In June 2001, a survey of the educational needs of the Canadian Association of Gastroenterology (CAG) membership was conducted. The purpose of the survey was to provide guidance to the Executive, as well as to the CAG Education Committee, with regard to areas of greatest educational need. As well, this needs assessment forms the first step toward accreditation of educational events according to the Royal College of Physicians and Surgeons of Canada accreditation criteria.

METHODS
The Education Committee consists of Drs Ford Bursey, Flavio Habal, Ronald Bridges and Connie Switzer. The survey was designed in association with Dr Vernon Curran, PhD, Faculty of Medicine, Centre for Collaborative Health Professional Education, Memorial University of Newfoundland, St John's, Newfoundland. The survey was similar to one conducted previously on the membership of the Canadian Cardiovascular Society. The data were compiled and analyzed at the CAG National Office by Sandra Daniels.

There were two sections in the survey. The first section collected basic demographic information, and the second questioned members on current versus desired knowledge in a number of specific areas and on other aspects of the Canadian Digestive Disease Week (CDDW) meeting.

It was decided to conduct a short, less comprehensive survey that might result in a higher return rate, rather than a longer, more comprehensive survey having a potentially smaller response rate.

RESULTS
Two hundred thirty-nine responses were analyzed. This represents approximately 33% of the membership of the CAG. While a 60% to 70% response rate would have been more desirable, this result is still sufficiently large to provide a valid picture of current educational needs.

Demographics: Of the respondents, 85% were men and 15% were women. The average respondent had been in practice for over 15 years. Over half of the respondents (61%) had a university affiliation.

The majority of respondents (approximately 40%) were from Ontario, and the rest of the responses were distributed by province, roughly in proportion to population. A response was also received from the Northwest Territories.

Almost three-quarters of the respondents were physicians. The remaining 25% was made up of roughly equal numbers of basic scientists, clinical scientists, surgeons, students, residents and fellows.

On average, 61% of CAG members’ time is spent in clinical gastroenterology. Ten per cent is spent practising internal medicine, 7% in teaching, 5% in administration, 7% each in clinical and basic science research, and 3% in other endeavours.

Respondents were asked to mark on a scale of 1 to 5 (1 = minimal, 5 = expert) their current knowledge of 26 separate areas in gastroenterology, and to mark beside it their desired level of knowledge.

Current knowledge: It appears that the study group was comfortable with their knowledge level in most areas, because the majority of current level scores were above 3 (Figure 1). Only eight were below a score of 3: administration for physicians, colonic motility, pregnancy and the gastrointestinal tract, transplantation, pediatric gastroenterology, office management, financial management and basic science in gastroenterology.

Desired knowledge: When the difference between current and desired level of knowledge was examined, the greatest gap (greater than 25% difference) was in the areas of financial management, nutrition, computer/Internet skills, admin-

Information and details for the 2002 Canadian Digestive Diseases Week meeting in Montreal, February 2 to 5, 2002, are available and regularly updated on the CAG Web site http://www.cag-acg.org
istration for medical doctors, gastrointestinal pharmacology, transplantation, disease prevention and office management (Figure 2). Conversely, the smallest gap (less than 10% difference) was seen for dyspepsia, Helicobacter pylori, upper gastrointestinal bleeding and irritable bowel syndrome.

**Attendance barriers:** The membership was asked about barriers to attending CAG educational events. The most common response was that there were no barriers (40%). The most common barrier was the amount of time required to attend the meeting (32%), followed by distance (17%), various miscellaneous reasons (16%) and meeting cost (13%). The timing of the CDDW was ranked as the smallest, discernable barrier to attendance (7%), suggesting that the time of the annual meeting is appropriate for many members.

**Learning formats:** The membership was asked to rank various learning formats, varying from least desirable (score = 1) to most desirable (score = 5). Most desirable was thought to be focused symposia (score = 4). Least desirable was an Internet chat with experts (score = 2.4). The rest of the formats, including The Canadian Journal of Gastroenterology, CAG mailouts, the postgraduate course, regional meetings, visiting lecturers and web-based lectures, were all in a similar range of satisfaction, generally around a score of 3 to 3.5.

**Desired most:** Members were asked what they wanted most from CAG educational events. The most common response was state-of-the-art lectures or some form of update (Figure 3). They wanted educational events to be practical and relevant to their practice. Maintenance of certification (MOCERT) credits were not ranked highly, nor were events based on controversies in gastrointestinal reviews. Meeting colleagues was not ranked particularly highly, nor was the development of consensus guidelines. As a result of the open nature of this question, 18% of respondents gave other comments that varied widely and thus could not be grouped into major categories.

**Top four topics:** The membership was asked to list up to four areas that they would like to see covered at the meeting. It is difficult to analyze these data because the responses were extremely variable. However, the most common responses were grouped into broad categories revealing certain patterns. The top four topics that the membership would like to see addressed, listed in order, are inflammatory bowel disease, hepatitis, gastrointestinal tract malignancy and nutrition (Figure 4).

**LIMITATIONS OF THE SURVEY**

We have heard from approximately one-third of the membership; conversely we have not heard from the remaining two-thirds. Given that 60% of the respondents have a university affiliation, it is likely that the results of this survey are biased toward hospital-based, urban, male, academic gastroenterologists. In future surveys, we will need to better...
Figure 2) Difference between current and desired level of knowledge of members of the Canadian Association of Gastroenterology. Admin Administration; GI Gastrointestinal; H.p. Helicobacter pylori; IBD Inflammatory bowel disease; IBS Irritable bowel syndrome; MDs Medical doctors

Figure 3) Items that are most desired from the Canadian Association of Gastroenterology educational events. CME Continuing medical education; MOC Maintenance of Certification
target community-based members outside the university setting.

Although we did ask our membership to rank 26 gastroenterology topics, many potential topics were not included. The membership did have an opportunity to suggest topics, but the absence of a topic from this list may have introduced some bias.

The comment section is difficult to analyze because it is in a free-flowing format.

Finally, a survey of this type represents the average response. The CAG is not a homogenous group. Within the CAG, there are sizeable numbers of people who have an interest in a particular area. We will need to analyze the data further to identify subgroups who have an interest in an educational event on a focused topic. It may be possible to deal with these issues through staging workshops with limited registration.

**SUMMARY**

The results of this survey have provided sufficient data to guide the CAG in the development of its educational programs. It is hoped that this will also be of interest to the pharmaceutical industry and perhaps encourage future targeted, cosponsored, accredited events for CAG members. Clearly, there is interest in some of the traditional educational topics such as inflammatory bowel disease and hepatitis. However, there is also a significant portion of the membership interested in areas that are not product-oriented, such as financial management and administration.

**THE MOVE FORWARD**

Based on this needs assessment, the Education Committee has tried to address at least some of the desires of the membership for the CDDW 2002 meeting. For example, in response to the request for pointed, state-of-the-art lectures while reducing time away from the office, CDDW 2002 will, as part of the program, provide a one-day postgraduate course. This course will provide members with an opportunity to get updates on a number of key areas over a one-day period. The Education Committee is also currently attempting to provide a symposium on administrative and financial matters around office-based endoscopy. CDDW 2002 will also include sessions on transplantation, hepatitis C, and gastrointestinal disease and pregnancy.

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