

# Do Continuing Medical Education events cover the content physicians want to know? A content analysis of CME offerings

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## Background

- Continuing Medical Education (CME) is an integral component of the life-long learning activities of healthcare workers
- A popular means of CME delivery is via the annual refresher course
- Refresher courses represent large time commitments where satisfaction and expectations of attendees are not always met
- A core reason expectations are not met is the inability to identify specific learning needs that address the attendees appropriate knowledge gaps
- Standard ways to identify needs such as surveys often have poor response rates, internal biases and tend to over-represent topical subject matter

## Objectives

- To assess whether annual refresher course curriculum offerings match the needs of physicians by coding and comparing refresher course syllabi to physician questions that were collected electronically at the point of care

## Methods

Syllabi of CME annual refresher courses aimed at family physicians practicing in Canada, from 2006, were requested from Canadian medical organizations such as universities and professional associations

➤ 26 syllabi were collected, 13 were discarded on the basis that they were too narrow in focus

➤ 625 sessions from the 13 different CME events were accounted for

➤ Sessions were coded by classifying topics by subject matter/organ system using the ICPC-2 classifying system

## Results

Table 1- ICPC-2 Classification

Organ System	Syllabi Titles Number (n)	CME Syllabi Titles Percent of Total (%)	Point of Care Questions Percent of Total (%)	Difference CME syllabi minus point of care (%)	Example of Syllabi Titles
<b>A – General</b>	127	20.3	32.1	-11.8	<i>Tips for Chronic pain management from the safety of your office</i> <i>Avian flu: Does it present a human health risk?</i> <i>Monitoring the side effects of statins</i> <i>Anaphylaxis, Don't panic!</i> <i>The vaccination schedule: learn how to use it!</i>
<b>B – Blood</b>	7	1.1	1.8	-0.7	<i>Gammopathies</i>
<b>D- Digestive</b>	21	3.4	6.0	-2.6	<i>What's new in Irritable Bowel Diagnosis and Treatment</i>
<b>F – Eye</b>	2	0.3	0.8	-0.5	<i>New Developments in the Treatment of Age-Related Macular Degeneration</i>
<b>H- Ear</b>	2	0.3	0.7	-0.4	<i>Otitis media- when to treat</i>
<b>K – Cardiac</b>	44	7.0	6.0	1	<i>Surgical Advances in the Treatment of the heart failure patient</i>
<b>L – Musculoskeletal</b>	24	3.8	7.2	-3.4	<i>How to refer discal hernias to neurosurgery: When should we?</i>
<b>N – Neurologic</b>	25	4.0	4.3	-0.3	<i>Migraine complications: How to recognize and prevent them</i>
<b>P – Psychiatric</b>	75	12.0	4.6	7.4	<i>Cognitive therapy for depression</i>
<b>R – Respiratory</b>	18	2.9	3.8	-0.9	<i>Asthma or COPD, what are they and does it matter which one?</i>
<b>S – Skin</b>	17	2.7	6.0	-3.3	<i>Diagnosis and Management of Benign Skin Lesions</i>
<b>T – Endocrine &amp; Metabolic</b>	37	5.9	6.4	-0.5	<i>Oral combination therapies - getting your diabetes to target</i>
<b>U – Urologic</b>	4	0.6	2.6	-2	<i>Treating Kidney stones</i>
<b>W – Pregnancy &amp; Contraception</b>	23	3.7	4.6	-0.9	<i>Modern contraceptive challenges</i>
<b>X – Female genital</b>	10	1.6	2.8	-1.2	<i>Breast cancer update: prevention, detection and treatment</i>
<b>Y – Male genital</b>	3	0.5	1.5	-1	<i>Do all vasectomy techniques have the same effectiveness? Referring a man for a vasectomy</i>
<b>Z – Social</b>	13	2.1	0.1	2	<i>Child Abuse and neglect: Children with special needs deserve special consideration</i>
<b>UNC - Unclassified</b>	173	27.7	8.6	19.1	<i>Teaching patients how to use the internet</i> <i>Stethoscopes and beyond (financial planning)</i> <i>Restoring workplace satisfaction and balance</i> <i>Has Publicly funded healthcare had its day?</i> <i>Carpe datum: putting personal health data into the hands of patients</i>
<b>Total</b>	625	100	100	0	

Table 2. Breakdown of syllabi by sub-categories for the General subcategory, compared to point of care questions

"General" subcategory	Code range	CME syllabi		Point of Care Questions		Difference in percentage per subcategory (CME - point of care) (%)
		Breakdown of 'General' category (n)	Breakdown of 'General' category (% total)	Breakdown of 'General' category (n)	Breakdown of 'General' category (% total)	
Symptoms/complaints	A1-A29	29	23%	105	16%	6%
Process	A30-A69	0	0%	0	0%	0%
Infections	A70-A78	18	14%	56	9%	5%
Neoplasms	A79	2	2%	3	0%	1%
Injuries	A80-A89	25	20%	138	22%	-8%
Congenital anomalies	A90	0	0%	10	2%	-2%
Other diagnoses	A91-A99	53	42%	325	51%	-15%
General total		127	100%	637	100%	

## Funding

- Undergraduate Research Opportunity Program, University of Ottawa
- Academy for Innovation in Medical Education, Ottawa

Table 3: Most frequent syllabi title codes by clinical problem (for problems making up ≥1% of titles coded)

ICPC code	Description	Number of Titles	% Total titles
UNC	Unclassified	173	27.7
A98	Health maintenance/prevention	25	4.0
A01	Abnormal result investigation NOS	17	2.7
P99	Concern/fear medical treatment	15	2.4
T90	Diabetes, non-insulin dependent	14	2.2
A85	Adverse effect medical agent	13	2.1
A99	General disease NOS	11	1.8
T93	Lipid disorder	9	1.4
R96	Asthma	8	1.3
K86	Hypertension Uncomplicated	8	1.3
P19	Drug Abuse	8	1.3
P76	Depressive disorder	7	1.1
<b>Total</b>			<b>49.3</b>

Table 4: Number of syllabi with focus on drug therapy

Point of Care Questions	Number (n)	Percent total questions (%)	Percent total questions (%)	Number (n)	Syllabi Title Categories
Drug prescribing and medication use	671	35.9	18.6	116	Clear focus on drug therapy
Not limited to, but may include drug prescribing as part of treatment	299	16.0	30.8	193	Likely includes drug therapy component during the presentation
Does not refer to a question of drug prescribing or treatment	901	48.2	50.6	316	Likely does not include drug therapy as a component of the presentation
Total of All Questions with likely drug /medication component	970	51.8	49.4	309	Total of All Titles with likely drug/medication component
Total questions	1871	100	100	625	Total questions

## Conclusions

- There was a considerable similarity between the distributions of both data sets across organ systems/medical subspecialties
- Our results, consistent with other studies, confirmed that musculoskeletal, cardiac, digestive and endocrine topics are among those most seen in the primary care setting
- Potentially **under-represented** subject matter in CME curriculum included: **musculoskeletal, skin, digestive and urologic**
- Potentially **over-represented** subject matter included: **psychiatry and mental health issues**
- A key finding from both data sets was that treatment, in particular with medication, comprised almost half of all titles and questions.** This suggests that presentations should always focus on covering therapeutic options for disease management