

Distance Education

CPL provides accredited continuing education opportunities to the approximately 530 physicians who practice in rural and regional areas of the province through a variety of distance education opportunities. The bulk of the physicians practicing in these areas are either general practitioners or family physicians. Historically, this education has been provided through District Medical Society Education Meetings located throughout the province. Since the fall of 2004, CPL has also partnered with Telehealth Saskatchewan to provide education via videoconferencing.

There are also a variety of online education sources that physicians can access for accredited education. One of these, MDcme, is a consortium of Canadian university continuing medical education offices that operates out of Memorial University in Newfoundland. CPL accessed the registration and completion data for MDcme courses under the Ethics Approval for the Revalidation Impact Study.

District Medical Society Education Meetings

At one point in time, there were over 30 health districts in which the District Medical Societies (DMSs) originated. Through various restructurings and consolidations these health districts became thirteen health regions in 2002. However, some of the original DMSs decided to continue to function as they had prior to the consolidation of the health districts. Therefore, there are some health regions that have more than one site for education programs. For ease of presentation and analysis, the DMS data was consolidated by health region.

The baseline data (2001 – 06) for the Revalidation Impact Study indicates that there were, on average, 5 DMS programs per site each year in both northern and southern Saskatchewan. The range of attendance is far broader in northern Saskatchewan (3 – 20) compared to southern Saskatchewan (8 – 11). The average attendance in both the north and the south per program between 2001 and 2006 was nine.

Although physicians were not required to report their 2007 attendance as part of their revalidation requirement, CPL chose to examine the 2007 data separately to determine if the act of joining a continuing professional development program influenced attendance at continuing education events.

Several changes in the 2007 DMS programming and attendance were noted. First of all, the average number of programs per site in northern Saskatchewan dropped from five to four. The average number of programs per site in southern Saskatchewan remained steady at 5. The reasons for the drop in the number of programs in the north are not clear but may reflect a decision by the northern DMSs to reduce the number of educational meetings or difficulties in recruiting faculty to travel outside of Saskatoon.

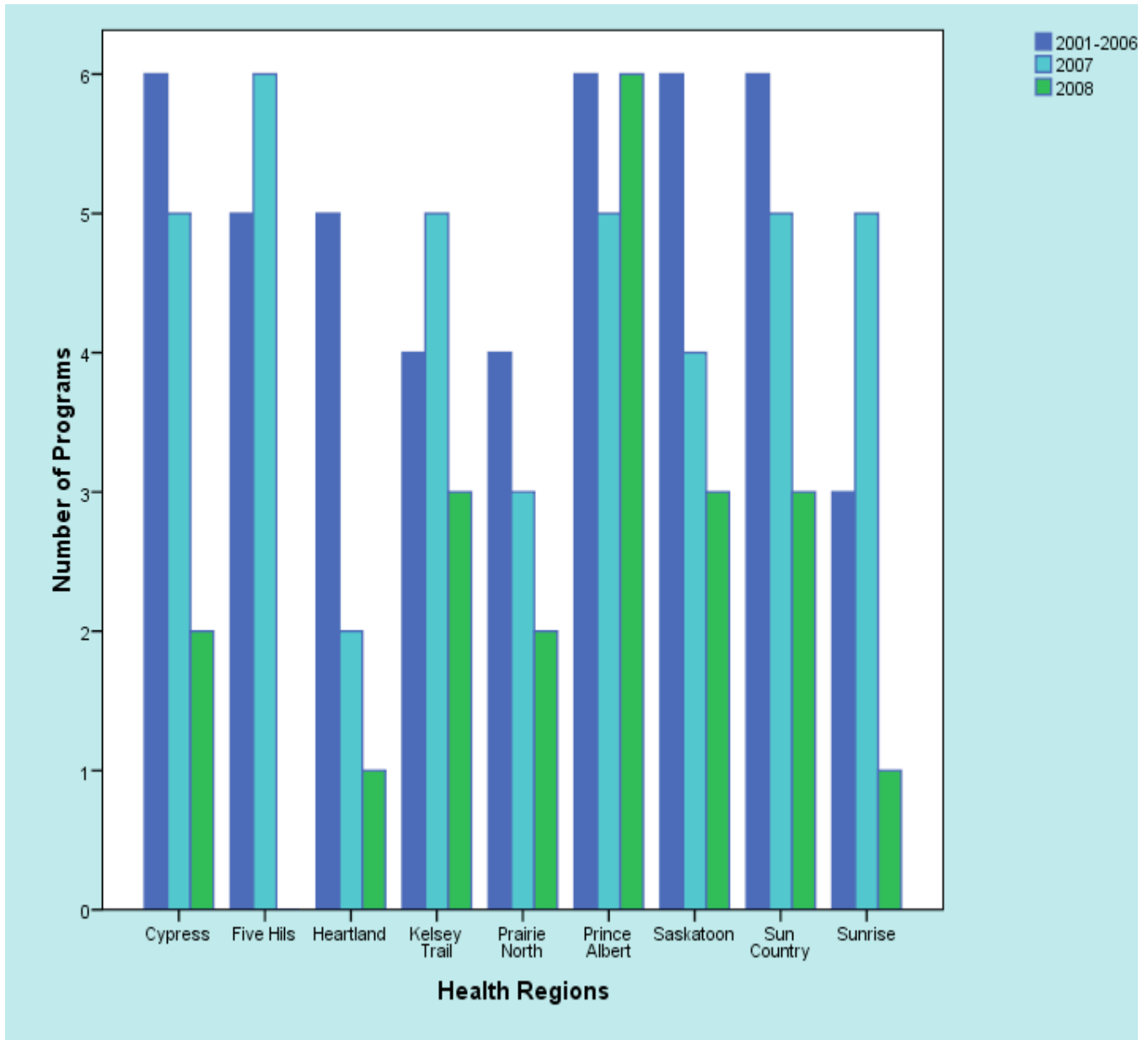
The second change was a drop in the average attendance at DMSs in northern Saskatchewan from 9 physicians per event to 7, with a range of 1 – 22 physicians in attendance. Southern Saskatchewan saw a slight increase in the average attendance with the number rising to 10 from 9 while the range of attendance was 8 - 14. Attendance changes such as these may be associated with factors such as the relevance of the content or weather so can not be directly attributed to revalidation.

During the first year of revalidation, 2008, the average number of programs offered in each northern site dropped to 3 with the average attendance rising to 10 physicians per program; the range in attendance was 4 - 30. In southern Saskatchewan, the average number of DMS programs dropped to 2 per site while the average attendance was maintained at 10 physicians per program with a range of 7 – 13 physicians in attendance.

Graph 1 provides information about the number of programs offered in each of the health regions during the time frame being studied. With the exception of the Prince Albert Parkland Health Region, there has been a decline in the number of DMSs over the past two years. This decline has been a gradual one in the northern health regions of the province while, in the south, there was a very dramatic drop in 2008. The reasons for the decline in the number of DMS programs in 2008 are, as they were in 2007, unclear.

The most notable decline in the number of programs occurred in Five Hills Health Region where there were no programs planned in 2008. This is a significant decline from the 2001 – 06 average of 5 or the 6 programs delivered in 2007. This would appear to indicate that the relationship between CPL and the Five Hills Health Region has undergone a significant deterioration.

Graph 1: Number of DMS Programs by Health Region



A further examination of the monthly DMS statistics reveals that 2 northern DMS sites with relatively low physician populations did not have any DMS programming in the fall of 2008. This is most likely due to challenges in scheduling the programs or decisions by the DMSs to not organize fall programs. In the case of the southern DMSs, there were no programs planned in any of the sites for the fall of 2008. This situation is most likely the result of staffing instability due to a maternity leave. Both of these factors would have contributed to the overall decline in the number of programs offered in 2008.

One might postulate that a decline in the number of programs offered at a site, particularly at a time when the acquisition of study credits has become mandatory for the maintenance of licensure, would be accompanied by an increased attendance. This has not, however, been the case. In fact, only Sun Country Health Region has shown a steady increase in their attendance. Interestingly, this increased attendance occurs more so in the Estevan programming than it does in the Weyburn programming.

As Graph 2 demonstrates, there have been fluctuations in attendance in all of the health regions with the majority of them demonstrating an upward movement from the 2001 – 06 baseline data to 2008. However, in addition to the situation in the Five Hills Health Region, both the Prince Albert Parkland Health Region and the Sunrise Health Region have experienced *declines* in attendance. Prince Albert Parkland Health Region has experienced a 20% drop in attendance over the 2001 – 06 average. Sunrise Health Region, which has previously experienced times when it did not participate in the DMS program, has shown a decline of nearly 40% between 2007 and 2008. Further investigation is obviously needed to determine the underlying causes of these declines but it is likely that they are caused by multiple factors.

The “raw” attendance for the DMSs can best be understood if it is put within the context of the SMA physician population for the health regions in which the education takes place. Since membership in the SMA is not mandatory, this population data may not exactly represent the total number of physicians in the health regions. Table 5 compares the 2008 average attendance in each of the health regions to the 2008 SMA population data. The two small DMSs that take place within the Saskatoon Health Region have been excluded from this table as only 30 of the 803 physicians in the region practice in rural locations.

This data, which is very similar to both the baseline data and the 2007 data, would suggest that the vast majority of the rural and regional physicians are not accessing the District Medical Society Education Meetings. The DMSs in southern Saskatchewan take place in regional centres so it is likely that the low percentage of attendance reflects the distances many of the physicians would need to travel in order to access the DMS Education Meetings. The DMS sites in the north tend to be smaller, more rural locations. However, the physicians still need to travel significant distances to access the education.

Graph 2: Average Attendance at DMSs by Health Region

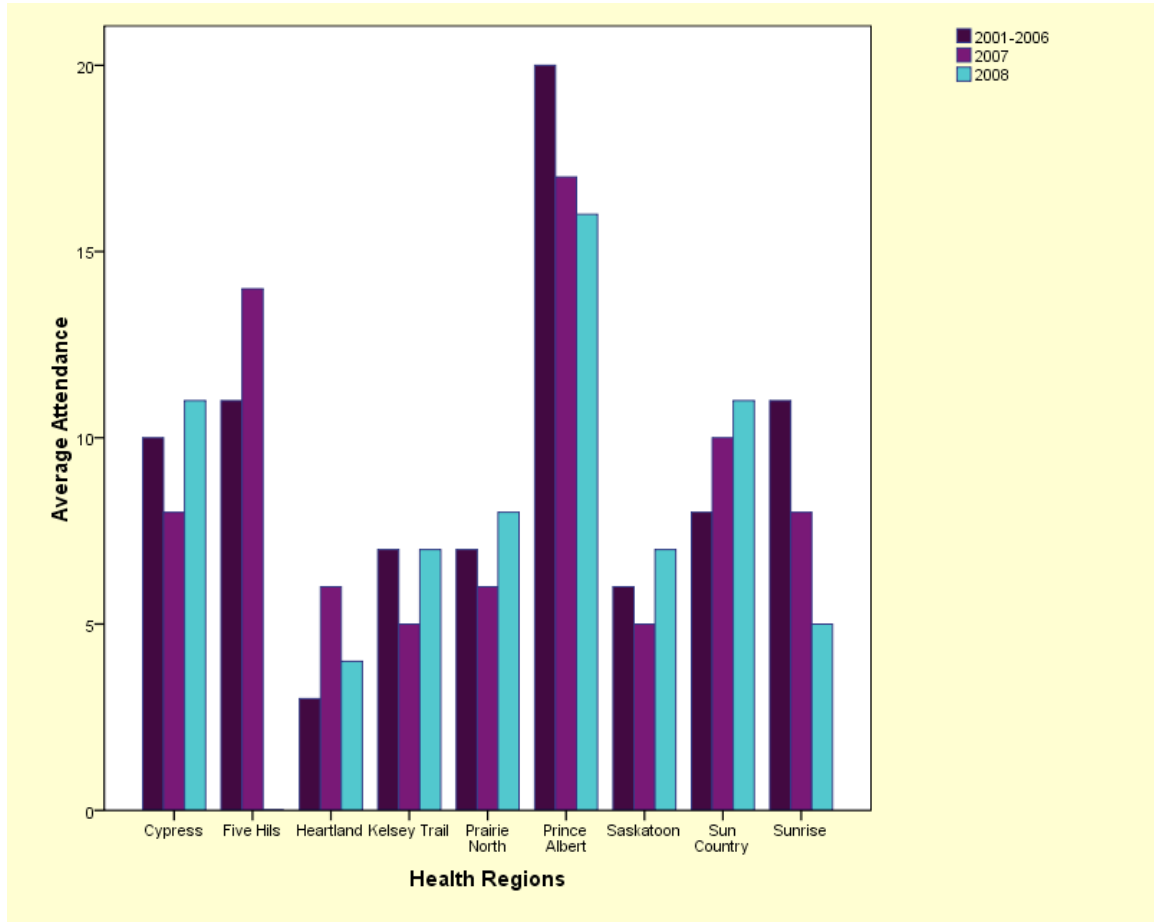


Table 5: Average DMS Attendance versus Population

Health Region	2008 Average Attendance	2008 SMA Population Data	Percentage Attendance
Cypress	11	49	22
Five Hills	0	63	0
Heartland	4	28	14
Kelsey Trail	7	37	19
Prairie North	8	105	8
Prince Albert	16	127	13
Sun Country	11	43	26
Sunrise	5	56	9

Videoconferenced Education Programs

Videoconferenced education programs typically originate from either Regina or Saskatoon with the rural physicians joining from a number of rural sites. Several originating from Moose Jaw were attempted, but this was not found to be as effective because of technical difficulties.

When videoconferenced education first began there were very few sites where physicians could access the programs. This has been changing very rapidly – particularly in southern Saskatchewan – where two health regions have made a strong commitment to multiple sites within each region. In the case of the Regina Qu'Appelle Health Region, this expansion resulted in 19 sites by 2007 with a 20th planned for 2008. Sun Country Health Region had 8 sites by 2007 with a plan to add 3 more in 2008.

Continuing Professional Learning initially viewed videoconferenced programs as “alternative” or “substitute” DMSs to be used when there was a topic that had provincial appeal or during the winter when road conditions were tend to be an issue. Therefore, the attendance data was initially recorded by the videoconference site – which tended to be the same sites as those in which DMS occurred.

As the number of sites in each health region has expanded, it has become clear that the videoconference attendance data is better understood when reported as attendance per event. The data for attendance at videoconferenced programs is provided in Graph 3.

The sharp rise in attendance in 2008 represents a 78% increase in the attendance at videoconferenced programs in 2008 versus the average attendance in 2004 – 06. The increased attendance at the videoconferenced programs is likely influenced by the increased number of sites which, in turn, allows physicians, to join without travelling as far as they had to in the past. Of course, the need for study credits combined with this easier access to the programs may also be an underlying factor in the increase.

Since there are videoconference sites in both Regina and Saskatoon, this attendance data includes urban physicians as well as rural and regional physicians. Given that there were 1772 physicians in Saskatchewan in 2008, this attendance represents 2% of the total physician population. If one assumes that the programs were attended by only general practitioners and family practice physicians, the percentage of the population in attendance at each event rises to 3%.

Graph 3: Average Attendance at Videoconferenced Program

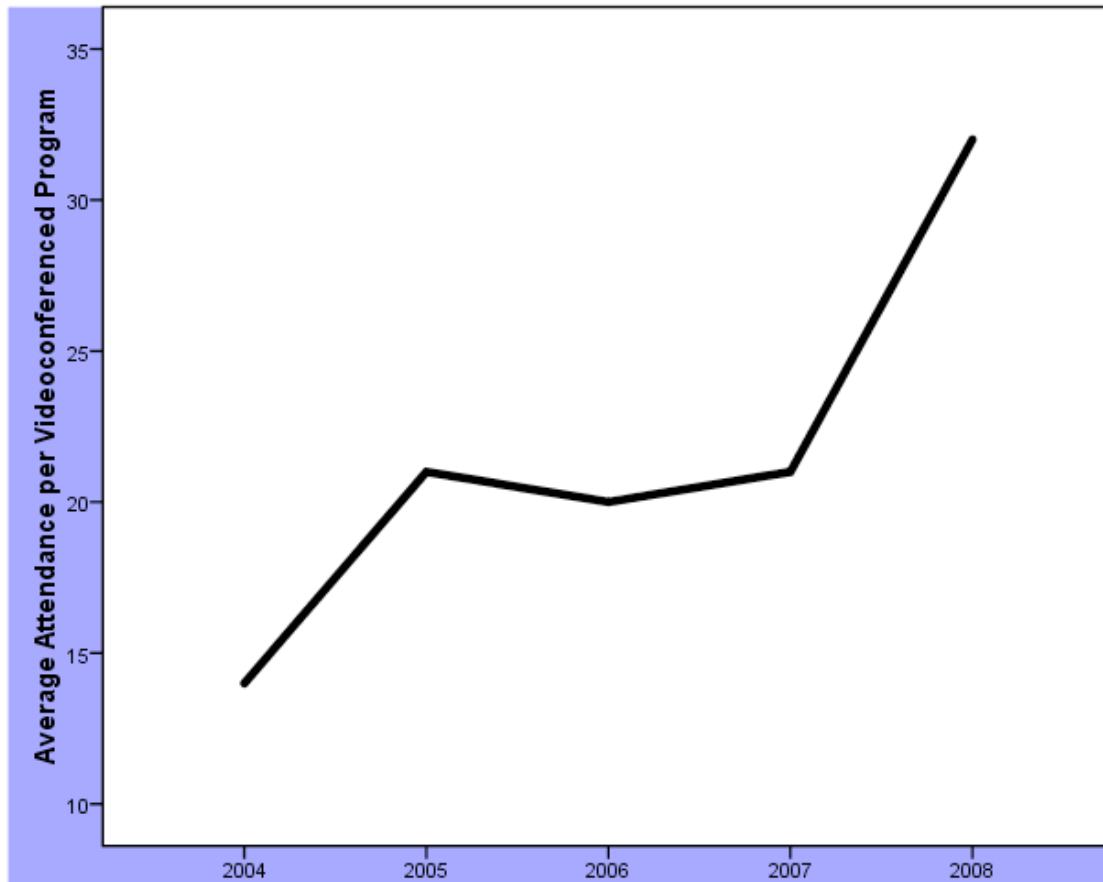


Table 6: Average Videoconference Attendance versus Population

Health Region	2008 Average Attendance	2008 SMA Population Data	Percentage Attendance
Cypress	1	49	2
Five Hills	2	63	3
Heartland	2	28	7
Kelsey Trail	4	37	11
Prairie North	7	105	7
Prince Albert	2	127	2
Sun Country	6	43	14
Sunrise	1	56	2

As Table 6 demonstrates, the average attendance at the videoconferences offered in 2008 by health region versus the population of the health regions indicates that the videoconferenced education is not being very well utilized in the majority of the health regions. Many factors will affect the utilization of the

videoconferenced programs. For example, some physicians do not like this educational format so they choose to attend other types of education. In still other cases, access to videoconferenced education may be limited by the availability of staff to operate the equipment.

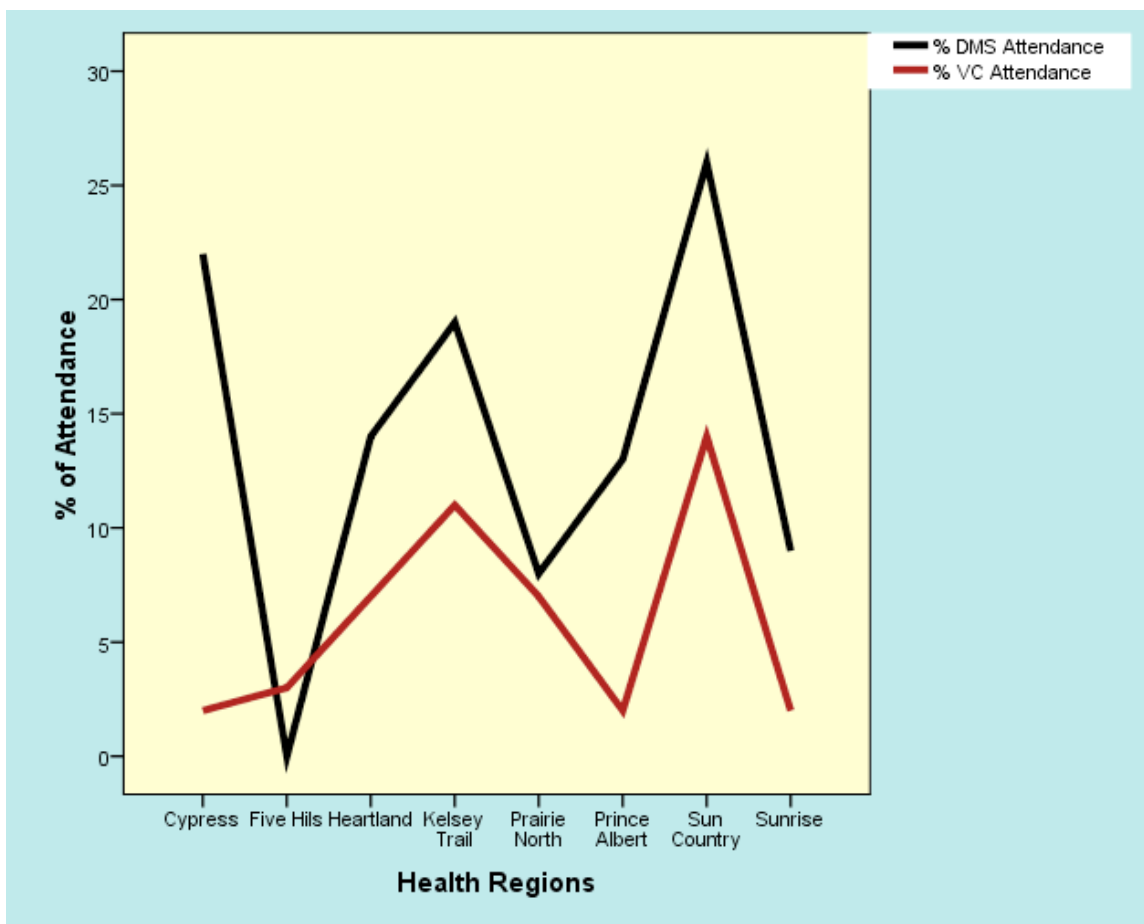
Sun Country Health Region, which has the highest percentage of attendance for DMSs, also has the highest percentage attendance for videoconferences. Kelsey Trail Health Region physicians also appear to engage in both forms of distance education. Interestingly, both of these health regions have a large number of rural videoconference sites so physicians would have to travel shorter distances or not at all to access videoconferenced education.

The Prince Albert Parkland and Cypress Health Region physicians appear to prefer the face-to-face DMS Education Meetings. However, in the case of the Cypress Health Region, this preference may have more to do with the lack of multiple videoconference sites than with a preference for face-to-face meetings. Since the bulk of the videoconference sites in the Prince Albert Parkland Health Region are located in Prince Albert, videoconferenced education is not readily available to the more rural areas of the health region.

Graph 4 provides a comparison of the attendance at District Medical Society Meetings and Videoconferenced Education Programs in 2008. Rather than using raw attendance data for the comparison, the attendance data was converted to the percentage of the population in attendance based on the SMA population data.

With the exception of the Five Hills Health Region, where there were no DMSs in 2008, the attendance at DMSs remains higher than the attendance at videoconferenced events. The attendance in Prairie North Health Region for both formats is approaching the same value. However, this is a health region in which DMSs take place in smaller rural areas while videoconferenced programs are available not only in these smaller communities but in two larger regional centres that do not have DMSs. This may partially explain the similarities in attendance at the two formats.

Graph 4: Percent of 2008 SMA Population in Attendance at DMSs and Videoconferences by Health Region



MDcme

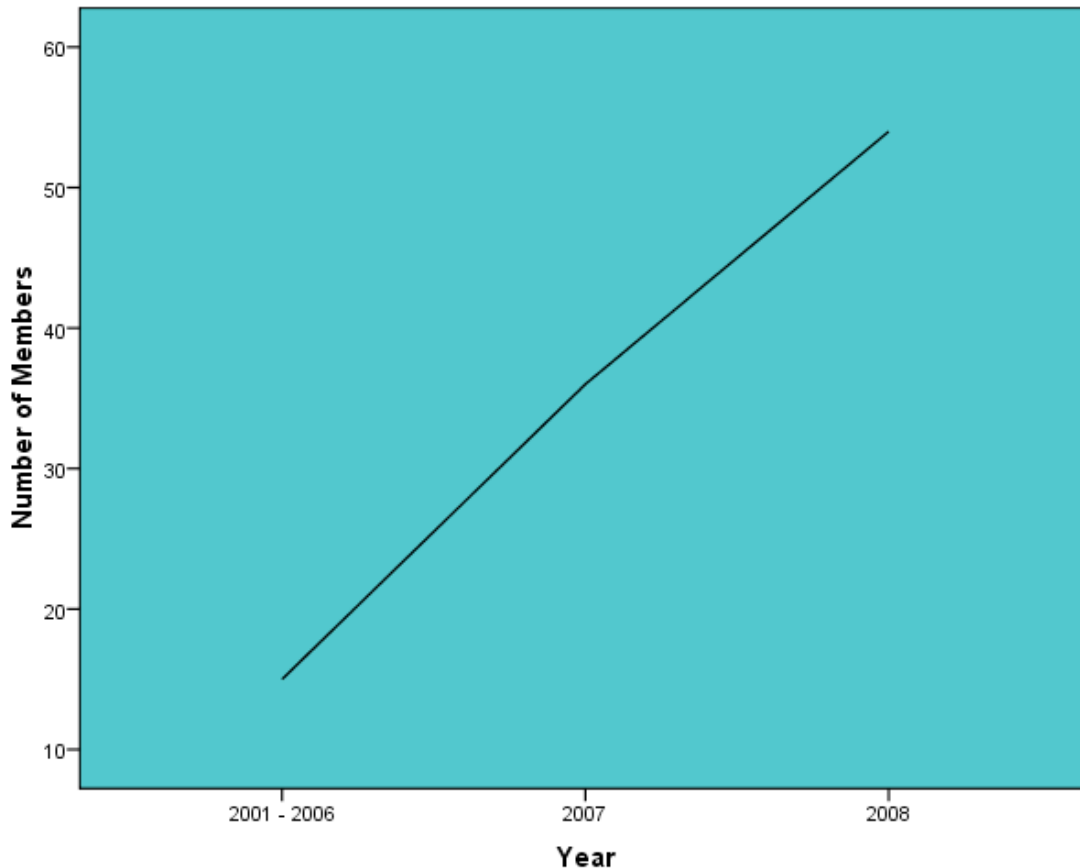
Continuing Professional Learning, along with the other 16 continuing medical education offices in Canada, is a member of the consortium that forms MDcme, Canada's eCME provider. These online courses are designed for general practitioners and family physicians and are accredited by the College of Family Physicians of Canada.

MDcme offers scheduled online courses which have a predetermined start and end date and facilitated small group forums. As well, they offer eCME on demand which are self-directed courses with asynchronous discussion boards.

The baseline data for MDcme was based on the registration data from its inception in 2002 to the end of 2006. Registration and completion information for both 2007 and 2008 were also obtained from MDcme.

Graph 6, below, provides an understanding of the increased participation in MDcme.

Graph 6: Usage of MDcme by Saskatchewan Physicians



During the start phase of MDcme there were, on average 15 Saskatchewan members. Then, in 2007, thirty-six Saskatchewan physicians (a 140% increase over the baseline average) enrolled in MDcme courses. This increase was most likely due to an increased awareness of MDcme as well as an expansion of their course offerings rather than the effects of revalidation.

By 2008, fifty-four Saskatchewan physicians were members of MDcme. This represents a 50% increase over 2007 and a 260% increase over the baseline average. It is possible that some of this increased participation could be attributed to revalidation but it is also likely that increased awareness of and comfort with online offerings are factors in this increase.

The membership data was analyzed for both gender and community location. This information is provided in Tables 7 and 8.

Table 7: Gender of MDcme Members

	Male	Female
2002 - 06	12 (80%)	3 (20%)
2007	15 (42%)	21 (58%)
2008	32 (60%)	22 (41%)

As Table 7 demonstrates, there has been a significant increase in the number of female members taking part in MDcme. The increase in male members, although not quite as dramatic, is also significant.

Table 8: Community Location of MDcme Members

	Rural (<10,000 or 80 km from closest Referral Centre)	Urban
2002 - 06	8	7
2007	12	24
2008	19	35

Although there has been a dramatic increase in the number of rural participants in MDcme, they still lag behind the urban members. Underlying causes of this could include workload or technological issues but further investigation would be required to identify or confirm the underlying causes.

Graph 7 provides information about the number of courses enrolled in and the number of courses completed. Although the completion rate has increased, it still remains low – 51% completion rate in 2008. MDcme has not conducted any research to determine the underlying causes of this low completion rate. However, they hypothesize that it is issues like not liking the format or running out of time that affect the completion of courses. Further investigation of this situation may be required.

The data provided by MDcme was also analyzed to determine the online learning activities of MDcme members. Interestingly, twenty-four percent of the 2008 members (13) registered for two or more online courses. Seven of these members identified themselves as rural participants. The course completion rates for the members who registered for two or more courses ranged from 0% (5 of the members) to 100% (4 of the members). Seventy-five percent of those with a 100% course completion rate self-identified as rural. One rural member completed 8 of the 9 courses registered for – the highest number of courses completed by a Saskatchewan member in 2008.

Graph 7: Number of MDcme Courses Enrolled In and Completed

