Using the Delphi process to conduct a needs assessment in the Department of Anesthesia & Perioperative Medicine

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Conflict of Interest Disclosures

Dr. Valerie Schulz, Michael Brock, and Andrea Good

- We have not had in the past 3 years, a financial interest, arrangement or affiliation with one or more organizations that could be perceived as a direct or indirect conflict of interest in the content of this presentation.
Learning Objectives

Following today’s presentation attendees should be able to:

1. Summarize the approach taken to identify and quantify perceived and unperceived areas of need within the department of Anesthesia & Perioperative Medicine

2. Identify topics well-suited for a personal learning plan from among the priority topics ascertained from this initiative.

3. Describe how to develop education from the identified learning needs.
“A Night on call”

- Faculty retreat identified a desire for additional professional development opportunities.
- CPD, Schulich school of Medicine & Dentistry, Western University – Needs assessment
- Expert by day, generalist by night
Overarching Project Goals

‘A night on-call’

Report Identified educational needs of Anesthesia & Perioperative Medicine faculty based on:

1. Expert opinion
2. Learner self-reports

Next Steps – an approach for developing education.
Needs Assessment Phases

- **Phase 1**: Educational topics for “*A Night On-Call*”
- **Phase 2**: Online Delphi of Anesthesiology experts
- **Phase 3**: Online survey for all Anesthesiology faculty
- **Phase 4**: Deliver personalized reports to all participants highlighting topics of strength, and topics where educational opportunities exist.
Phase 1

- **Methodology**: Committee meeting with subspecialty experts (faculty/educators) in the department of Anesthesia & Perioperative Medicine

- **Outcomes**: A finalized list of 36 topics (formatted as learning objectives) for the surveys to follow.

- **Theme**: “A Night On-Call”
**Phase 2**

**Methodology:** 2-round Delphi survey of sub-clinical experts (N = 10) on the 36 Topics previously identified (*In Phase 1*).

**Outcomes:**
Expert Delphi: Topics scored on *expected* ability of faculty members

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Ex.

![Diagram showing ability to communicate effectively within a team-based setting]
Phase 3

Methodology: Qualtrics survey for faculty members (N = 34) on the 36 Topics previously identified

Outcomes:
Self-reported for ability, desire to learn, and frequency of clinical encounters for each topic.

Ex.

<table>
<thead>
<tr>
<th>No ability</th>
<th>End of Residency</th>
<th>Mastery</th>
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<tbody>
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Survey Methods

Comparisons between surveys allowed for prioritization of educational needs with regards to the 36 topics.
Realize your role following a Significant complication (or death)  
Employ point of care ultrasound (POCUS) to enhance patient care  
Manage the "can't intubate, can't ventilate" scenario

Additional interesting results:

- Obstetrical topics were deemed low in educational gap and desire to learn. Existing educational efforts may be sufficient and effective?
- Topics that suit simulation-based education were highly desired (i.e. Emergency scenarios)
Individualized Learner Reports

- All results are dependent on average Expert scores and average peer scores.
- Strength: Value > +0.5SD of Peer average
- Opportunity: Value > -0.5 SD of Peer **OR** Expert average.
- Priority Opportunity: Value > -1.0 SD of Peer **AND** expert averages.
Individualized Learner Reports

- Visualizes how the learners self-reported abilities compare to their peers and the expectations of the experts.
- Can aid in the development of personalized learning plans, and potentially self-assessment opportunities (Section-3 credits) if reviewed alongside peers.
Individualized Learner Report - Data

- 18 Faculty Members desired a report to be generated.

- The topics with the greatest frequency of Priority Opportunity for ‘A Night On-Call’
  - Insert a cardiac pacemaker [8/18]
  - Perform pre-op/intra-op transesophageal echocardiogram (TEE) monitoring (e.g. For hemodynamically unstable patients [7/18]
  - Employ POCUS [5/18]
  - Manage obstetrical hemorrhage [5/18]
Can I still participate?

https://uwo.eu.qualtrics.com/jfe/form/SV_bscrdb1jfkoyMzX
12 priority topics identified

Targeted Education

Resident Rounds

Perceived benefit
(If additional educational opportunities were made available)
Themes identified

Patient Management skills

‘A night on-call’

3. Integrate Crisis Resource Management principals and practice during emergencies

7. Demonstrate an understanding of your role in procedures (e.g. Disclosure, Notification, AEMS, QCIPA, etc.) following a significant complication or death involving a patient under your care
Themes identified

Anaesthetic Techniques

‘A night on-call’

8. Employ point of care ultrasound (POCUS) to enhance patient care

9. Perform pre-op/intra-op transesophageal echocardiogram (TEE) monitoring (e.g. For hemodynamically unstable patients)
13. Manage the "can't intubate, can't ventilate" scenario
14. Recognize and manage local anesthetic toxicity
15. Recognize and manage anaphylaxis
16. Identify and manage Malignant Hyperthermia
17. Assess and manage elevated Intracranial pressure
18. Provide ACLS care within pre-op, intra-op and post-op settings
20. Manage obstetrical hemorrhage
21. Manage vascular emergencies (e.g. Aortic rupture)
So - what’s the next step?

With educational needs identified the next logical step is:

Development of targeted education
8300 - How to Get Promoted - For Clinical Academics at the Assistant Professor Rank

Format: Workshop
Continuing Professional Development

Course Description

Whether you are up for promotion next year or in five years, in order to be successful, it is important to be aware of the University requirements for promotion and the granting of continuing appointments. Clinical academics can benefit from this practical workshop, which will provide guidance on preparing teaching dossiers, promoting dossiers, and presenting your case.

What You Will Learn
- Highlight the new conditions of appointment & the guidelines for promotion;
- Describe the opportunities for promotion based on your current or planned activities (Academic Role Categories - ARC);

REGISTER - SELECT A SECTION TO ENROLL IN

8300 - 001  Fall/Winter  2018/19  Workshop

Available

Register Now

Type: Workshop
Days: W
Time: 4:30PM to 7:00PM
Dates: Jan 30, 2019
Schedule: View Details
Total Hours: 2.2
Role of Inhaled Therapies in Stable COPD

Waiting Room

You have three patients in your waiting room. Each of these vignettes will be more closely examined at the end of the module. For now, please take a moment to think about how you might approach the management of each case.

Click on the (+) images to display a brief description of each patient.

Jim
Rebecca
Janice
Jim, a 54 year old man, reports to your clinic. Jim is a new patient who recently moved to your area. In your initial questioning and chart review you learn he is relatively healthy with no major complaints and has a BMI of 21. You also learn he is a long-time smoker averaging one pack per day for the last 25 years. You inquire to his level of physical activity and learn he used to enjoy nightly walks with his wife but has gradually stopped over the last year because he finds himself out of breath and unable to keep up with her along the hilly path. "Not in as good a shape as I used to be I guess", Jim says.

Considering his reduced exercise tolerance and history of smoking you run through the COPD Assessment Test and perform a spirometric assessment. His spirometry returns a post-bronchodilator FEV1 of 74% predicted and a FEV1/FVC ratio of 0.64. His CAT score was 14.

What other than smoking cessation what would you recommend for Jim considering the results of the TIO-COPD study?

- No treatment is necessary
- Dual bronchodilator with a LABA-LAMA FDC
- A long acting bronchodilator

Jim’s spirometric results indicate he has fairly mild airflow obstruction and would be classified as GOLD stage 2 COPD [2]. It is estimated that mild COPD patients (GOLD stage 1 or 2) make up about 70% of the total COPD cases, and unfortunately, many of them will go completely undiagnosed until their disease progresses and noticeable symptoms manifest [5]. The TIO-COPD study, working with patients with mild disease, found that treatment with a LAMA (lontopium) resulted in a higher FEV1 at the end of the study and reduced the decline in FEV1 compared to values seen in patients in the placebo group [5]. While it is still unknown whether or not earlier treatment truly modifies the long term course of COPD, providing treatment that helps to maintain lung function and prevents exacerbations in these patients is clinically meaningful.

Initiation of a dual bronchodilator for patients like Jim is not currently recommended by either the GTS or GOLD, both of which advocate for a "step-up" approach to therapies [1,2]. This means that a patient would be started on a single therapy, either a LABA or LAMA and monitored. If symptoms are not adequately controlled a second agent can be added, likely whichever agent was not used as monotherapy. Finally patients with severe disease can be put on triple inhaled therapies consisting of a LABA-LAMA-ICS combination [1,2]. If Jim were to return to your clinic complaining of worsening symptoms while maintained on a long acting bronchodilator, it would then be time to consider dual bronchodilator therapy.

Correlli

It has been debated whether or not patients with mild disease even need treatment. The TIO-COPD study, working with patients with mild disease, found that treatment with a LAMA (lontopium) resulted in a higher FEV1 at the end of the study and reduced the decline in FEV1 compared to values seen in patients in the placebo group [5]. Further, the total number of patients experiencing exacerbations and the time to first exacerbation were both improved following long-term treatment with a LAMA [5]. These are clinically important benefits and these patients, once identified, should receiving long acting treatment.
CPD’s Services and Process

Needs Identification
- Outcomes from the Needs assessment

Develop Learning Objectives
- Engagement of Faculty leads for objectives

Determine Method of Education
- Simulation
- Online module
- Rounds

CPD office support
- Section 3 accreditation
- Online hosting
- Registration/attendance certificates
Faculty leads

• Looking to connect with those of you who are interested
• Content experts – You stay with your content
• We can frame your education to:
  • Ensure it follows the right pedagogy
  • Align your content with instruction method to target desired outcomes
What’s in it for me?

• **Promotion**: Strengthen your teaching dossier & promotion packages through developing education as a collaborative project with us.

• **We are cost recovery** – Registration, Industry sponsorship, etc.

• **Advertising** – Hosting your content & expanding it’s reach
Get in touch

If you are interested in collaborating, contact Andrea Good and specify:

– The topic in which you have content expertise;
– How would you prefer we contact you?
– Available dates & times to meet

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