Trends in the Canadian Surgery Forum (CSF): analysis of the CSF program over the past decade

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SUMMARY

Numerous clinical and basic science–related innovations have been presented at the Canadian Surgery Forum (CSF). We sought to define changes in both the content and methodology of the CSF scientific program over the past decade. While the total volume of CSF abstract presentations has increased dramatically, the methodological quality has remained static, with few randomized trials and minimal prospective work. Although the majority of the scientific content is associated with urban university centres, the program also encourages content from community practices. Surgical education, hepatopancreatobiliary and bariatric content have increased substantially, but remain secondary to colorectal diseases.

The evolution of the Canadian Surgery Forum (CSF) over the past decade has been remarkable. More specifically, it reflects the increasing importance of subspecialty scientific content, relevant continuing medical education and improvements in care within both traditional and new subspecialty societies under the umbrella of the CSF itself. The scientific content within any national surgical congress provides an important commentary on the status and evolution of care within that given country. More specifically, it may act as a barometer of innovation as well as the quality of both clinic care and health care systems (i.e., regionalized care). These conferences and embedded scientific topics also stimulate new directions in clinical care, future research and, not uncommonly, an evaluation of one's own practice and/or hospital system upon returning home.

While the science behind any individual subspecialty topic tends to follow a "recognition–momentum–plateau" pattern,[1] the more relevant query for the CSF is the evolution of scientific content within the program itself. Changes in the scientific presentations reflect the increasing relevance of certain topics with a concurrent reduction in focus on others. These trends can be driven by technical developments, public health issues, reorganization of health systems and/or changing interests among new generations of surgeons.

Given the importance of understanding past progress and challenges to help define the future, we sought to define the volume, type and methodology of the scientific content within the CSF over the past decade. To this end, all scientific abstracts that were presented at the CSF (oral or poster) from 2004 to 2013 were independently reviewed by our group for topic/subspecialty volume, scientific content, methodology[2] and the geographical region of origin.

A total of 1214 scientific abstracts were presented in oral or poster format during the study interval (2004–2013). The total volume of presented abstracts per year increased significantly over time from a low of 107 in 2004 to a high of 195 in 2012 (Fig. 1). This clearly reflects an enhanced commitment of the CSF to original scientific contributions. It is also interesting to note that this increase in abstract volume correlates with a concurrent increase in overall conference attendance (538 attendees in 2004

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and 707 attendees in 2012). Although the geographic distribution of abstracts was consistent across years, it was not directly related to the population within a given province. More specifically, the mean (range) distribution was 49% (43%–60%) from Ontario, 18% (13%–21%) from Quebec, 10% (9%–11%) from Alberta, 8% (6%–12%) from British Columbia and 15% (4%–19%) from other provinces. Interestingly 9% of all abstracts were not directly affiliated with a University centre. Although this was consistent over time, it reflects the continued importance of community surgery perspectives that include advancing clinical care, human resource needs, resource limitations and a wide breadth of practice. This content must be encouraged and fostered moving forward.

The relative proportions among subspecialty topics were also consistent over the decade. Not surprisingly given the commonality of the topic across nearly all surgical subspecialties, colorectal diseases remained the dominant area of focus (mean 26%, range 18%–33%). Additional topics included surgical/medical education (mean 20%, range 8%–27%), thoracics (mean 10%, range 5%–13%), hepatopancreatobiliary (HPB; mean 9%, range 2%–15%), upper gastrointestinal (mean 8%, range 1%–10%), breast (mean 7%, range 4%–9%), bariatrics (mean 6%, range 1%–8%), trauma (mean 6%, range 1%–8%) and other areas (mean 8%). Three of these subspecialties displayed substantial growth in their scientific footprint: surgical/medical education (8% in 2004 v. 27% in 2012), HPB (2% in 2004 v. 15% in 2013) and bariatrics (1% in 2004 v. 10% in 2013) all dramatically increased the volume of their presentations (Fig. 2). This reflects the relatively new and momentum-building evolution of each of these subspecialties; to our knowledge, this is the first report of this finding across a large multisubspecialty meeting within surgery. Interestingly, only trauma-related topics showed a significant decrease in footprint over the decade (11% in 2004 v. 3% in 2013). Also not surprisingly, the majority (91%) of noneducation-based abstracts discussed clinical care.

In addition to the specific content of the abstract, methodological quality/type remains an important factor to both improve the quality of a surgical congress and to parlay these topics into subsequent improvements in actual clinical care. The quality of methodology among the CSF scientific abstracts was consistent across the study interval. The majority were retrospective (mean 76%, range 66%–81%), with an additional 12% each engaging in prospective and survey techniques. This finding reflects the continued need to strive for prospective studies and trials as a surgical community within Canada. It also has a clear and direct link to support from funding agencies and university departments. Despite the retrospective pattern of CSF studies, the median number of study participants across all projects was 895. This represents a relatively large average cohort and therefore greater potential relevance to our field.

The evolution of the scientific content within a national surgical congress is influenced by numerous factors. These include, but are not limited to, revolutionary antidogmatic concepts, persuasive speakers, dominant institutions, program committee viewpoints and general clinical patient issues.[3] In an ideal setting, the peer-reviewed abstract presentations mirror clinical needs for the improvement of patient care and increase in methodological quality as time progresses. Without a regular and objective rearview evaluation of our CSF, however, we will not be able to fine-tune our pathway forward.

In summary, the CSF program has dramatically increased in terms of the volume of scientific abstract presentations, but it has remained static in terms of methodology over the past decade. It has also observed a large

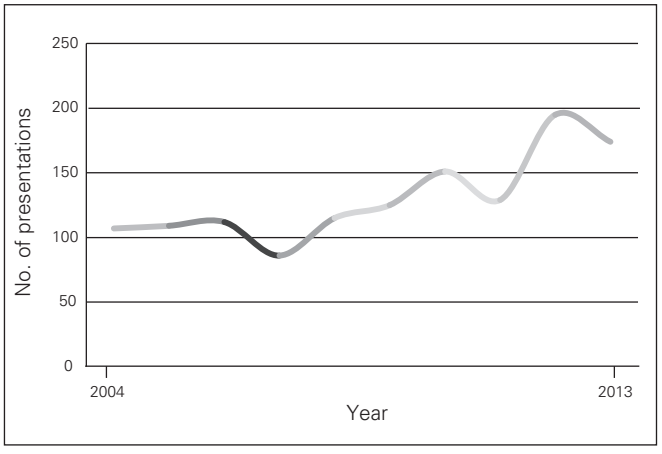

Fig. 1. Total number of Canadian Surgery Forum scientific abstract presentations from 2004 to 2013.

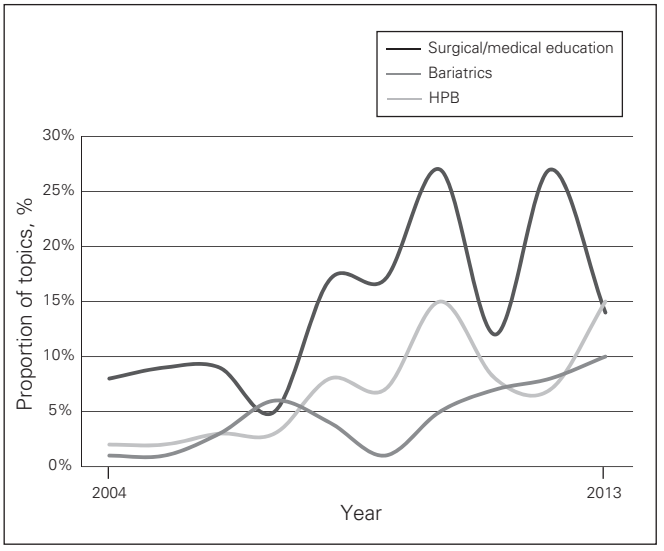

Fig. 2. Growth in subspecialty topics in the Canadian Surgery Forum program from 2004 to 2013. HPB = hepatopancreatobiliary.

growth in education, HPB and bariatric content footprints. As a national congress, we need to continue to encourage prospective subspecialty and relevant community-driven content.

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