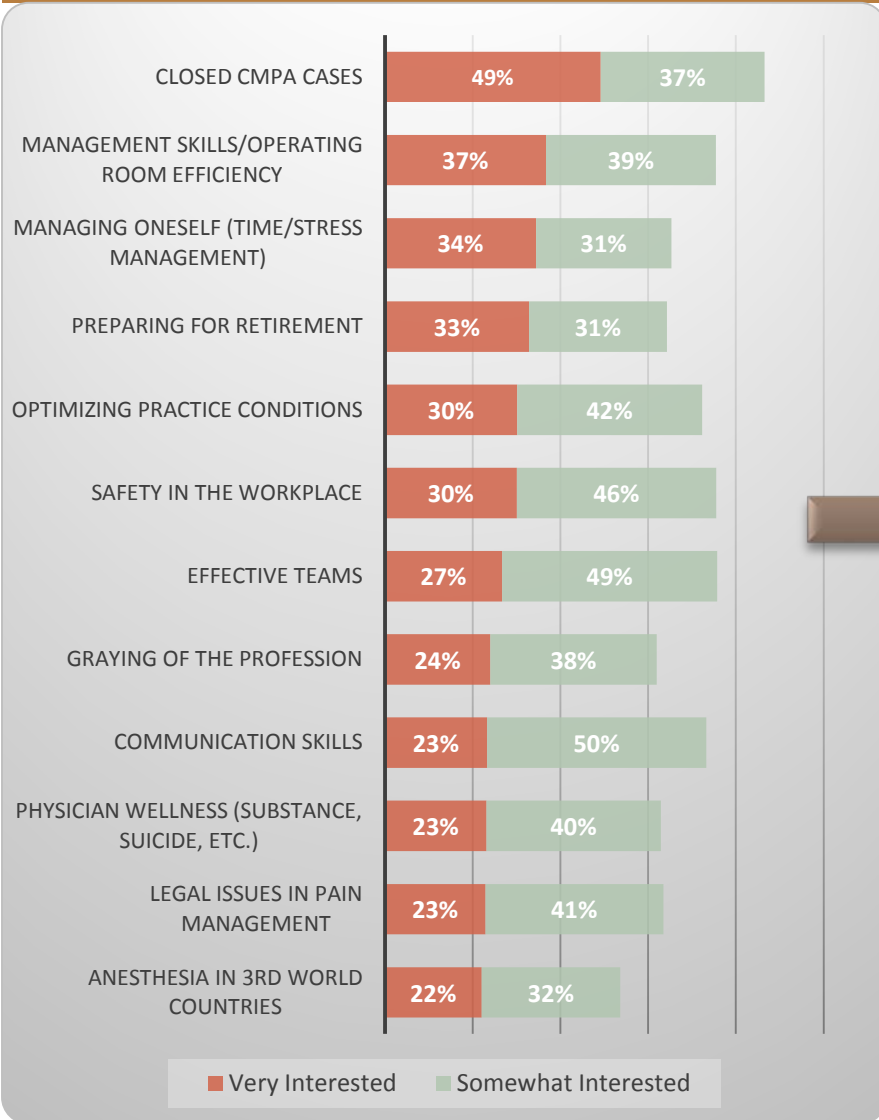
Notes: Interest is the percent very interested plus somewhat interested.
Introductory includes scores of 1 and 2 while advanced includes scores of 4 and 5.

DESIRED LEARNING TOPICS AND LEVELS – MANAGEMENT AND GENERAL TOPICS

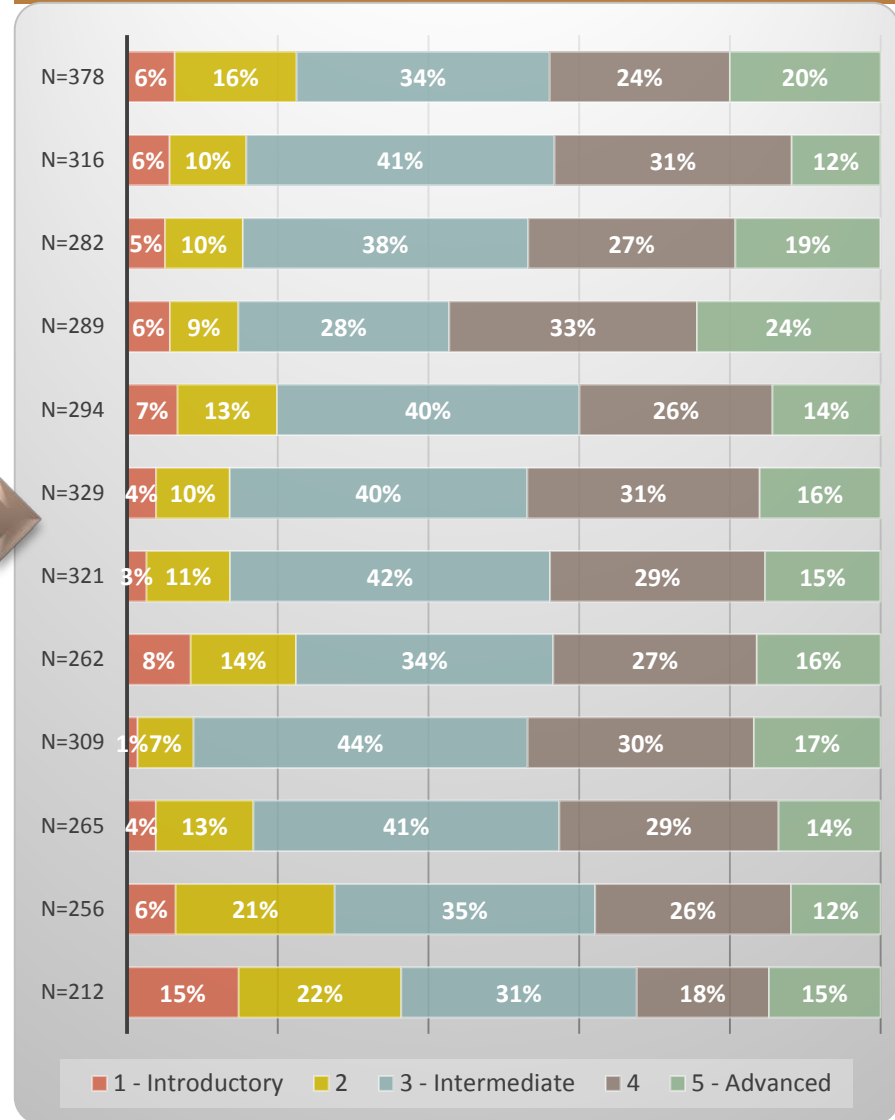
- ❑ Members were also asked to indicate their degree of interest and desired learning level for 12 management and general learning topics. Results are presented on the following page. As seen with the anesthesia specific topics, there is some interest in all topics, though it is considerably lower than for the anesthesia specific topics. Accordingly, the thresholds for the topics groupings have been lowered for these learning areas (definitions remain unchanged).
- ❑ *High Value Topics (45% or higher rated very interested):* The only management and general topic in this category is Closed CMPA cases (49%).
- ❑ *Rotational Topics (30% to 44% rated very interested):* This topic group includes Management skills/Operating room efficiency (37%), Managing oneself (Time/Stress management) (34%), Preparing for retirement (33%), Optimizing practice conditions (30%), Safety in the workplace (30%).
- ❑ *Niche Topics (less than 30% rated very interested):* The six niche topics include Effective teams (27%), Graying of the profession (24%), Communication skills (23%), Physician wellness (substance, suicide, etc.) (23%), Legal issues in pain management (23%) and Anesthesia in 3rd world countries (22%).
- ❑ When it comes to learning levels, most management and general topics tend to center an intermediate advanced level (ratings focused on 3 and 4 out of 5). The exceptions are as follows:
 - Preparing for retirement would qualify as a balanced intermediate to advanced learning level.
 - Legal issues in pain management and Anesthesia in 3rd world countries ratings are focused on an intermediate level with strong portions also rating their learning level at 2 and 4.

DESIRED LEARNING TOPICS AND LEVELS – MANAGEMENT AND GENERAL TOPICS (CONT'D)

Interest in CEPD Topics (N=323)



Desired Learning Level (among those somewhat or very interested)



Q8. Please indicate your level of interest in learning about these topics over the next 24 months.

Q10. Please use the 1 to 5 scale to indicate the level of learning that is most appropriate to meet your current learning needs.

DESIRED LEARNING TOPICS AND LEVELS – MANAGEMENT AND GENERAL TOPICS (CONT'D)

- ❑ The chart on the next page provides a detailed summary of topic interest and learning levels for management and general topics by age. Notable differences by age group, years in practice and length of membership include:
 - Not surprisingly, interest in learning about the Graying of the profession and Preparing for retirement increases with age, length of membership and years in practice. Interest in learning about Safety in the workplace also increases with age.
 - Desired learning levels tend to be lowest for those aged 25 to 34 and in many cases increase with age. A similar pattern exists for years in practice. For length of membership, desired learning levels tend to be lowest for members of five years or less.

- ❑ Other notable subgroup differences include:
 - Interest in learning about Management skills/Operating room efficiency and Optimizing practice conditions tends to be lower west of Ontario. On the other hand, interest is lower in the east in learning about Closed CMPA cases and Preparing for retirement.
 - Active members expressed greater interest than others in learning about Closed CMPA cases, but lower interest than others in learning about Anesthesia in 3rd world countries and Preparing for retirement. As with anesthesia specific topics, the desired learning level is generally higher among Active members for all topics.
 - Desired learning levels for management and general topics tends to be higher among Specialist Anesthesiologists.

DESIRED LEARNING TOPICS AND LEVELS – MANAGEMENT AND GENERAL TOPICS BY YEARS IN PRACTICE

	0 to 5 Years				6 to 10 Years				11 to 20 Years				21 to 30 Years				More Than 30 Years			
	Interest	Learning Level			Interest	Learning Level			Interest	Learning Level			Interest	Learning Level			Interest	Learning Level		
		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced
Closed CMPA cases	77%	52%	21%	27%	87%	9%	45%	46%	93%	20%	33%	47%	88%	10%	34%	56%	93%	8%	45%	47%
Effective teams	69%	26%	39%	35%	73%	20%	40%	41%	77%	6%	50%	44%	78%	6%	42%	52%	84%	14%	34%	52%
Safety in the workplace	55%	28%	51%	21%	65%	21%	40%	39%	87%	7%	50%	43%	85%	7%	29%	64%	91%	7%	29%	64%
Management skills/Operating room efficiency	73%	29%	45%	26%	81%	20%	40%	40%	73%	9%	38%	53%	76%	10%	30%	60%	66%	3%	49%	48%
Communication skills	68%	17%	51%	32%	77%	12%	52%	37%	72%	5%	39%	56%	73%	6%	37%	57%	83%	7%	33%	60%
Optimizing practice conditions	72%	35%	36%	29%	67%	26%	44%	30%	69%	7%	48%	45%	76%	12%	39%	50%	66%	12%	32%	56%
Managing oneself (Time/Stress management)	61%	27%	46%	28%	69%	17%	41%	42%	63%	3%	45%	52%	69%	12%	29%	58%	61%	13%	27%	60%
Preparing for retirement	46%	40%	25%	35%	47%	20%	31%	49%	77%	10%	38%	53%	80%	7%	27%	67%	86%	4%	18%	78%
Legal issues in pain management	60%	47%	27%	26%	61%	14%	43%	44%	57%	20%	39%	41%	60%	22%	35%	43%	74%	19%	33%	48%
Physician wellness (substance, suicide, etc.)	54%	27%	31%	42%	61%	23%	46%	31%	66%	8%	49%	42%	67%	14%	38%	47%	67%	8%	40%	53%
Graying of the profession	48%	66%	22%	12%	48%	27%	38%	36%	66%	10%	34%	56%	75%	8%	45%	47%	78%	2%	27%	71%
Anesthesia in 3rd world countries	58%	61%	18%	21%	53%	33%	22%	45%	56%	28%	41%	31%	52%	27%	35%	38%	57%	14%	44%	42%

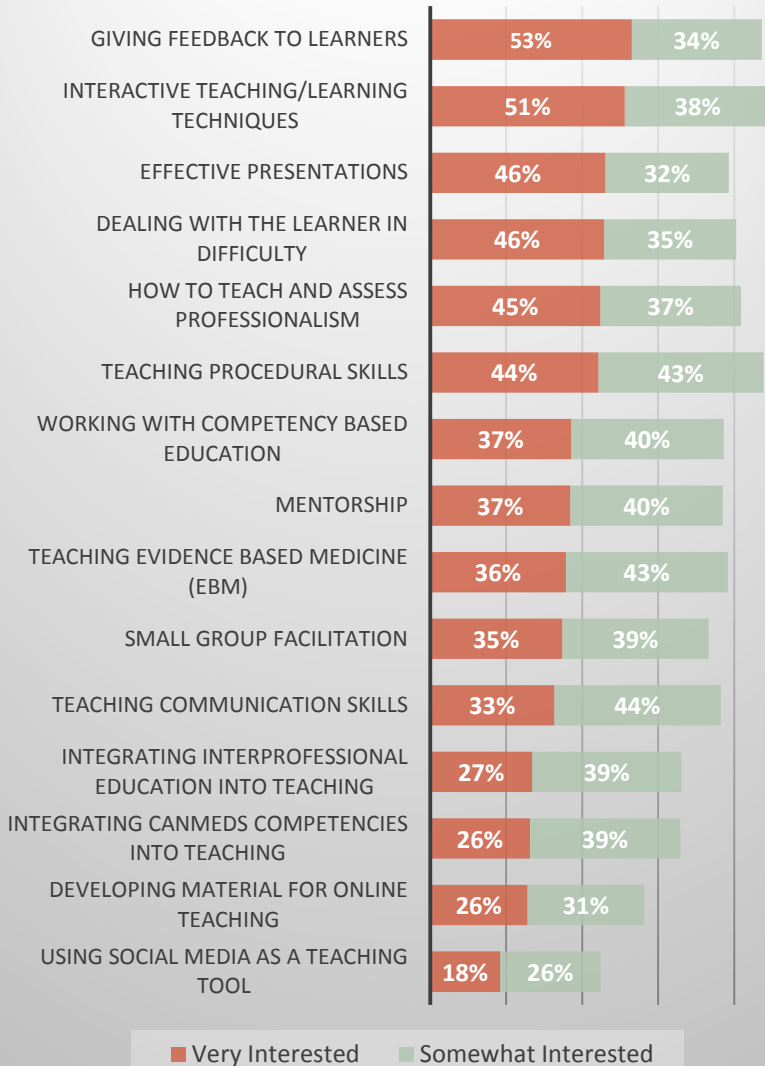
Notes: Interest is the percent very interested plus somewhat interested.
Introductory includes scores of 1 and 2 while advanced includes scores of 4 and 5.

DESIRED LEARNING TOPICS AND LEVELS – TRAINER TOPICS

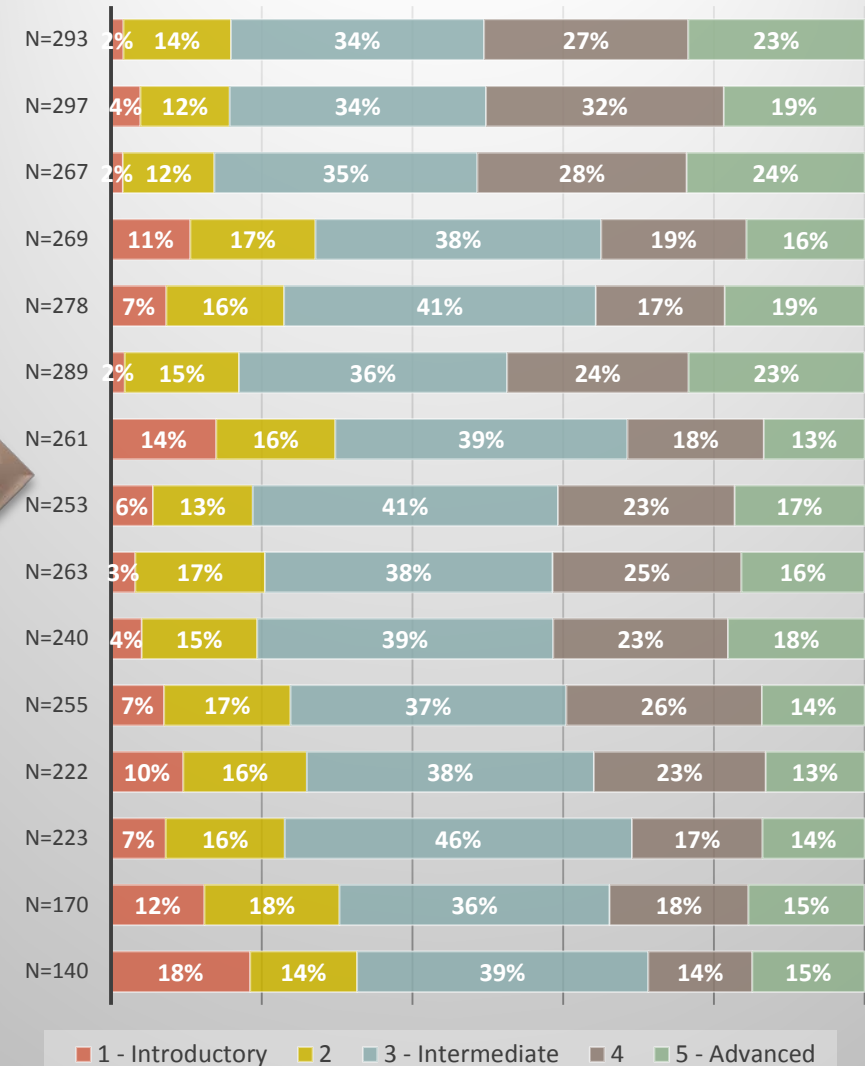
- ❑ The final area members were asked to indicate their interest and preferred learning levels was trainer topics. There were 15 trainer topics in all. Three quarters (75%) of respondents indicated that they are involved in training. Again, there is some interest in all topics. But again, it is lower than for the anesthesia specific topics and the thresholds for the topics groupings have been lowered for these learning areas (definitions remain unchanged).
- ❑ *High Value Topics (44% or higher rated very interested):* Trainer topics in the high value category include Giving feedback to learners (53%), Interactive teaching/learning techniques (51%), Effective presentations (46%), Dealing with the learner in difficulty (46%), How to teach and assess professionalism (45%) and Teaching procedural skills (44%).
- ❑ *Rotational Topics (30% to 43% rated very interested):* This topic group includes Working with Competency Based Education (37%), Mentorship (37%), Teaching Evidence Based Medicine (EBM) (36%), Small group facilitation (35%) and Teaching communication skills (33%).
- ❑ *Niche Topics (less than 30% rated very interested):* The four niche topics include Integrating Interprofessional Education into teaching (27%), Integrating CanMeds competencies into teaching (26%), Developing material for online teaching (26%) and Using social media as a teaching tool (18%).
- ❑ When it comes to learning levels, there is strong demand for all learning levels from 2 to 5 out of 5 for all trainer topics. That said, for all topics, the highest demand is for an intermediate learning level as selected by 34% to 41% for all topics but one (Integrating CanMeds competencies into teaching is the exception at 46%). Responses lean more to the advanced end of the spectrum for Giving feedback to learners, Interactive teaching/learning techniques, Effective presentations, Teaching procedural skills, Mentorship, Teaching Evidence Based Medicine (EBM), Small group facilitation, Teaching communication skills and Integrating Interprofessional Education into teaching.

DESIRED LEARNING TOPICS AND LEVELS – TRAINER TOPICS (CONT'D)

Interest in CEPD Topics (N=251)



Desired Learning Level (among those somewhat or very interested)



Q12. Please indicate your level of interest in learning about these topics over the next 24 months.

Q13. Please use the 1 to 5 scale to indicate the level of learning that is most appropriate to meet your current learning needs.

DESIRED LEARNING TOPICS AND LEVELS – TRAINER TOPICS (CONT'D)

- ❑ The chart on the next page provides a detailed summary of topic interest and learning levels for trainer topics by age. Notable differences by age group, years in practice and length of membership include:
 - Interest in learning about trainer topics is generally higher for those over the age of 65.
 - Desired learning levels for trainer topics tend to increase with age. Desired learning levels also increase with the length of practice.

- ❑ Other notable subgroup differences include:
 - The desired learning level for Integrating CanMeds competencies into teaching is highest east of Ontario.
 - Desired learning levels for Dealing with the learner in difficulty, Integrating CanMeds competencies into teaching and Integrating Interprofessional Education into teaching are higher among active members.
 - Interest in learning about trainer topics is generally lower among Specialist Anesthesiologists in community hospitals while desired learning levels are highest among Specialist Anesthesiologists in academic hospitals.
 - Desired learning levels are generally higher among those in University/Teaching Hospitals compared to those in Other Hospital/Healthcare facilities.

DESIRED LEARNING TOPICS AND LEVELS – TRAINER TOPICS BY YEARS IN PRACTICE

	0 to 5 Years				6 to 10 Years				11 to 20 Years				21 to 30 Years				More Than 30 Years			
	Interest	Learning Level			Interest	Learning Level			Interest	Learning Level			Interest	Learning Level			Interest	Learning Level		
		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced		Introductory	Intermediate	Advanced
Interactive teaching/learning techniques	89%	19%	26%	54%	89%	26%	34%	40%	88%	12%	36%	52%	86%	11%	36%	53%	100%	7%	40%	53%
Teaching procedural skills	92%	39%	23%	38%	81%	16%	42%	42%	88%	7%	41%	52%	86%	6%	39%	54%	93%	8%	28%	64%
Giving feedback to learners	89%	31%	18%	50%	87%	18%	36%	46%	88%	10%	41%	48%	85%	8%	36%	56%	100%	2%	51%	47%
How to teach and assess professionalism	76%	46%	37%	18%	77%	20%	49%	31%	89%	22%	44%	33%	80%	12%	36%	53%	98%	7%	45%	48%
Dealing with the learner in difficulty	83%	38%	39%	23%	79%	32%	30%	38%	85%	23%	39%	38%	77%	18%	41%	41%	91%	16%	44%	41%
Effective presentations	71%	16%	39%	45%	80%	16%	35%	49%	85%	12%	42%	47%	77%	9%	31%	60%	90%	8%	32%	60%
Teaching Evidence Based Medicine (EBM)	77%	31%	31%	38%	73%	22%	37%	42%	83%	17%	38%	45%	78%	14%	43%	42%	88%	8%	44%	48%
Working with Competency Based Education	71%	37%	48%	15%	79%	32%	30%	38%	83%	34%	37%	28%	74%	20%	37%	44%	86%	17%	43%	40%
Mentorship	85%	19%	46%	36%	65%	21%	46%	32%	77%	18%	44%	38%	75%	17%	40%	43%	83%	8%	31%	60%
Teaching communication skills	74%	36%	39%	25%	82%	25%	43%	32%	75%	23%	35%	42%	70%	17%	27%	56%	91%	8%	49%	42%
Small group facilitation	82%	36%	29%	35%	65%	26%	43%	31%	75%	11%	47%	42%	67%	10%	45%	44%	95%	10%	37%	53%
Integrating Interprofessional Education into teaching	56%	42%	35%	23%	66%	28%	36%	36%	63%	25%	37%	37%	67%	14%	41%	46%	82%	16%	40%	45%
Integrating CanMeds competencies into teaching	55%	39%	53%	7%	68%	18%	46%	36%	66%	15%	55%	30%	68%	19%	43%	39%	77%	13%	33%	54%
Developing material for online teaching	75%	45%	32%	23%	52%	43%	31%	26%	47%	23%	30%	47%	55%	13%	49%	38%	59%	17%	37%	46%
Using social media as a teaching tool	45%	45%	47%	8%	43%	45%	23%	33%	41%	23%	44%	34%	49%	26%	40%	34%	46%	17%	39%	44%

Notes: Interest is the percent very interested plus somewhat interested.
Introductory includes scores of 1 and 2 while advanced includes scores of 4 and 5.

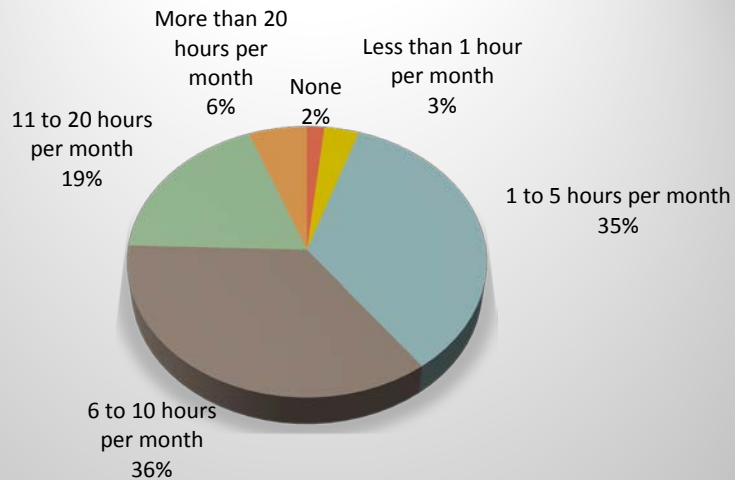
PREFERRED LEARNING METHODS

TIME SPENT ON CEPD ACTIVITIES

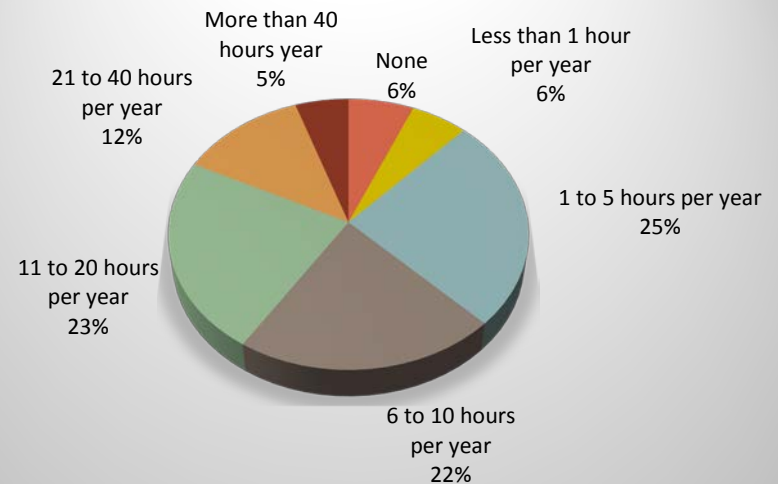
- ❑ The survey shows that CAS members spend a considerable amount of time on CEPD activities throughout the year. Results are presented on the next page. All but 2% indicated that they spend at least some time each month reading journals and articles. In fact, six in ten (61%) spend more than 5 hours each month on this ongoing CEPD activity.
- ❑ Other CEPD activities were measured on a yearly basis. The time commitment is greatest for conferences where half (49%) spend more than 20 hours per year and a further 31% spend 11 to 20 hours per year. Members also invest a significant amount of time in attending workshops and seminars with 45% spending 6 to 20 hours per year and another quarter (25%) spending 1 to 5 hours. Clearly, in-person learning opportunities are popular among CAS members. The time commitment reflects the in-person nature of these opportunities.
- ❑ Interestingly, the lowest CEPD time investment among CAS members is for webinars and other online resources. In fact, almost one quarter (23%) indicated that they don't invest any time in this form of learning. The results point to a potential challenge in getting members to use online vehicles as CAS continues to develop its offering. Among those who do participate in online learning, most spend less than 20 hours (61%) doing so. It is important to keep in mind that online formats are often designed to save time over in-person formats and will be reflected in the results.

TIME SPENT ON CEPD ACTIVITIES (CONT'D)

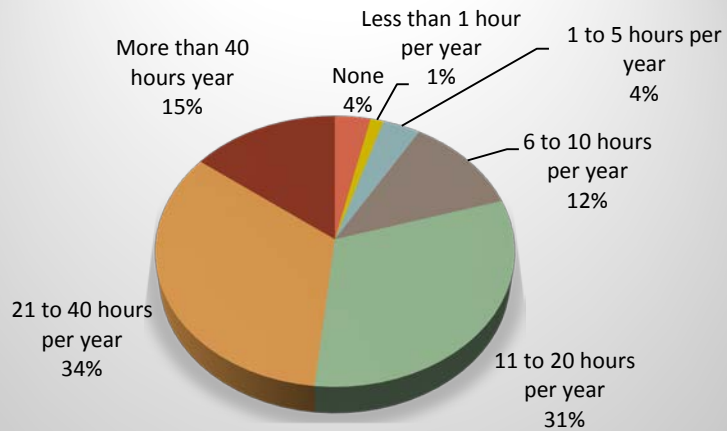
Reading Journals and Articles – Monthly (N=409)



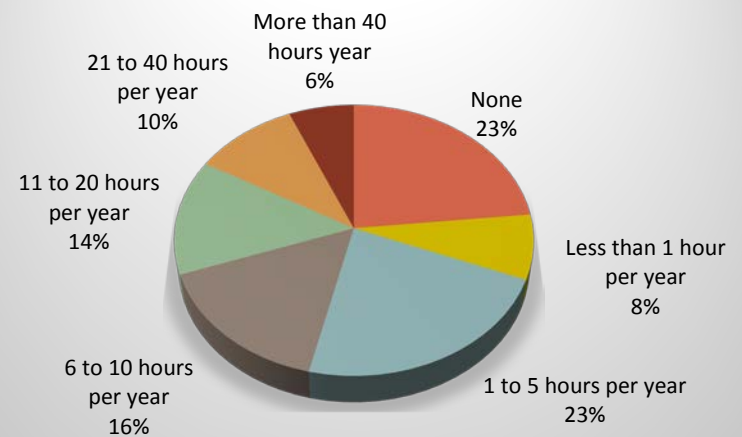
Attending Workshops and Seminars – Yearly (N=408)



Attending Conferences – Yearly (N=407)



Webinars or Other Online Learning - Yearly (N=401)

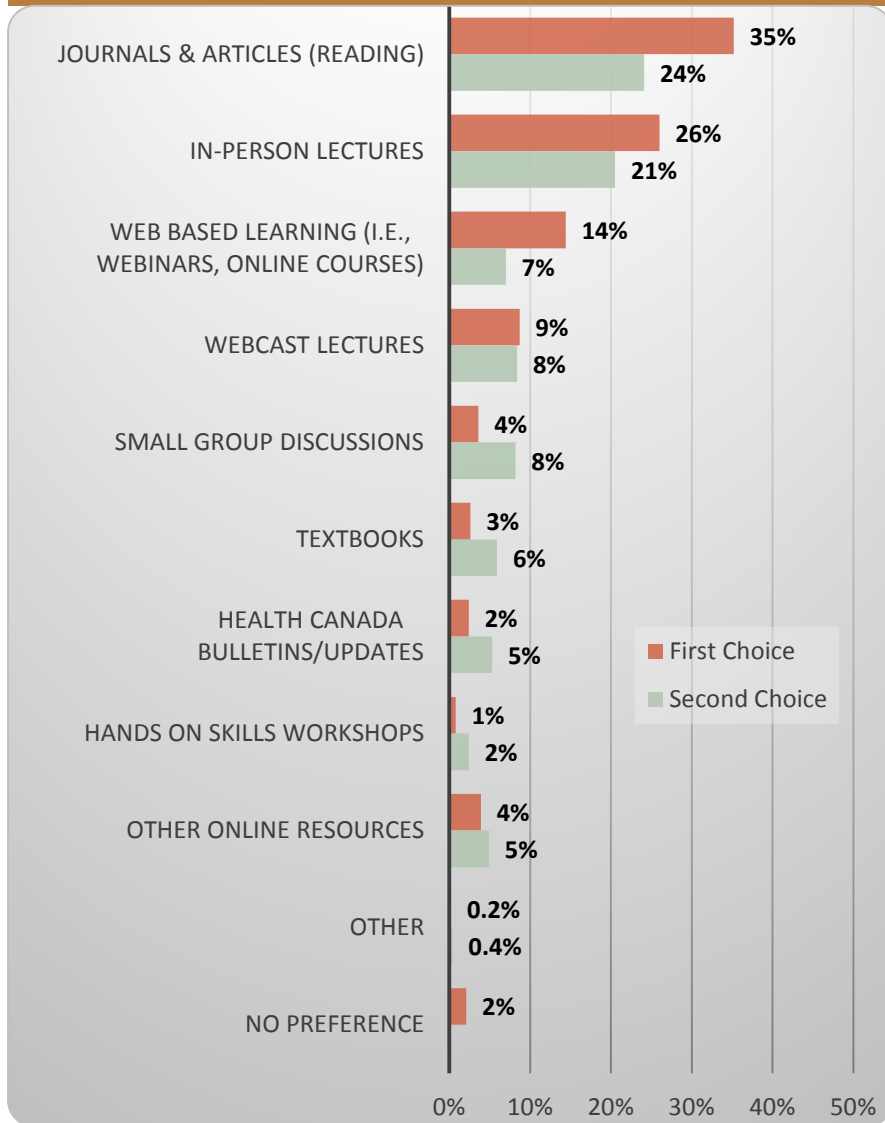


PREFERRED LEARNING METHODS

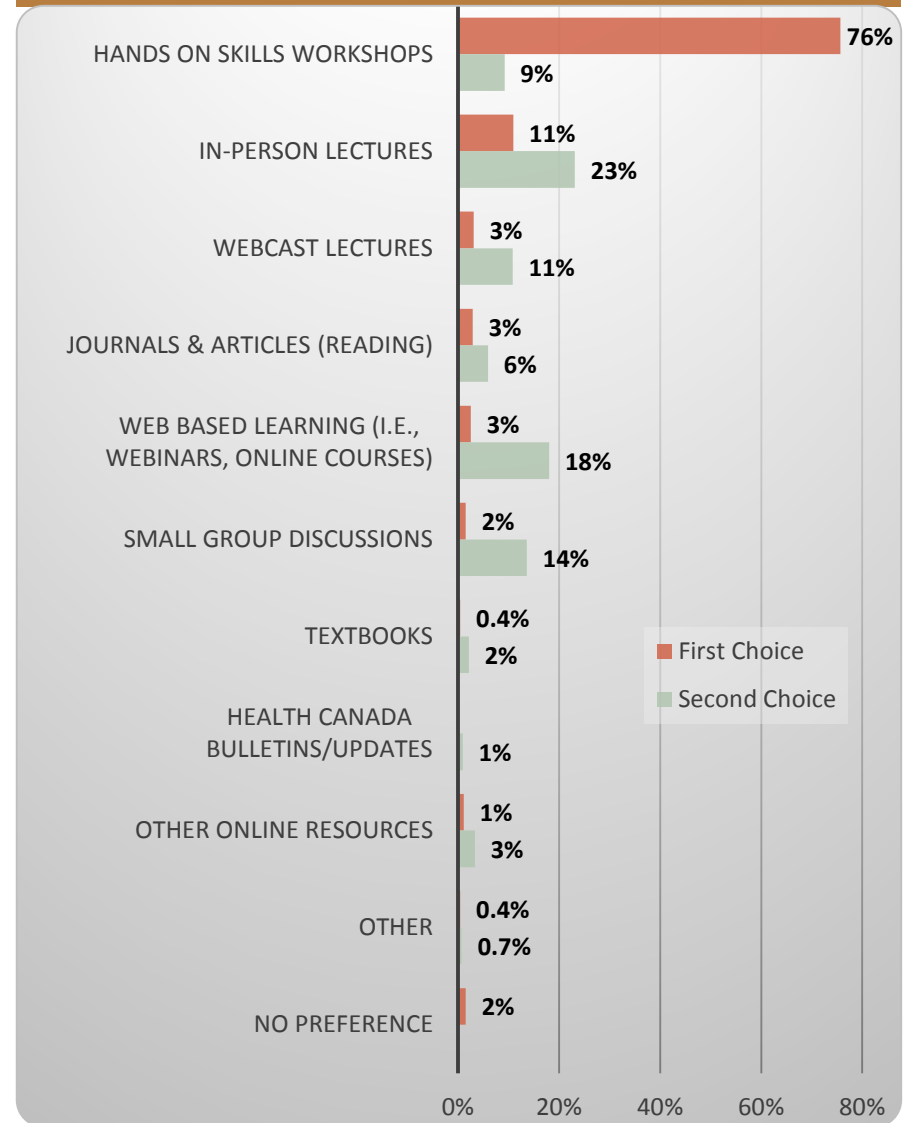
- ❑ The charts on the following pages show the preferred (top and second choice) learning methods for four different topics types.
- ❑ When it comes to new medications and new guidelines or guideline updates, journals & articles are the preferred learning channel followed by in-person lectures.
- ❑ Not surprisingly, hands-on skills workshops are by far the top choice for new techniques with 76% rating it as their first choice.
- ❑ The preferred learning method for reviews of key topics in anesthesia & pain medicine are in-person lectures followed closely by journals & articles.
- ❑ As noted earlier, getting members to use online learning resources may be a challenge. Further confirming this notion is that while there are some who have a preference for these formats of learning, it is not overwhelmingly strong.
- ❑ Notable subgroup differences among the top channels include:
 - New Medications:
 - Members of five or fewer years, with five or fewer years in practice or who are residents are more likely to prefer web-based learning and less likely to prefer in-person lectures. Webinars may not be preferred for most members but they may be a preferred channel for young members, who currently make up about 20% of this survey. Be careful about dismissive comments about webinars.
 - New Guidelines or Updates:
 - Members with five or fewer years in practice or aged 25 to 34 are more likely to prefer in-person lectures and less likely to prefer journals.

PREFERRED LEARNING METHODS (CONT'D)

New Medications (N=408)

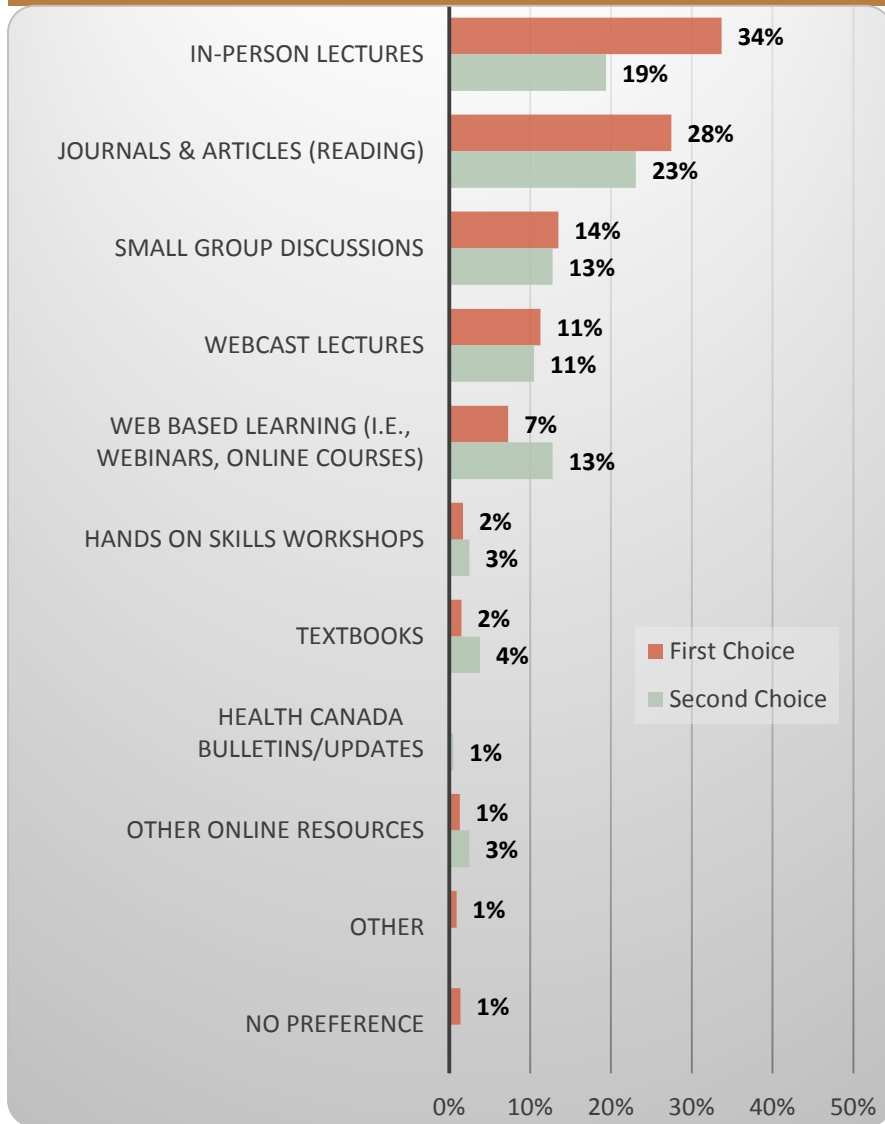


New Techniques (i.e., ultrasound/3D imaging etc.) (410)

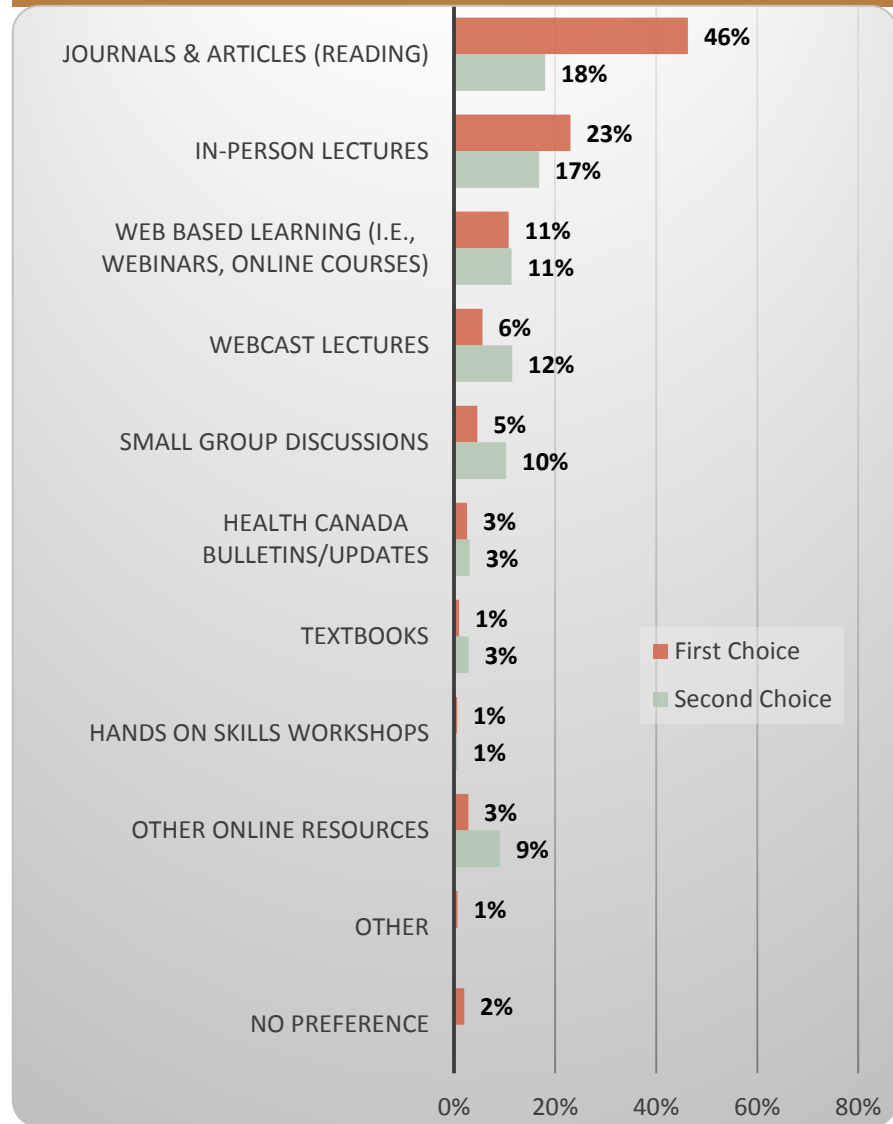


PREFERRED LEARNING METHODS (CONT'D)

Reviews of Key Topics in Anesthesia & Pain Medicine (N=410)

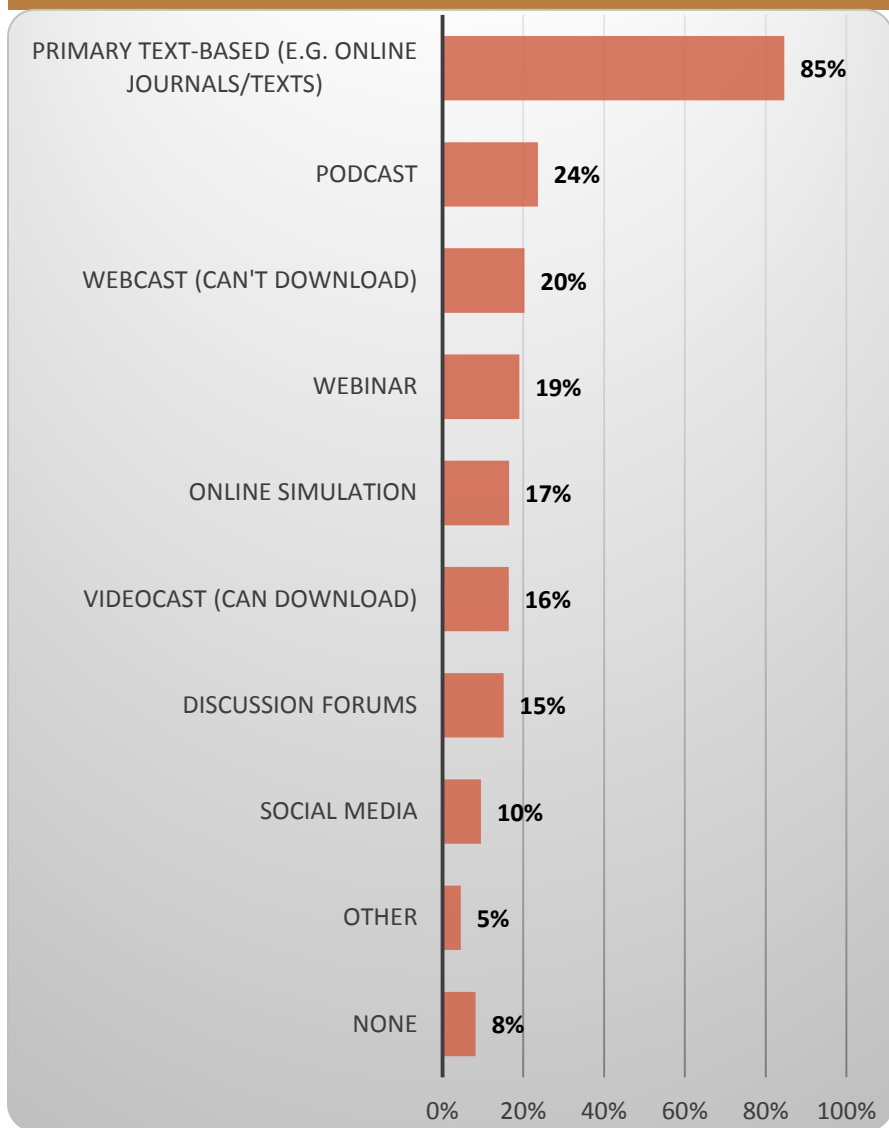


New Guidelines or Guideline Updates (307)



ONLINE EDUCATION FORMATS ACCESSED PAST 12 MONTHS

Online CPD Formats Accessed in Past 12 Months (N=403)



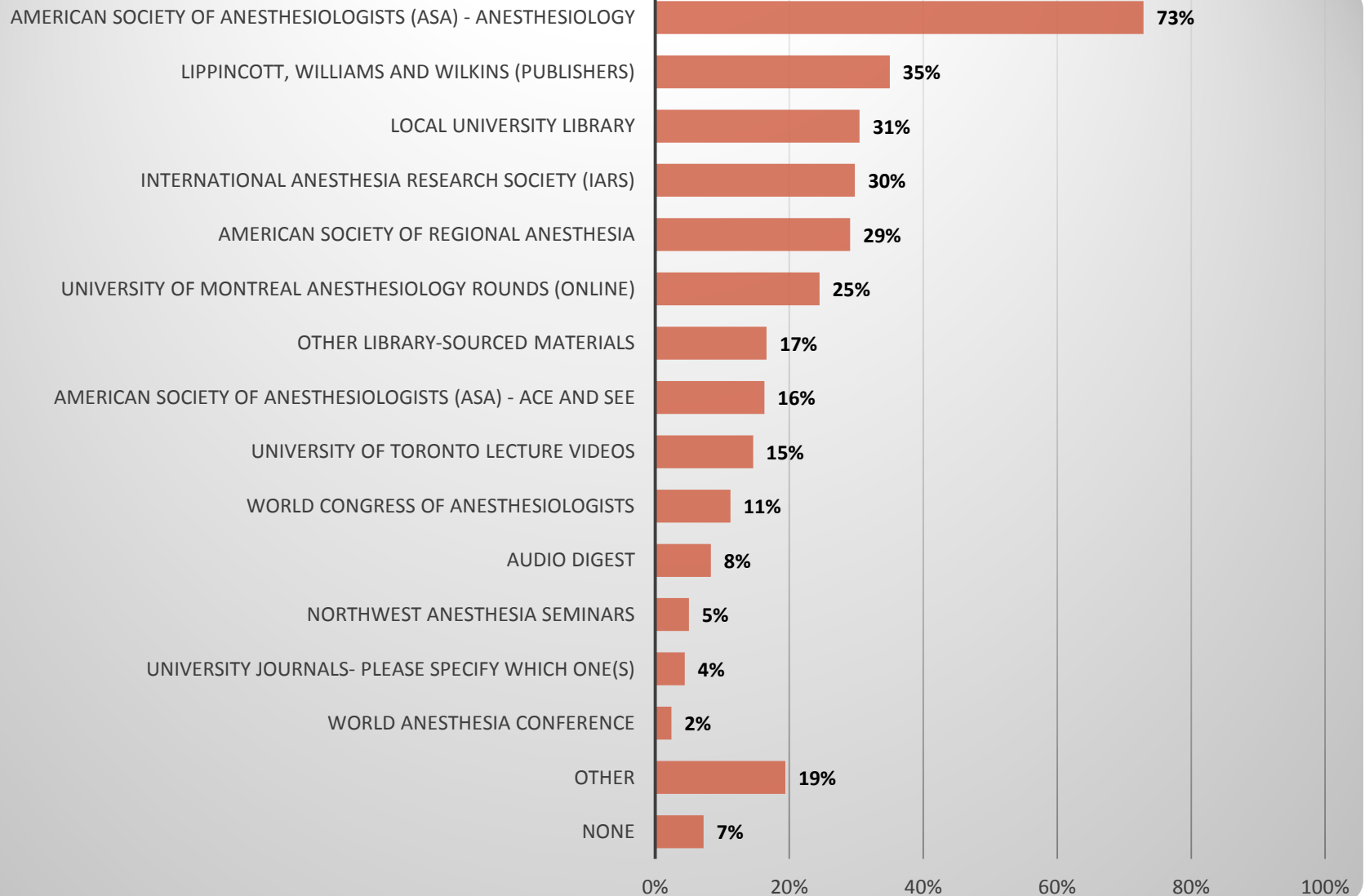
- ❑ At 85%, primary text-based resources are far and away the most common online format accessed by members in the past 12 months.
- ❑ Podcasts (24%), webcasts (20%) and webinars (19%) are also common, but considerably behind the top resource.
- ❑ The results further elaborate on the challenges in getting members to use online learning tools. Clearly they have no issue accessing information online as evidenced by the fact that most have read articles and journals online. However, use of more teaching based or interactive tools is limited.

NON-CAS SOURCE OF CEPD ACCESSED PAST 12 MONTHS

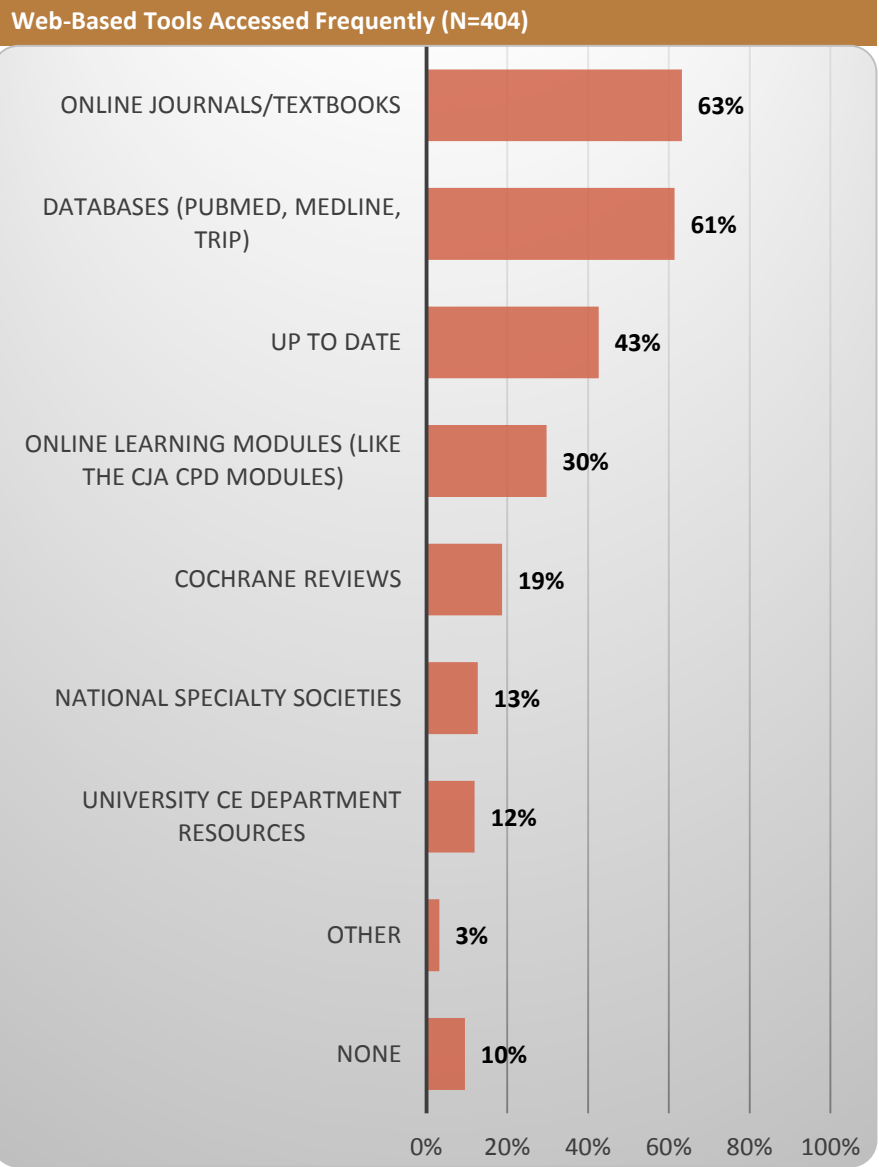
- ❑ The vast majority of members (93%) have accessed CEPD materials from a source other than CAS in the past 12 months. The top CEPD competitor for CAS is by far the American Society of Anesthesiologists. In fact, almost three quarters (73%) of CAS members indicated they have accessed the journal (Anesthesiology) in the past 12 months while 16% have accessed ACE and SEE.
- ❑ Other common sources include Lippincott, Williams and Wilkins (35%), local university library (31%), International Anesthesia Research Society (30%), American Society of Regional Anesthesia (29%) and University of Montreal Anesthesiology Rounds (25%).

NON-CAS SOURCE OF CEPD ACCESSED PAST 12 MONTHS (CONT'D)

Non-CAS Source of CEPD Accessed Past 12 Months (N=403)



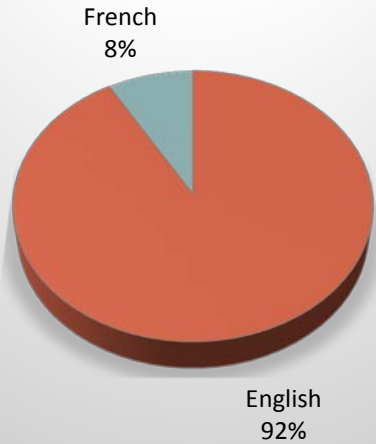
WEB-BASED TOOLS ACCESSED FREQUENTLY



- ❑ Online journals/textbooks (63%) and databases (PUBMED, MedLine, TRIP) (61%) are by far the most common web-based tools that members access frequently. Up To Date is also a common tool and is frequently accessed by 43% of members.
- ❑ Online learning modules such as the CJA CPD online modules are only accessed frequently by 30% of members.

PREFERRED LEARNING LANGUAGE

Preferred Language (N=409)



- ❑ Not surprisingly, the vast majority (92%) of members prefer to receive their CEPD in English.

CONCLUSIONS

CONCLUSIONS

PENETRATION

- With 79% having accessed its services in the last 24 months and 63% in the past year, penetration with CAS' CEPD offerings could be improved, but is acceptable overall.
- CJA CPD online modules are the most widely used CEPD resource with 39% of respondents indicating that they have accessed them in the past 12 months. The annual meeting is also popular, with 44% indicating they have attended in the past 24 months; however, it is important to note that the cancellation of the 2013 meeting in Calgary (due to flooding) may have caused these numbers to be lower than normal.

SATISFACTION

- For the most part, those who use them are satisfied with CAS' current offerings.
- Satisfaction is highest with the most often used offering - the CJA CPD online modules. Members are very satisfied with CAS's offering in this area. The regional meetings and CPAS also ranked quite well in terms of member satisfaction.
- In contrast, improvements could be made with regard to the Annual Meeting, although once again the 2013 meeting cancellation may be having an impact on this result.

CONCLUSIONS (CONT'D)

LEARNING LEVEL

- ❑ In addition to being relevant, the majority of CEPD users feel that the learning level of the various resources is about right. Those that don't agree with this generally feel the learning level is a bit too advanced (4 out of 5) for their needs.
- ❑ There is room for improvement in the level of learning taking place at the annual meeting. A key challenge in making adjustments to the learning level for the annual meeting is that those who feel the learning level is not right are split between too basic (15%) and too advanced (22%).

REASONS FOR NOT PARTICIPATING IN CEPD

- ❑ Time, cost, convenience and awareness are the key barriers for members in participating in CAS' CEPD programming. Specifically:
 - The top reasons for not attending an annual conference (within the last 5 years) include not having enough time and distance to the conference. Travel costs and conference fees are also barriers for some
 - The top reason for not attending regional meetings is a lack of awareness. Further to this, a significant number of those not using CJA CPD online are not aware of the program, although lack of time is also a factor in this instance. Better communications around these two offerings may be something to consider in future initiatives to boost participation.

CONCLUSIONS (CONT'D)

TOPICS OF INTEREST - ANESTHESIOLOGY

- In terms of the topics that are of most interest to members in CAS' CEPD offerings, the critical topics that should be the mainstays of the curriculum are Anticoagulants and Resuscitation. Other high-value topics include: Recovery room problems; Ultrasonography; Acute Pain; Transfusion Medicine; Airway management; and, Cardiac/heart disease - general.

TOPICS OF INTEREST - MANAGEMENT

- When it comes to management topics, there is some interest from members, although it is considerably lower than the anesthesia-specific topics. The only high-value topic in this area is closed CMPA cases.

TOPICS OF INTEREST – TRAINER TOPICS

- With three-quarters of respondents involved in training, there is some interest in trainer topics, although it is lower than for the anesthesia-specific topics. Trainer topics in the high value category include: Giving feedback to learners; Interactive teaching/learning techniques; Effective presentations; Dealing with the learner in difficulty; How to teach and assess professionalism; and, Teaching procedural skills.

CONCLUSIONS (CONT'D)

PREFERRED LEARNING FORMATS

- The survey shows that CAS members spend a considerable amount of time on CEPD activities throughout the year. Journals and articles are the most popular with all but 2% indicating that they spend at least some time each month reading this type of publication.
- The time commitment is greatest for conferences, followed by workshops and seminars. Clearly, in-person learning opportunities are popular among CAS members.
- Similarly, journals and articles; in-person lectures; and, hands-on skills workshops are the preferred learning methods for most types of information.
- Interestingly, respondents did not show a strong preference or uptake when it comes to online learning methods. These results were fairly consistent across all member segments. Digging deeper to determine why there has not been stronger uptake may be something to consider.

CONCLUSIONS (CONT'D)

OTHER CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT RESOURCES

- ❑ The survey shows The top CEPD competitor for CAS is by far the American Society of Anesthesiologists, with almost three quarters of CAS members indicating they have accessed the journal (Anesthesiology) in the past 12 months, and a further 16% having accessed ACE and SEE. Other sources of education include: Lippincott; Williams and Wilkins; local university library; International Anesthesia Research Society; American Society of Regional Anesthesia; and, University of Montreal Anesthesiology Rounds.

CLOSING

- ❑ Overall, CAS is performing adequately in its CEPD program. Although there are certainly areas to improve, it appears that modifications to the current offering, as opposed to an overhaul of the program would be sufficient in helping to improve uptake and satisfaction across these services.

APPENDIX A – ADDITIONAL CEPD TOPICS – VERBATIM RESPONSES

VERBATIM CEPD TOPIC SUGGESTIONS

Following is a listed of suggested topics for CAS CEPD offerings. As the suggestions have been grouped by broader topic areas. The responses are verbatim from the survey and have not been edited.

Acute and Chronic Pain Management

- A SEMINAR ON SUCCINYLCHOLINE INFUSIONS - AN OLDER BUT VERY USEFUL TECHNIQUE.
- ACUTE PAIN IN THE CHRONIC PAIN PATIENT
- ACUTE PAIN MANAGEMENT IN MINIMALLY INVASIVE SURGERY
- ACUTE PAIN MANAGEMENT IN ORTHOPEDIC SURGERY
- ACUTE POST-OPERATIVE PAIN MANAGEMENT OF TOTAL JOINT SURGERY
- BEST PRACTICES IN ACUTE PAIN MANAGEMENT
- CHRONIC PAIN PATIENTS COMING FOR MAJOR SURGERY
- CHRONIC PAIN ULTRASOUND GUIDED BLOCKS
- INTERVENTIONAL PAIN PROCEDURES FOR CHRONIC CANCER AND NON-CANCER PAIN
- PAIN MANAGEMENT AND PREVENTION OF CHRONIC PAIN
- PALLIATIVE CARE FOR ANESTHESIA PROVIDER
- PALLIATIVE PAIN CONTROL - INTERVENTIONAL AND NON
- POST SURGICAL PAIN MANAGEMENT IN SUBSTANCE ABUSING PATIENTS
- PRÉVENTION DE LA DOULEUR CHRONIQUE POST OP
- SPINAL CORD STIMULATORS IN THE TREATMENT OF NEUROTIC PAIN DUE TO NEUROTOXICITY
- ULTRASOUND FOR CHRONIC AND ACUTE PAIN

Ethics

- ANESTHÉSIE ET DNR
- ANESTHÉSIE ET GROUPE RELIGIEUX
- CONSENT FOR ANESTHESIA
- ETHICAL ISSUES IN CARE PROVISION
- ETHICAL ISSUES IN TEACHING IN ANESTHESIA
- ETHICS
- ETHICS OF PROVIDING ANAESTHESIA IN "HOPELESS" CASES.
- ETHIQUE
- THE COMPLICITY OF ANESTHESIA IN FUTILE SURGERY

Administration/Management/Professional Issues

- ANAESTHESIA-ADMINISTRATION RELATIONSHIPS
- ANESTHESIOLOGIST - SURGEON CONFLICT
- ANESTHETIST AS TRAUMA TEAM LEADER
- CONFLICT/CHANGE MANAGEMENT
- DEALING WITH DIFFICULT ADMINISTRATION , STANDARDS?
- DEPARTMENTAL LEADERSHIP
- HOW TO DEAL WITH PERCEIVED OR REAL PROFESSIONAL ISSUES
- HOW TO ENCOURAGE INTERDISCIPLINARY COOPERATION (TEAM BUILDING)
- HOW TO MANAGE DIFFICULT PEOPLE
- MANAGING CONFLICT IN THE OR
- NEGOTIATION TO GET EQUIPMENT OR NEW MEDICATIONS FROM THE HOSPITAL
- TEAM - PHYSICIANS AND PARAMEDICALS - MANAGEMENT
- TEAM TRAINING

Anesthesia Outside the OR

- ANESTHESIA IN PRIVATE SETTINGS/ OUT OF HOSPITAL CLINICS
- ANESTHESIA IN REMOTE AREAS
- ANESTHESIA SERVICES OUTSIDE THE OR
- ENHANCED RECOVERY / HOME CARE MODELS
- NORMES S'APPLIQUANT SPÉCIFIQUEMENT À L'ANESTHÉSIE HORS MILIEU HOSPITALIER
- SÉDATION AU BLOC ET À L'EXTÉRIEUR DU BLOC
- SEDATION FOR OUT OF HOSPITAL PROCEDURES

VERBATIM CEPD TOPIC SUGGESTIONS (CONT'D)

Following is a listed of suggested topics for CAS CEPD offerings. As the suggestions have been grouped by broader topic areas. The responses are verbatim from the survey and have not been edited.

Acute and Chronic Pain Management

- ANESTHESIA FOR ACUTE PANCREATITIS
- ANESTHESIA FOR ARTHROPLASTY
- ANESTHESIA FOR CANCER SURGERY
- ANESTHESIA FOR PATIENTS WITH TRANSPLANTED ORGANS
- ANESTHESIA FOR SUBSTANCE ABUSE PATIENTS
- ANESTHESIA FOR THE PATIENT WITH PREVIOUS SURGERY FOR CONGENITAL HEART DISEASE
- ANESTHÉSIE BARIATRIQUE
- ANESTHÉSIE THORACIQUE
- ANESTHESIA & CANCER OUTCOMES.
- ANÉVRISME INTRA-CRANIEN
- CARDIAC ANESTHESIA
- CONGENITAL HEART DISEASE IN ADULTS
- CRITICAL CARE ULTRASOUND IN THE PAR
- DEALING WITH SPECIAL NEEDS PATIENTS IE. AUTISM
- DIFFICULT OBSTETRICS
- ECHOCARDIOGRAPHY FOR NON CARDIAC ANESTHESIA
- ENVIRONMENTAL INJURIES - DEALING WITH PATIENTS INJURED BY FROSTBITE OR FIRE
- GESTION DE L'ANESTHESIE POUR PATIENTES OBSTETRIQUES AVEC CARDIOPATHIES
- GESTION DE L'ANESTHESIE POUR PORTEUR DE PACE-MAKERS ET DEFIBRILLATEURS
- HYPERTENSION PULMONAIRE ET ANESTHESIE
- HYPERTHERMIE MALIGNNE
- IIDIOPATHIC OR POST SURGICAL INTRACRANIAL HYPOTENSION
- INTRAOPERATIVE MANAGEMENT OF THE SEPTIC PATIENT
- MAJOR LAPAROSCOPIC PROCEDURES-LIVER RESECTION, ABD HYST ETC.
- MANAGEMENT OF ASPIRATION
- MANAGEMENT OF MASSIVE BLOOD LOSS
- MANAGEMENT OF OSA PATIENTS
- MANAGEMENT OF PATIENTS WITH COEXISTING DISEASE.
- MANAGEMENT OF THE PREGNANT PATIENT FOR NON- OBSTETRIC ANESTHESIA
- MANAGEMENT OF TRACHEOSTOMY
- MANAGEMENT OF TRANSPLANT PATIENTS FOR NON TRANSPLANT ANESTHESIA
- MANAGING THE SUPER MORBIDLY OBESE
- MORBID OBESITY
- NON-CARDIAC PERIOPERATIVE TEE
- OBSTETRIC ANESTHESIA ASSISTANCE AT EMERGENCY SECTIONS
- PEDIATRIC LAP PROCEDURE MANAGEMENT.
- PEAU A PEAU LORS DES CESARIENNES
- PEDIATRIC ADVANCED LIFE SUPPORT
- PEDIATRIC ANESTHESIA FOR THE NON-PEDIATRIC ANESTHESIOLOGIST
- PRACTICAL SLEEP APNEA MANGEMENT
- PRÉ-ÉCLAMPSIE
- PREHABILITATION FOR FRAIL PATIENTS PRE OPERATIVELY
- PROBLÈMES OBSTÉTRICAUX (HÉMORRAGIE, PRÉ-ECCLAMPSIE, ETC)
- RARE EMERGENCIES
- RÉACTION LORS D'ÉVÉNEMENTS RARES
- RENAL FAILURE
- REVIEW OF ANESTHESIA AND ENDOCRINE DISEASE
- REVUE DE BAS DE L'ANESTHÉSIE OBSTÉTRICAL MODERNE (MISE À JOUR)
- REVUE DE BAS DE L'ANESTHÉSIE PÉDIATRIQUE MODERNE (MISE A JOUR)
- RISK REDUCTION STRATEGIES FOR EMERGENCY ANESTHESIA IN UNSTABLE PATIENTS
- SLEEP APNEA
- SPINAL DOSES FOR ORTHOPEDICS
- THE DISRUPTIVE PHYSICIAN
- THE MANAGEMENT OF DYSRUPTIVE BEHAVIOUR AND BULLYING
- TRAITEMENT D'ARYTHMIES PER-OP, MISE À JOUR
- UNUSUAL CAUSES OF CARDIAC ARRESTS WITH ROUTINE CASES

VERBATIM CEPD TOPIC SUGGESTIONS (CONT'D)

Following is a listed of suggested topics for CAS CEPD offerings. As the suggestions have been grouped by broader topic areas. The responses are verbatim from the survey and have not been edited.

Anticoagulants

- ANESTHETIC CONCERNS OF NEW ANTICOAGULANTS AND ANTIPLATELET MEDICATIONS
- ANTICOAGULANT PERIOPERATIVE MANAGEMENT
- ANTICOAGULATION AND REGIONAL ANESTHESIA
- CONSENSUS SUR LA GESTION DES ANTICOAGULANTS ET ANESTHESIE NEURAXIALE
- NEW ANTICOAGULANTS
- NOUVEAUX ANTIPLAQUETTES
- PERIOP MANAGEMENT OF NEW ANTICOAGULANTS EG DEBAGATRON
- REGIONAL ANESTHESIA AND ANTICOAGULANTS

Operating Room Procedures and Management

- EFFECTIVE USE OF OPERATING ROOMS
- LEAN PROCESS IMPROVEMENT
- MISE À JOUR DES RECOMMANDATIONS EN SALLE D'OPÉRATION
- NORMES SALLE D'OP
- OPERATING ROOM MANAGEMENT
- PROCESS/LEAN MANAGEMENT

Perioperative Management/Medicine

- GENETICS IN PERI OPERATIVE PERIOD
- HANDS-ON PERIOPERATIVE ULTRASOUND
- HELP ANESTHESIOLOGISTS BECOME PERIOPERATIVE SPECIALISTS
- MODELS OF EFFECTIVE AND EFFICIENT PATIENT PERIOPERATIVE CARE
- PERIOPERATIVE FLUID AND ELECTROLYTE MANAGEMENT
- PERIOPERATIVE MANAGEMENT OF PT WITH SLEEP APNEA
- PERIOPERATIVE MANAGEMENT OF THE DIABETIC PATIENT
- PERIOPERATIVE MEDICINE

Teaching/Mentorship

- APPRENTISSAGE ET ENSEIGNEMENT
- ASSESSING TRAINEES
- EDUCATING TRAINEES
- EFFECTIVE TEACHING METHODS
- EFFECTIVE TEACHING SKILLS
- ENSEIGNEMENT AUX EXTERNES ET RÉSIDENTS - COMMENT S'Y PRENDRE, COMMENT RESTÉ MOTIVÉ
- HOW TO BE A BETTER TEACHER- FEEDBACK ETC.
- IMPROVEMENTS TO RESIDENT TEACHING
- INVOLVEMENT OF CANADIAN ANESTHESIOLOGISTS IN TEACHING OVERSEAS
- MENTORING YOUNGER ANESTHESIOLOGISTS
- MENTORSHIP
- OPTIMAL BEDSIDE TEACHING AND EFFECTIVE PROVISION OF FEEDBACK
- RESIDENT EVALUATION
- RESIDENT TEACHING
- RESIDENTS TEACHING PROGRAM, MINUSES IN PRESENT TIME
- TEACHING OF STUDENTS IN THE OR
- TEACHING RESIDENTS

Trauma

- ANESTHESIA FOR TRAUMA PATIENTS
- GUIDELINES VS REALITY IN THE MASSIVELY BLEEDING PATIENT
- PEDIATRIC TRAUMA LIFE SUPPORT
- TRAUMA
- TRAUMA ANESTHESIA
- TRAUMA PATIENT MANAGEMENT

VERBATIM CEPD TOPIC SUGGESTIONS (CONT'D)

Following is a listed of suggested topics for CAS CEPD offerings. As the suggestions have been grouped by broader topic areas. The responses are verbatim from the survey and have not been edited.

Pharmacology

- ANTIBIOTICS GUIDLINES
- CURRENT THOUGHTS IN CONTINUATION OF PATIENTS USUAL MEDS PREOP
- DRUG ERROR PREVENTION
- DRUG SHORTAGES
- DRUG SHORTAGES WHY AND HOW TO RESOLVE THE SITUATION
- MINIMIZING NARCOTICS IN ROUTINE CARE
- OPIOID MANAGEMENT
- PHARMACOECONOMICS
- UPDATE ON DRUG SHORTAGES IN CANADA & THE USA
- UPDATE ON STANDARD AND NEWER ANESTHETIC OR SEDATIVE DRUGS

Safety

- OCCUPATIONAL HAZARDS AND SAFETY IN THE OR ENVIRONMENT
- PATIENT SAFETY INITIATIVES (QUALITY ASSURANCE)
- PATIENT SAFETY
- SAFETY OF WORK ENVIRONMENT - IT ISN'T SAFE.

Other Topics

- ADDICTION ISSUES IN ANESTHESIA
- ADDITIVES TO SINGLE SHOT NERVE BLOCKS
- AHA GUIDELINES
- AIRWAY ISSUES INCLUDING CLOSED CLAIM CASES
- ALGORITHME PRÉ-OPÉRATEUR
- ANAESTHESIA FOR ECT'S
- ANAESTHESIA IMPACT IN EDUCATION: UNDERGRAD, CCM, EM
- ANESTHESIA AND SURGICAL OUTCOMES
- ANESTHESIA ASSISTANTS BENEFITS FOR INCREASED EFFECIENCY IN MOR
- ANESTHESIA EQUIPMENT REVIEWS RECOMMENDATIONS
- ANESTHESIA ISSUES IN REGIONAL HOSPITAL
- ANESTHESIA WITH AS FEW ANAPHYLACTIC TRIGGERS AS POSSIBLE
- ANESTHESIA-RELATED CORONERS' REPORT
- APPROACH TO MECHANICAL VENTILATION IN THE PERI OPERATIVE PERIOD: DOES LUNG PROTECTION APPLY TO MY PATIENT
- ASA 4
- ASRA GUIDELINES
- ASSESSING AND MANAGING EPIDURAL ANALGESIA
- ASSISTANT EN ANESTHÉSIE
- AUTOMATION
- AWARENESS AVOIDANCE!!! IS THE BIS AS GOOD AS THE FULL EEG TO PREVENT IT?
- BARIATRIC MEDICINE
- BASIC SCIENCE REVIEW
- BEST PAPERS OF THE YEAR
- BLOOD CONSERVATION PROGRAM
- C SPINE STABILITY NON TRAUMA
- CASE STUDIES
- CHALLENGING AIRWAY SCENERIOS
- CHOC ANAPHYLACTIQUE
- CODE ORANGE-DISASTER PLANNING
- COGNITIVE DECLINE AND ANESTHESIA

VERBATIM CEPD TOPIC SUGGESTIONS (CONT'D)

Following is a listed of suggested topics for CAS CEPD offerings. As the suggestions have been grouped by broader topic areas. The responses are verbatim from the survey and have not been edited.

Other Topics

- COGNITIVE PROBLEMS FOLLOWING ANESTHESIA
- COILING OF CEREBRAL ANEURYSM-ANESTHETIC ISSUES
- COMMENT BIEN INTERPRÉTER UNE ÉTUDE CLINIQUE, INCLUANT MÉTHODE STATISTIQUE
- COMMERCIAL INFLUENCE AND PATENT EFFECTS ON SAFE MONITORING
- COMPLEX SPINE SURGERY ANESTHESIA
- CONTROVERSIES (ANY) AND OVERCOMING OLD WIVES TALES
- COST BENEFIT ANALYSES OF NEW THERAPIES
- COST EFFECTIVENESS OF VACCINATION - DO WE REALLY NEED FLU VACCINE
- CREDENTIALING: SUBSPECIALTY, PROCEDURAL (EG. TEE, TCD, ETC.)
- CUTTING BACK ON WORK SCHEDULE
- DEALING WITH ADVERSE EVENT REPORTS
- DO WE STILL NEED SPECIALIST ANESTHETISTS OUTSIDE TERTIARY CARE CENTRES? WHY?
- DOES ET/CO2 MONITORING IN SEDATED PATIENTS AFFECT OUTCOMES SIGNIFICANTLY?
- ECG CHANGES INTRA-OPERATIVELY---SIGNIFICANCE
- EDUCATING THE PUBLIC ABOUT ANAESTHESIA ISSUES
- EDUCATION
- ELECTRONIC ANESTHETIC RECORDS
- ENCÉPHALOPATHIE À PRIONS ET ANESTHÉSIE .
- ENVIRONMENT AND ANESTHESIA
- ERAS
- EVIDENCE AROUND INFECTION CONTROL PRACTICES IN THE ANAESTHESIA ENVIRONMENT
- EVIDENCE BASED MEDICINE
- EVIDENCE BASED PREOP TESTING
- FATIGUE AND PERFORMANCE
- FATIGUE IN THE WORKPLACE
- FLUID ADMINISTRATION AND MANAGEMENT
- FLUID MANAGEMENT COLLOID VS CRYSTALLOID
- FUNDING HEALTH SYSTEM
- FUTURE OF EDUCATION IN ANESTHESIA
- FUTURE OF HEALTH CARE IN CANADA
- FUTURE OF OUR SPECIALTY (E.G. ALTERNATE CARE PROVIDERS, ACADEMIC ROLE)
- GENERATION DIFFERENCES
- GOAL DIRECTED FLUID THERAPY
- GREENING THE OR ENVIRONMENT
- GUIDE LINES FOR HOSPITALS TO PROVIDE ANESTHESIA ASSISTANTS
- GUIDE PRATIQUES
- HEALTH POLITICS
- HEPATIC DYSFUNCTION
- INFECTION CONTROL - IS THE HAND WASHING REALLY WORTH IT
- INTERPRETING RESEARCH - NNT AND NNH
- INTERPROFESSIONAL KNOWLEDGE TRANSFER
- INTERPROVINCIAL COMPARISONS (AND INTERNATIONAL)
- INTRAOPERATIVE TEE DIAGNOSIS OF HEMODYNAMIC INSTABILITY
- IT , CHARTING AND ANESTHESIOLOGY . ANY GOOD ?
- IV SEDATION FOR ENDOSCOPY
- KEEPING ABREAST OF RADIOLOGY/IMAGING
- MAINTAINING STERILITY FOR OUR PROCEDURES (REGIONAL ANESTHESIA, LINES)
- MAINTAINING COMPETENCE AT LOW VOLUME HIGH INTENSITY CARE CENTERS
- MANAGEMENT OF ANESTHETIC AGENTS VENTED OUTDOORS THROUGH DEDICATED SCAVENGING SYSTEM
- MANPOWER SUPPLY AND DEMAND
- MEDICAL EDUCATION
- MEDICAL EDUCATION - COMPETENCE BASED EDUCATION
- MEDICAL MALPRACTICE
- MEDICOLEGAL RIGHTS OF ANESTHESIOLOGISTS' IN EVOLVING CORPORATE HEALTH CARE STRUCTURES

VERBATIM CEPD TOPIC SUGGESTIONS (CONT'D)

Following is a listed of suggested topics for CAS CEPD offerings. As the suggestions have been grouped by broader topic areas. The responses are verbatim from the survey and have not been edited.

Other Topics

- MÉMORISATION EN ANESTHÉSIE ET CHOC POST TRAUMATIQUE.
- MINDFULNESS IN ANESTHESIA PRACTICE
- MONITORING DU DÉBUT CARDIAQUE -ET DE LA VOLEMIE .(DOPPLER ŒSOPHAGIEN)
- MONITORING NEURO
- MORE PRESENTATIONS/COLLABORATION WITH SURGEONS AND INTERNISTS
- MORTALITYANDMORBITY MEETINGS
- NASAL INTUBATION
- NERVE INJURIES FROM REGIONAL ANESTHESIA
- NEUROANESTHESIA
- NEURODEVELOPMENT
- NEW TECHNOLOGY
- NGO'S IN NEED OF ANESTHESIA SKILLS
- NON INVASIVE CARDIAC MONITORS
- NON-INVASIVE CARDIAC OUTPUT MONITORING
- NON-INVASIVE MONITORING
- ON CALL HOURS
- OPTIMAL MODELS OF ANESTHESIA DELIVERY (HEALTH SERVICES RESEARCH)
- OPTIMIZATION OF HEMODYNAMICS
- OPTIONS FOR WORK AFTER RETIREMENT FROM FULL TIME PRACTISE
- OTHER END OF SPECTRUM FROM GRAYING... DEALING WITH MILLENNIAL / GEN Y PATIENTS AND /OR TRAINEES.
- OUTCOME BASED ANESTHESIA CARE
- OUTCOMES WHEN USING REGOINAL ANESTHESIA VOR ANESTHESIA VERSUS GENERAL ANESTHESIA
- OUTPATIENT KETAMINE INFULSIONS
- OUTPATIENT SPINAL ANESTHESIA: A REFRESHER
- PACU MANAGEMENT OF PROBLEMS
- PATIENT POSITIONING ISSUES/COMPLICATIONS
- PATIENTS WITH SPINAL CORD INJURY
- PATTERN RECOGNITION AND CRITICAL INTERVENTION INCLUDING SOUND AND SMELL
- PENURIE DES MEDICAMENT
- PLUS DE PROGRAMME DE DÉVELOPPENT EN EMC
- POST DISCHARGE PROBLEMS FOR OUTPATIENT SURGERY
- POTENTIAL HARMS OF ROUTINE ANESTHESIA CARE
- PRE-OPERATIVE ASSESSMENT
- PREASSESSMENT CLINICS
- PREOP ASSESSMENT IDEALLY BY THE SPECIFIC ANESTHETIST PLUS FOLLOWUP BY THE ANESTHETIST
- PREOPERATIVE ASSESSMENT: PRO CON DEBATE
- PROBLEM ROUNDS
- PRODUCTION PRESSURE
- PUBLIC RELATIONS-TO EDUCATE THE GENERAL PUBLIC ABOUT THE GREAT KNOWLEDGE AND CONCERN FOR PATIENTS THAT AN ANESTHESIOLOGIST MUST HAVE.E.G. TALKING TO A PHD CANDIDATE--HE DID NOT KNOW THAT IN CANADA AN ANESTHETIST MUST BE AN M.D. BEFORE 4 OR5 YEARS OF SPEC
- QUALITY CONTROL IN ANESTHESIA
- QUALITY IMPROVEMENT AND MEASUREMENT
- REAL SIMULATIONS - CRM
- RECOVERY AND RECYCLING OF FLUORINATED ANESTHETICS OTHERWISE LOST TO THE ATMOSPHERE
- RESEARCH METHODOLOGY
- RESPONDING TO NEUROMONITORING CHANGES
- REVIEW OF ENDOCRINE SECRETING NEOPLASMS EG PHEOCHROMOCYTOMA, INSULINOMA ETC
- ROBOTIC SURGERY, HOW SAFE?
- ROLE OF ANESTHESIA ASSISTANTS
- ROLE OF ANESTHESIA IN LEADING HEALTH CARE DELIVERY
- SEDATION FOR PROCEDURES IN HOSPITAL
- SIMULATION

VERBATIM CEPD TOPIC SUGGESTIONS (CONT'D)

Following is a listed of suggested topics for CAS CEPD offerings. As the suggestions have been grouped by broader topic areas. The responses are verbatim from the survey and have not been edited.

Other Topics

- SIMULATION FOR ANESTHESIA CRISIS MANAGEMENT
- SPINAL AND EPIDURAL ANESTHESIA
- SPINAL ANESTHESIA AFTER EPIDURAL ANALGESIA
- STRATEGIES TO MINIMISE POST OP CONFUSION
- SUPRAGLOTTIC AIRWAYS CAN THEY REPLACE ENDOTRACHEAL TUBES
- TEE
- TEMPS INTERCAS AU BLOC OPERATOIRE
- THE AGING ANESTHETIST
- THE FUTILITY OF PROTECTING THE BRAIN
- THE LACK OF LITERATURE ON THE COGNITIVE STATE OF THE PERI-OPERATIVE PATIENT
- THE ROLE OF THE ANESTHESIA ASSISTANT
- THORACIC ANESTHESIA
- THORACICS
- TIVA
- TOP 10 PHARMACOLOGY PAPERS OF THE YEAR
- TOPICS RELEVANT TO COMMUNITY HOSPITAL PRACTICE E.G. COMMON ERRORS OR PROBLEMS
- TTE
- TTE FOR NON CARDIAC CASES
- UPDATE IN SURGICAL SPECIALITIES THAT MAY INFLUENCE FUTURE ANES PRACTICE
- UPDATE MALIGNANT HYPERTHERMIA
- UPDATES ON CARDIOLOGY/CARDIAC ASSESMENTS
- UPDATES ON INTERNAL MEDICINE IN GENERAL
- UPDATES ON NEWER REGIONAL AND SPECIFIC NERVE BLOCK PROCEDURES
- US VASCULAR ACCESS
- USE OF LMA FOR RECOVERY AFTER A PATIENT HAD BEEN INTUBATED FOR SURGERY
- USING ELECTRONIC DEVICES EFFECTIVELY (TABLETS, SMART PHONES ETC) AT THE BED SIDE AND IN THE OR
- USRA
- VETERINARY ANESTHESIA
- WHAT'S NEW IN MEDICAL SUB SPECIALTIES THAT MAY INFLUENCE FUTURE ANES PRACTICE
- WORK UP FOR CLINICAL RESEARCH PROJECT