'Talk to Your Doc' - helping adolescents make health care transitions

Evaluation and design to extend the reach

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Executive Summary

Adolescents have problems with access to the healthcare system, developing an independent relationship with a doctor and taking an active role in their healthcare. They find it difficult to talk (with a doctor) about sensitive issues such as sexual problems, emotional and mental well being, or family problems, and they are concerned about confidentiality. These are observations from many reports and confirmed by our data from a needs assessment of high school students in Vancouver in 1999-2000.

University of British Columbia medical students have presented ‘Talk to Your Doc’ workshops in Vancouver high schools as a volunteer outreach since 1998. They show and talk about problems that arise from poor communication and engage the adolescents in small group discussions and role playing to address the five workshop objectives:
1. Sharing thoughts and opinions with your doctor;
2. Talking about sensitive and embarrassing issues;
3. Taking an active role in making decisions about your health;
4. Confidentiality between you and your doctor – how it works; and,
5. Establishing and maintaining an independent relationship with your doctor.
The Vancouver School Board considers the workshops a part of the curriculum to meet personal development objectives.

In the past 10 years 518 medical students have put on 188 workshops for 5005 high school students in 7 schools in Vancouver, 2 in Victoria and 1 in Prince George, British Columbia.

A decade of ‘satisfaction’ reports says the workshops are popular with the adolescents, their teachers and the medical students. However, we have not had rigorous data to show the effect. This study used Kirkpatrick’s classic model for evaluating training programs (Kirkpatrick, 1996) to examine three levels of effect on the adolescent learners: reactions (their feelings about, and satisfaction with, the workshop), learning (knowledge acquired, skills improved or attitudes changed) and behaviour change (does the learning affect the way they behave when they subsequently visit a doctor?). We also repeated the needs assessment with Grade 9 students

(toward the end of the school year) to check that the workshop objectives were still appropriate. The results showed that that the workshop objectives and content are relevant for Grade 9 students about to enter into Grade10. However, these students have hardly begun to think about making the transition to an independent relationship with the doctor. The emphasis of the workshops, key messages, and expected outcomes need to be modified to connect to this younger audience.

The effectiveness study was a controlled comparison of students in Grade 10 from three Vancouver schools that had workshops with their peers who had not had workshops, from the same schools and from others with similar demographics. Quantitative data were obtained through an effect survey questionnaire completed by 213 Grade 10 students. The average age was 15.5 years and 48% were female. Qualitative (explanatory) data were obtained by interviews and focus groups with all the stake holders: Grade 10 students, teachers, school board representatives, parents and medical students.

Reactions (from focus groups, interviews and post-workshop questionnaires).
High school students reported workshops as "*interesting; informative; fun; cool.*" Workshops were rated highly for organization and the medical students as easy to relate to. Their teachers said that *it "opens students' eyes to the possibilities of doctor-patient relationship"* and that *"medical students are good role models."*

Learning (from focus groups, interviews and effect survey of validated scales to measure items like help-seeking and preference for participation, and specific items derived from workshop objectives such as problems experienced with a doctor and management of confidentiality).
The most memorable things, for high school students, were: about confidentiality, that "you can go to see the doctor on your own", how to talk about awkward topics, and that you can see a doctor about concerns other than 'just medical'. Medical students gained understanding of the adolescents' perspective and some of the things they would do when they are in practice, especially to build trust and relationships – "*they* [high school students] *are really suspicious.*"

There was no significant difference between control and workshop students in help-seeking intention (all indicated a doctor fairly high on their choice for severe emotional problems), or preference for participation in healthcare decision making (most tended to be non-deliberative delegators, ie, wanted information but didn't care to be involved in too many choices and wanted the doctor to make decisions). A larger proportion of students in the workshop group than controls identified problems they had when visiting a doctor. Students that attended the workshop were more likely to demand secrecy, but did not heed the workshop message that they should explicitly ask the doctor if they were concerned that information would not be kept confidential.

The workshop appears to have raised the awareness of the students about communication issues but did not increase their sense of competence in being able to deal with these problems. We suggest that our results can be explained by the 'conscious competence' learning theory that describes the psychological states involved in the process of progressing from incompetence to competence. We think the students who attend the workshop shift from the stage of 'unconscious incompetence' to 'conscious incompetence,' ie, they are more aware of their deficits and have higher goals.

Behaviour change (from focus groups, interviews and an effect survey of validated scales to measure items like communication with a doctor, self-efficacy and health hardiness, and specific items derived from workshop objectives such as problems experienced with a doctor and recent encounters with a doctor). Results of particular interest were that workshop students tended to have *lower* confidence with the doctor, reported *more problems* experienced during a visit with a doctor and a *lower* assessment of their health hardiness.

High school students were tentative (in focus groups) about whether they had changed: "not much". However, some said that they thought that maybe they talked more, were more open, asked more questions and felt less intimidated when they went to see their doctors. There was evidence of many barriers to change. It is hard for students to explain to parents why they might want to change their doctor or go alone. It is hard to start a relationship with a new doctor, to go alone (without support), and tell a stranger (older and maybe of a different gender) about

personal concerns. It is hard to find a doctor, make an appointment and trust in the confidentiality.

We suggest that these findings can be explained with reference to the Stages of Change model that identifies categories along a continuum of motivational readiness to change a problem health behaviour (Cancer Prevention Research Center n.d.). Students who have attended a workshop have progressed from the 'pre-contemplation' to 'contemplation' stage of change. A significant number had moved even further: they had acquired a new doctor and they knew they had a 'right' to confidentiality.

Conclusions

Everyone likes the workshops and gives good reasons why they are important and relevant. The relationship between high school students and medical students builds trust – it is a model for the intended relationship between high school students and their doctors. The data indicate that high school students 'get the idea' of Talk to Your Doc. There is a wide variation in readiness to take responsibility for their health care and a wide range in the role of family and culture. Grade 10 students attending the workshops have moved or made an important step from not having a notion of a relationship with a doctor to attaching value to such a relationship.

Changes to the 'Talk to Your Doc' workshop suggested by this study:

- Respond to high school students' questions, especially with more detail on how to find a doctor of their own and how the health care system works (eg, making appointments, payment).
- Create a vicarious experience (eg, video, skit) that will show what a good doctor-patient encounter looks like.
- Involve parents and teachers in reinforcement, including school web site information, materials for teachers and exercises for students (eg, have students interview their parents about doctor-patient relationships).
- Incorporate evaluation findings in training for medical students and revisit the 'Talk to Your Doc' workshop objectives.

Implications for extending the reach of the 'Talk to Your Doc' program objectives:
The most promising approaches appear to be provision of resources for teachers, on-line modules or direct messaging to adolescents through the internet. The phrase 'Talk to Your Doc' appears to be a simple and understandable phrase that gives an important message to adolescents.

Implications for research:
One important finding from our work is a better understanding of the stages of transition in this population of adolescents. Although the literature does indicate some changes in attitudes and behaviours between early and late adolescence with respect to the doctor-patient relationship, important questions are not addressed. These include the processes that adolescents go through in making those changes, how these processes are affected by parental and cultural factors, factors that lead to good outcomes (good communication with the physician and active participation in their health care), and how the processes might be influenced (through education, physician behaviour etc).These are important areas for future research.

Implications for educational policy:
Adolescents do not understand how the health care system works. Indeed, most people only learn by experience when they become parents or develop a chronic illness. Grade 10 students do not know the basics of how to find a doctor or make an appointment. The 'Talk to Your Doc' workshop fills a small niche, but more information about the health care system could be provided to high school students as part of the core curriculum, either by teachers or through educational technology. One does not need medical students to talk about these nuts and bolts.

Grade 10 students display a wide spectrum of readiness to become more independent; the doctor-patient relationship is but one of many relationships that change during adolescence. Having the 'Talk to Your Doc', or any similar intervention, at one particular time does not address the stages of change. The doctor-patient relationship is an important one, a key to good health care. It is important for the school curriculum to address it and for students to be able to come back to it as they progress towards taking a more active role in communicating with their doctor.

Chapter 1: Introduction

1.1 The problems

Adolescents have difficulty in communicating important health concerns to physicians and making the transition from seeing a physician with their parents to an independent relationship.

Adolescents constitute a large proportion of the population, have a distinct pattern of health and illness and are one subset of the population that has experienced little or least improvement in overall health status over the past 40 years (Viner & Booy 2005). Adolescence is a time when new health behaviours are laid down – behaviours that track into adulthood and will influence health and morbidity throughout life (Viner & Macfarlane 2005). Adolescents who receive regular care by a family physician (GP) have healthier behaviours and fewer unmet health needs (Klein 2003). Yet adolescents underutilize physician offices, and their visits are short and counselling is not a uniform component of care (Ziv *et al* 1999).

During early adolescence (13 to 15 years) the leading reasons for visits are respiratory, dermatological and musculoskeletal problems (Churchill *et al* 2000; Ziv *et al* 1999) but adolescents identify major health concerns that go beyond the medical problems they present with. These include exercise, diet, contraception, sexually transmitted diseases (STDs), and alcohol and drug use, which may provide doctors with important opportunities to promote teenage health (Walker & Townsend 1999).

Surveys consistently show few adolescents actually discuss such important health issues when they visit a physician. For example, in the UK only 33% of adolescents consulted their GP about contraception (Kari *et al* 1997) and in a USA survey 71% of adolescents said they would go to a primary care physician for a bad sore throat but only 30% for birth control and 6% for alcohol and drug use (Klein *et al* 1998.). In another USA study 20% of adolescents regularly used illicit drugs, 24% were sexually active and 38% thought they had a weight problem, but only 1%, 4% and 10% respectively had sought care for these matters (Marks *et al* 1983).

Although these topics are not discussed, adolescents do want to talk with their doctor about them. In the UK the top three issues adolescents wanted to discuss were STDs (55%), contraception (49%) and menstruation (37%), but only 11%, 16% and 40% said they had discussed these topics (Epstein *et al* 1989). In Canada adolescents wanted to talk to the doctor about exercise (86% wanted, 42% did discuss), nutrition (83%, 51%), STDs (70%, 18%), contraception (66%, 22%) and depression (59%, 16%) (Malus *et al* 1987).

The gap between what adolescents want to talk about with their physicians and their actual behaviour creates at best a missed opportunity to provide high quality preventive care and at worst the potential for missed diagnoses and delayed treatment, especially in relation to the health risks commonly associated with adolescence. Klein & Wilson (2002) found that 71% of adolescents in Grades 5 to 12 reported at least one of 8 potential health risks but 63% had not spoken to their doctor about any of them. Using data from the same cohort, Kapphahn *et al* (1999) found that 43% of girls and 34% of boys with the highest depression scores and 41% of girls and 33% of boys with the highest stress index scores did not report speaking privately with a physician.

It cannot be assumed that because adolescents are reluctant to talk about personal, sensitive or embarrassing concerns that physicians will raise the issues instead. Levenson *et al* (1987) found that physicians do not accurately judge the importance that adolescents place on different health related items: none of the items the physicians anticipated would be considered very important by the teens appeared as a priority for the adolescents, and physicians attached significantly greater importance than did adolescents to every scale except those pertaining to self actualization and peer opinion.

The major barriers to open communication with doctors that recur in surveys of adolescents are embarrassment and worry that their parents might be told (Gleeson *et al* 2002). In the UK 22% of adolescents said they might not tell the GP about some health problems because they worried about other people finding out and 43% said they might be too embarrassed to talk to their GP (Churchill *et al* 2000). Similar findings have been reported in the USA. In one study, 58% of adolescents had health concerns they wanted to keep private from their parents and 25% said

they would forgo health care in some situations if their parents might find out (Cheng *et al* 1993). Fear of embarrassment is associated with lower consultation rates for gynaecology problems and contraception (Churchill *et al* 2000). Other barriers to communication include perceptions of wasting the doctor's time, that doctors are too busy to deal with their problems and that doctors would not understand their problems (Burrack 2000).

Males appear to be less concerned about talking to the doctor than females: in the UK 46% of male adolescents and 63% of females said it was embarrassing to talk to the doctor about personal concerns, 24% and 32% respectively were concerned their parents would find out, and 21% and 32% thought the doctor was unsympathetic (Donovan *et al* 1997). In Canada, females were more likely to discuss sexual activity with a female physician than a male. Barriers to discussion (including embarrassment, physician might tell parents, and a perception that physicians lack respect for young people who have sex) were, in all cases, of more concern to females than males (Langille *et al* 2001). Embarrassment and concerns about confidentiality appear to decrease in older adolescents (Murdoch & Silva 1996, Ackard & Neumark-Sztainer 2001).

Adolescents have a poor understanding of their physician as a source of confidential care. In a USA survey only 5% of adolescents named their primary care physician as a source of confidential care (Klein *et al* 1998). Ford *et al* (2001) found that adolescents knew less about the protections of confidentiality in physician-patient relationships than about the limits, especially for concerns such as STDs, birth control and substance use. Assurances of confidentiality increase the willingness of adolescents to disclose sensitive information about pregnancy prevention, sexuality, substance use and mental health and seek future health care (Thrall *et al* 2001, Ford *et al* 1997).

Even when adolescents know about confidentiality in theory they do not necessarily trust it will happen in practice. Schuster *et al* (1996) found that most adolescents would trust a physician to keep secret that they asked questions about sex (75%), that they were having sex (65%) or that they were using contraception (68%) but fewer trusted confidentiality if they had a sexually transmitted disease (44%) or were pregnant (44%). Factors that adolescents perceive to influence

confidentiality include proximity of service provider to adolescent's familiar environment, previous experience, attendance with a parent, relationship between service provider and others (eg, adolescent, adolescent's parents, school), legal obligation of the provider and severity of the condition (Oppong-Odiseng & Heycock 1997).

In fact adolescents are correct to be wary of physicians' behaviours regarding confidentiality. Physicians do not consistently discuss confidentiality with adolescent patients, may not offer adolescents the opportunity to see them without their parents present (Rutishauser *et al* 2003) and may not know or follow the guidelines laid down. Physicians who do discuss confidentiality often assure unconditional confidentiality which is inconsistent with professional guidelines and law (Ford & Millstein1997). Standards for the provision of confidential health care for adolescents are available (eg, Society for Adolescent Medicine 2004; Larcher 2005) and explicit discussion of confidentiality with adolescents is considered helpful, especially if the adolescent sees the same doctor as their parents.

Other things that would help adolescents overcome barriers to talking about important health concerns have been identified (Gleeson *et al* 2002). These include quicker appointments, friendly receptionist, more sympathetic doctor, doctor of the same sex, and GP having more time: males are more likely to want quicker appointments, and females to want a more sympathetic doctor and doctor of same sex (Donovan *et al* 1997). In general, adolescents prefer a doctor of the same gender, especially when talking about sexual health (Burrack 2000). However, same gender preference is stronger for girls (Kapphahn *et al* 1999), and in the study by Van Ness & Lynch (2000) male adolescents, especially African American males, preferred female physicians. Macfarlane & McPherson (1995) found adolescents wanted confidentiality, the ability to telephone the practice without giving their names and well written information designed specifically for them.

Most surveys suggest that approximately 20% of teenagers are dissatisfied with the care they receive from GPs, well above the quoted rate of 10% for adult patients (Jacobson & Kinnersley 2000). In the UK Jacobson *et al* (2000) found that the two most common causes for dissatisfaction were insufficient information provided by the GP and lack of improvement of the

condition following the consultation. In the USA Freed *et al* (1998) found that perceptions about the health care provider's style of behaviour were a strong predictor of visit satisfaction, and visit satisfaction was associated with intention to keep scheduled follow up appointments.

Almost all of the information about adolescents' perceptions of the doctor-patient encounter comes from quantitative surveys, but there are a few qualitative studies that add some new ideas to the survey findings. Beresford & Sloper (2003) identified factors affecting the openness and effectiveness of the communication of chronically ill adolescents with their doctors. In addition to the duration and frequency of contact; the communication skills of the adolescents and health professional; and the presence of medical students/trainee doctors were noted. Adolescents were reluctant to ask questions that revealed poor adherence. Oandasan & Malik (1998) found that adolescent girls would like doctors to explain medical issues, to be more like friends, and to treat them as teenagers (not as children or adults). The gap between teenagers and health care providers can be wide. Teenagers reported a lack of knowledge of services available from primary care, a feeling of a lack of respect for teenage health concerns, poor communication skills in GPs, and a poor understanding of confidentiality issues. The providers did not always share these concerns and had differing views on communication and confidentiality issues (Jacobson *et al* 2001). In making decisions to seek health care in the USA adolescents were more concerned about provider characteristics (honesty, respect, competence, equal treatment of patients, confidentiality, costs, relate well to teens, and same provider for all visits) than site or system characteristics (Ginsburg *et al* 1997).

During adolescence there is a shift from accepting externally imposed rules and boundaries to their being self-set, a fact that has significant implications for health promoting behaviour as well as health care (Milne & Chesson 2000). As a young person enters adolescence their parents are still largely responsible for all aspects of their health. By the end of adolescence health issues will be almost entirely the responsibility of the young person. The health professional has to maintain an effective clinical relationship while the health responsibilities transfer from the parents to the young person (Christie & Viner, 2005). This transfer takes place over time and at different rates, dependent on factors such as the individual adolescent, his/her parents and the nature of the health care problem. Older teenagers would prefer to see their own GP rather than

their family's (Murdoch & Silva 1996), but adolescents are unsure how to find their own GP (Kari *et al* 1997; Kramer *et al* 1997).

The factors that influence the transition from seeing a doctor with a parent to going alone are not well studied but appear to include age, gender, country/culture and nature of the health problem. Donovan *et al* (1997) found that over 60% of 15 to 16 year olds in the UK attend the consultation with a parent but Macfarlane & McPherson (1995) quote UK data that adolescents start making decisions about attending for health care by themselves at around the age of 15, and over 50% of boys and 60% of girls attend by themselves at the age of 15. In our survey in Vancouver we found that 65% of students in Grades 11 and 12 still saw the family doctor accompanied by their parents (Towle *et al* 2006). Burrack (2000) found that in matters of sexual health 68% of males and 39% of females preferred to see the GP on their own, 18% and 43% respectively with a friend and 11% and 16% with a parent (Burrack 2000). A decline in health care visits has been found as adolescent boys grow older (Marcell *et al* 2002) raising the need for a greater understanding of male adolescents' transition between providers from adolescence to adulthood.

Physician visits during this adolescent transition are an opportunity to develop an adult relationship and establish good patterns of communication. However, although there is much advice in the medical literature about what health care providers can do to assist adolescents make the transition to an independent relationship with the provider, there is little about the role of parents, though they are clearly influential. Children learn about going to see the doctor from their parents and by observing their parents' interactions. Given the large body of literature on the difficulties that patients have in communicating with their physicians, it is likely that many parents are not necessarily good role models. They may also be concerned about their child having confidential conversations with a doctor. A survey of parents in the UK found few parents (2%) of 14-15 year old patients were aware of practice policy on confidentiality and 46% did not think that adolescents under age 16 years should always have a right to confidential consultations (Magnusson *et al* 2007). On the other hand parents can be important allies in health promotion activities. A systematic review of effectiveness of interventions to promote physical activity in adolescents found strong evidence of favouring school-based interventions that

included some parental involvement, such as newsletters or homework assignments (Van Sluijs *et al* 2007).

Research shows that patient communication skills training has a positive effect on patient adherence and clinical health outcomes (Cegala 2006). Currently, there is very limited research on the outcomes of teaching communication skills to adolescents to improve interactions with physicians. Researchers in Australia have developed an intervention aimed at improving adolescents' willingness to seek help from physicians (Wilson *et al* 2007). An evaluation of their program concluded that participation resulted in reduced help-seeking barriers, and increased willingness to seek support for psychological problems.

We developed 'Talk to Your Doc' as a unique program to improve the communication skills of adolescents so they can actively engage with physicians to address their specific health concerns. Research that we have done among adult populations indicates that it is difficult to change behaviour patterns of established doctor-patient relationships (Towle *et al* 2003). Teaching communication skills during adolescence, when the relationships are being initiated, may be more effective, and necessary to enhance life-long patient-physician partnerships, and promote patient autonomy. The 'Talk to Your Doc' program is delivered by medical students who can communicate more easily with high school students about sensitive health care matters than can teachers (Jobanputra *et al* 1999).

1.2 The intervention

'Talk to Your Doc' is a workshop created and delivered by medical students at the University of British Columbia (UBC), Vancouver, Canada, to help high school students develop independent, active and more satisfying doctor-patient relationships (Towle *et al* 2005, Towle *et al* 2006). In partnership with the Vancouver School Board (VSB) we had presented 106 workshops in 7 schools for 3500 high school students by 345 medical students in 2000-2007. Initially, workshops were incorporated into Career and Personal Planning (CAPP) classes of Grades 11 and 12. In 2004 the CAPP curriculum was discontinued and the workshop has been part of the Grade 10 curriculum as a component of Planning 10, one of the provincial graduation programs with objectives related to health, informed decision making and personal responsibility – all of

which are topics addressed by the 'Talk to Your Doc' program. The aim of Planning 10 is "to enable students to develop the skills they need to become self-directed individuals who set goals, make thoughtful decisions, and take responsibility for pursuing their goals throughout life" (BC Ministry of Education 2007). Among its objectives, Planning 10 provides opportunities for students to "think critically about health issues and decisions" (ibid).

The design of the workshop was informed by a needs assessment questionnaire survey conducted in two private and six public schools in Vancouver, representing a range of socioeconomic and cultural profiles, in 1999 (252 students in Grades 8-12 from two private and two public schools) and in 2000 (181 students in Grades 11 & 12 in five public schools). The survey was designed to identify: i) the most appropriate age group for the workshop, ie, when students were making the transition to an independent relationship with a doctor, and ii) the most frequent communication problems that could be addressed by the workshop.

The workshop was facilitated by 2nd year medical students in Fall and Spring, and by 1st year medical students in Spring. A few 3rd and 4th year students also took part when their clinical schedules permitted. High schools were contacted and workshops scheduled at beginning of term. Medical students new to the program were trained by faculty and students previously involved. There were five workshop objectives:

1. Sharing thoughts and opinions with your doctor;
2. Talking about sensitive and embarrassing issues;
3. Taking an active role in making decisions about your health;
4. Confidentiality between you and your doctor – how it works; and,
5. Establishing and maintaining an independent relationship with your doctor.

Medical students signed up for scheduled workshops on a web site (usually 4-6 students per workshop) and picked up a package of support materials from our office. The typical structure of a 60-70 minute workshop was:

- Icebreaker to establish rapport with the high school students,
- Opening skit performed by medical students to illustrate some of the problems that can arise if adolescents cannot communicate well with the doctor,

- Small group discussions facilitated by individual medical students that included:
  – role-play of the kind of problems adolescents can go to their doctor about.
  – communication skills training for effectively bringing up and discussing difficult problems, resolving disagreements and making the most of an appointment.
  – information on confidentiality.
- Review of key points,
- Evaluations completed by students and teachers.

The reaction of high school students to each workshop during 1999-2006 was surveyed through questionnaires at the end of the workshop and >90% of respondents said it was “just right”. We did a small follow up study in 2000 with one class of Grade 12 students about 2 months after the workshop. Seven of 17 respondents had been to a doctor since the workshop and 4 said there was a difference compared to previous encounters. Twelve had talked to friends or family about the workshop.

1.3 Research questions

This research project aimed to answer three questions: Are we doing the right thing? What are the consequences? How might we improve?

Question 1: Are the objectives, content and format of the intervention still appropriate for needs?

This question was important because the current target group for the workshops were Grade 10 students but the workshop was originally developed for Grades 11-12 based on the needs assessment done across Grades 8-12 in 1999 and 2000. Communication patterns, health care seeking and knowledge resources might have changed since the needs assessment was conducted given changes in demographics and culture (especially significant in Vancouver), and new communications technologies such as cellular phones and the Internet.

The answers to this question would help us to identify the need for any changes to the workshop objectives or format in order to make it more appropriate for Grade 10 students in the future.

Question 2: What are the outcomes of the intervention?

This question was important because we had only collected data on student opinions about the workshop. We had not conducted a rigorous evaluation of the effectiveness of the workshop. We wanted to know the effect of the workshop on student learning and whether there was any change in behaviour as a consequence. The answer to this question would allow us to identify ways in which we could increase the impact of the intervention.

Question 3: **How can the intervention be improved and adapted to reach a wider audience?**

From our work to date we knew that the 'Talk to Your Doc' workshop was acceptable, do-able and sustainable. We wanted to know directly from high school students, medical students, teachers and parents not only how the workshop itself could be made more effective, but what other activities (pre- or post-workshop) would be helpful to support and reinforce the messages of the workshop. The workshop cannot reach a major proportion of high school students because of the limited number of medical students and their busy medical school curriculum. The answer to this question would help us to consider alternatives that might allow us to reach a wider audience and to identify ways in which one might realize some of the same benefits without a nearby medical school.

Chapter 2: Methodology

2.0 Study methods

This study measured the impact of a Talk to Your Doc workshop (the intervention) upon Grade 10 students in Vancouver high schools (study participants). Students from the same schools and from other schools who had not had the workshop were the comparison groups. The appropriateness of workshop objectives was examined by comparison of needs assessment data from both earlier (several years ago) and current classes. The effect of the workshop was measured with survey instruments and focus groups and interviews.

The Methods are presented in five sections: 2.1 overall study design, demographics of participant schools, intervention and evaluation framework; 2.2 needs assessment; 2.3 effect survey; 2.4 focus groups and interviews; 2.5 data analysis, quantitative and qualitative. Each of sections 2.2, 2.3 and 2.4 describes the participants (identification and recruitment) and the study procedures.

2.1 Study design

The study comprised three main data collection activities.

- A needs assessment survey (quantitative) to answer Question 1 (Section 2.2)
- An effect survey (quantitative) to answer Question 2 (Section 2.3)
- Focus groups and interviews (qualitative) to answer Questions 1, 2 and 3 (Section 2.4)

The overall study design is shown in Figure 2.1. Of the 18 high schools in the Vancouver School Board (VSB), some classes in 7 had Talk to Your Doc workshops for several years. From these we chose 3 ‘study’ schools with varied demographics. We also selected 3 ‘control’ schools that had not had workshops but had similar demographics to study schools. From each of the study schools we recruited one Grade 10 class that had a workshop and one that had not. In one school two classes received a workshop on the same day and both classes were included. One Grade 10 class was recruited from each of the control schools. Students from these classes (control and study) completed the effect surveys and took part in focus groups and interviews.

From each study and control school we recruited a Grade 9 class to complete a needs assessment, which was compared with results from previous years and other classes. Students who attended

Talk to Your Doc workshops were asked to complete post-workshop evaluations that asked about the objectives of the workshop and opinions about the performance of the facilitators (medical students). Explanatory exploration of the quantitative results and assessment of higher level effects were done through focus groups and interviews with high school students, their school teachers, medical students who facilitated the Talk to Your Doc workshops, representatives from the Vancouver School Board and parents.

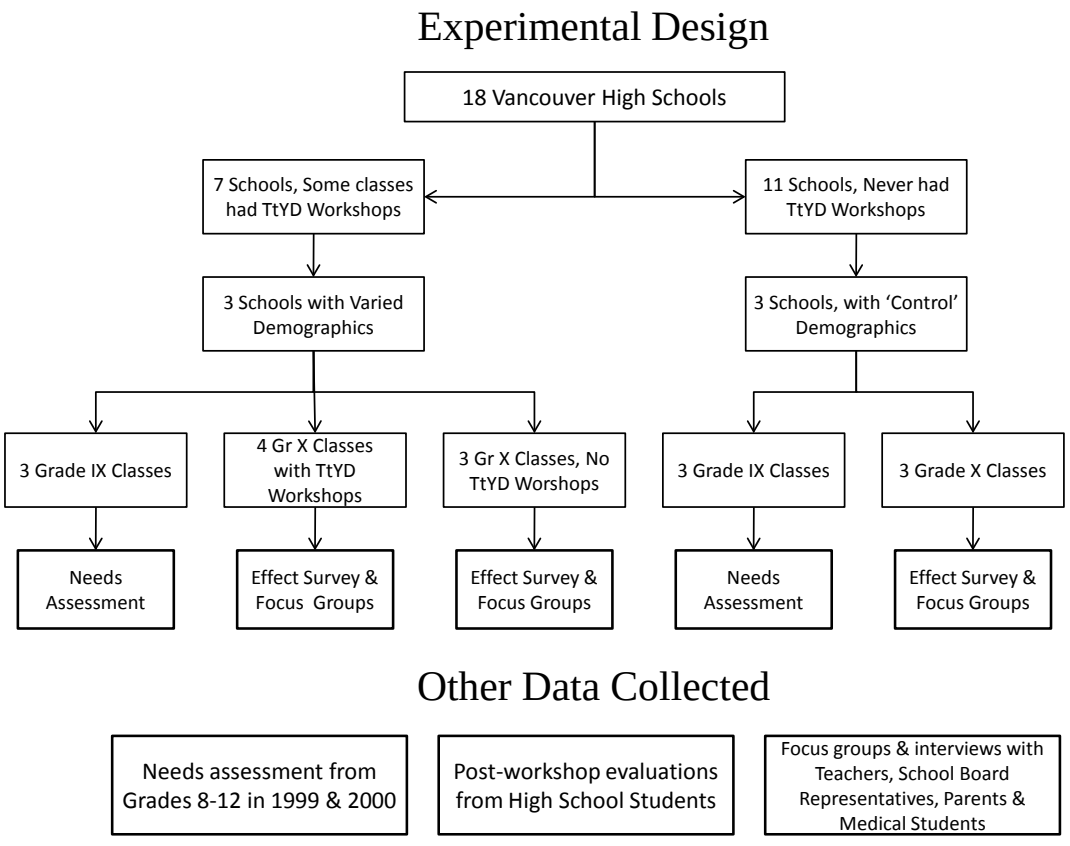

Figure 2.1 Overall design of a controlled study of Talk to Your Doc (TtYD) Workshops

Study participants

The study was conducted at six of the 18 schools in the Vancouver School Board district. Three schools (D, E and F) were selected from those that held the 'Talk to Your Doc' workshop in 2007-2008 in their Planning 10 classes (Intervention *or* Workshop group). These schools were matched with 3 high schools: A, B and C (Control group), of comparable location (central and

south Vancouver), and socio-economic and cultural profiles. The matching of schools was based on advice provided by the Vancouver School Board. See Table 2.1 for a summary of the characteristics of the schools in the study. A letter was sent to the Principal at each school asking for their permission to conduct the study (Appendix 1).

Table 2.1. Some demographic characteristics of Control (A, B, C) and Workshop (D, E, F) schools. Information for the whole school (not necessarily characteristic of the individual classes) was acquired from Vancouver School Board administrative records. The school board has a 'no streaming' policy that tends to result in similar characteristics across classes. Overall the percent of students writing Grade 12 exams in Math & English is 89% and 98% (respectively) and the percent of incoming students who graduate from Grade 12 in that school is 76%.

School (geographical location in Vancouver)	Number of students in the school	Percent ESL (English as second language)	Percent NEHL, (Non-English speaking home life)
A (central)	1285	8%	78%
B (south)	2031	8%	62%
C (south)	1259	16%	58%
*D (south)	1120	9%	78%
*E (south)	1822	13%	82%
F (central)	1661	13%	61%

*Schools D and E took part in the 1999-2000 needs assessment survey and have held 'Talk to Your Doc' workshops regularly since that time.

The intervention: Talk to Your Doc workshops

The workshops were not experimental but part of the usual offering and program of 'Talk to Your Doc' workshops, run by groups of medical students in the usual way (see Introduction, Section 1.2 for detailed description) and with a standard format during the period January to April 2008. None of the teachers, medical student facilitators or high school student participants knew that they might be involved in a subsequent research project.

Workshops in the study were held as follows:

School D: January 21; class size 30; 5 medical student facilitators.

School E: April 7; class size 24; 6 medical student facilitators.
School F: February 11; workshops in 2 different classes on the same day, class size 30; 6 medical student facilitators.

Evaluation framework

The framework used for evaluation was the classic 4-step model for evaluating training programs described by Kirkpatrick: reaction, learning, behaviour and results (Kirkpatrick 1996). Student opinions were measured at the end of each workshop using the questionnaires we routinely administer (Level 1: reaction). Acquisition of knowledge (Level 2: learning) was measured with an effect questionnaire and focus group questions. A change in behaviour (Level 3) would be more difficult to measure objectively and communication with the doctor would require invasive techniques such as audio recording and discourse analysis – outside the scope of this project. However, we measured some important aspects of behaviour, such as self-efficacy, by including in the effect questionnaire valid survey items for which psychometric properties and population comparative data have been published. We also collected subjective qualitative data about behaviour change through focus groups with students who had taken part in the workshop and subsequently visited a doctor. Final effect (Level 4: results) upon the students and others is a longer term problem to measure, outside the scope of this project.

2.2 Needs assessment survey

Participants

One class (about 30 students) was surveyed in each of the 6 schools (Intervention and Control). Since there is no streaming of students into classes, a single class was considered to be representative of other classes of the same grade at each school.

Survey instrument

The needs assessment questionnaire was exactly the same as that administered in 1999-2000 with minor formatting changes (Appendix 3).

Data collection procedures

The questionnaire was administered to Grade 9 students between 18 April and 4 June 2008, near the end of the school year. Classes were selected by convenience based on teacher's consent and availability. Information about the study was briefly explained to the class by the research assistant and a consent form was handed out to all students (Appendix 2). The passive consent process was explained and students were asked to take the form home and show it to their parent/guardian. Students were told that if their parents did not want to them participate in the survey the 'Request to Opt Out of Study' form should be returned, signed by the parent/guardian. This passive consent process met requirements of the Vancouver School Board for anonymous questionnaires. The research assistant returned one week later to administer the questionnaire. No passive consent forms were returned and every student present completed a questionnaire.

2.3 Effect survey

Participants

The Intervention group comprised Grade 10 students in schools D, E and F who attended a 'Talk to Your Doc' workshop during their regular Planning 10 classes as part of their curriculum. One class from each school that had the workshop during this period was selected for study based on convenience (fit with the data collection schedule). Control groups were 1) Grade 10 students in the same schools (D, E and F) but from classes that did not have a workshop *and* 2) students from schools A, B and C that never had workshops (one Grade 10 class from each school). Control classes were selected based on teacher consent and availability.

End of workshop questionnaire

The workshop evaluation (Appendix 6) was administered to the high school students at the end of each of the Intervention workshops.

Development of the effect survey instrument

The effect survey instrument was designed to measure acquisition of knowledge (Kirkpatrick's Level 2: learning) through items relevant to the workshop objectives in addition to survey items for which psychometric properties and population comparative data have been published.

- Students' preferred confidants for health (especially emotional) problems was measured with the *General Help Seeking Questionnaire* ***(GHSQ)*** (Wilson *et al* 2005). The GHSQ was developed to assess intentions to seek help from different sources and for different problems. Its use with adolescents has been reported in studies with Australian high-school students, including an intervention 'Building Bridges to General Practice' intended to reduce young peoples' barriers to consult with a GP for physical and emotional problems.
- Attitudes toward shared decision-making were measured with items of the *Preferences for Participation in Health Care Decision Making Scale* (Flynn *et al* 2006).
- *Problems experienced during a visit with a doctor* were measured to find out if students had learned how to deal with problems addressed in the workshop, such as asking the doctor questions. The 'problem' items were identical to those in the Needs Assessment questionnaire administered to Grades 8-12 in 1999-2000 and to Grade 9 in 2008. The items illustrated the commonest problems reported in the literature.
- Students' *knowledge about confidentiality* was measured by questions developed to reflect the objectives and recommended teachings of the 'Talk to Your Doc' workshops.

Change in behaviour (Kirkpatrick's Level 3) was measured indirectly through questions related to an important aspect of behaviour: self-efficacy. We included survey items for which psychometric properties and population comparative data have been published in addition to items derived from the objectives of the 'Talk to Your Doc' program.

- *Self-rated Health (Lo*rig *et al 1*996), a one item self-report of health status has been shown to be a reliable and reproducible value, the principal predictors of which are number of health problems and life satisfaction; in older adults it is a good predictor of mortality
- *Communication with Physicians.* This scale was developed by Lorig *et al* (1996), part of the Stanford Chronic Disease Self-Management Study, to see if key behaviours, which they taught concerning communicating with health care providers, had changed.
- *Confidence with Physicians.* A self-efficacy scale that employed items from objectives of 'Talk to Your Doc' workshops and derived from the Needs Assessment questionnaire.

- *Revised Health Hardiness Inventory* (Gebhardt *et al* 2001). One of four scales that constitute the Revised Health Hardiness Inventory; others being Internal Health Locus of Control, External Health Locus of Control, and Perceived Health Competence. All items in the Health Values scale "reflect a concern with health issues and a determination to do everything possible to maintain or improve one's health." It is suggested that health value is a mediator between psychological hardiness and health behaviour

See Appendix 8 for a copy of the effect survey ('Survey about Experience with Health Care and Communication').

Data collection procedures

The effect survey questionnaire was administered to Grade 10 students between 14 April and 22 May 2008. The surveys were administered using the same procedure (passive consent, Appendix 7) as for the needs assessment survey, described in section 2.2.

2.4 Focus groups and Interviews

Focus groups and interviews were held to i) to provide explanatory information to supplement and clarify answers from the needs assessment and effect surveys; ii) follow up on learning from the workshop (Kirkpatrick Level 2); iii) assess behavioural change as a consequence of the workshop (Kirkpatrick Level 3); and iv) provide information about how the program could be improved and reach a wider audience.

Participants

Grade 10 students

Focus groups were with students from the 3 classes that had workshops and completed the effect survey in schools D, E and F. Separate focus groups were held with those who had, and those who had not seen a doctor since the workshop. Focus groups were also held with students from the control classes in schools A, B and C.

Teachers

Participants were Planning 10 teachers who had workshops in their classes and teachers who had never had a workshop. An interview was held with the Coordinator for Career Programs of the Vancouver School Board (VSB).

Parents

Parents were members of the District Parent Advisory Council (DPAC) but did not necessarily have a child who had been to a 'Talk to Your Doc' workshop.

Medical students

Participants were medical students who had facilitated 'Talk to Your Doc' workshops.

Recruitment procedures

Grade 10 students

The research assistant informed students about the focus groups after they had completed the effect surveys. The consent process was explained (consent forms had to be signed by a parent/guardian by the day of the focus group) and information about the focus groups and consent forms was provided (Appendices 11 & 12). Students were told the purpose of the focus groups and that they would receive a $20 gift certificate for participating. Students were told the dates and times of the focus group and that they would be reminded by e-mailed before the scheduled day. A sign-up sheet was passed around and students who signed up were given a consent form. Extra consent forms were left with the teacher in case other students decided to attend or if anyone lost their form. Contact information was collected from interested students and the research assistant followed-up with students and parents by telephone to answer any questions, confirm the time and location of the focus groups, and arrange collection of signed consent forms. Focus groups were held at the end of the school day during May and June 2008, approximately a week after the effect surveys had been administered.

Teachers

Teachers of Planning 10 classes in the study schools and the VSB Coordinator were each sent an email invitation to take part in an evaluation of the 'Talk to Your Doc' program (Appendix 13). Invitations were sent in April-May 2008 and the interviews and focus groups were scheduled in June 2008.

Parents

The research assistant contacted the DPAC to explain the study and distribute the parent invitation letter (Appendix 15).

Medical students

Medical students who facilitated ‘Talk to Your Doc’ workshops in 2007-8 were sent a letter invitation to attend a focus group to discuss their experiences as a workshop facilitator (Appendix 16). Interested students were asked to respond by e-mail.

Data collection procedures

Focus groups and individual interviews were about one hour and conducted by the research assistant. Prior to the commencement of the focus group/interview participants were asked to sign a consent form (Appendices 18, 19, 20, 21) or in the case of the high school students an assent form since consent was provided by their parents (Appendix 17). Each focus group or interview followed a defined script: a series of broad questions followed by more specific probes (Appendices 22, 23, 24, 25, 26, 27, 28). At the close of the focus group/workshop each participant was given a $20 gift certificate for their time and to defray any travel expenses. All focus groups and interviews were audio-taped and transcribed.

Data were collected as follows:

Grade 10 students:

- Intervention schools and had seen a doctor since workshop: three focus groups total of 15 students (6 males, 9 females) (FG7, FG11, FG12).
- Intervention schools and had not seen a doctor since workshop: five focus groups total of 27 students (10 males, 17 females) (FG5, FG6, FG8, FG9, FG10).
- Control schools: three focus groups, total of 13 students (4 males, 9 females) (FG2, FG3, FG4).

Teachers:

- Planning 10 teachers from schools that had workshops: individual interviews with 2 teachers (INT2 and INT3). (Note: neither of the teachers had remained in the classroom during the workshop itself).
- Planning 10 teachers from schools that had not had workshops: one focus group of 4 teachers (FG15).

- Coordinator for Career Programs of the VSB: individual interview (INT1).

Parents

- Two focus groups, of two parents each (FG13 and FG14).

Medical students

- One focus group of 6 first year students (FG1).

2.5 Data analysis

Categorical and scaled data from the needs assessment and effect surveys were entered into a statistics program (SPSS®) for calculation of descriptive statistics. Quantitative data were subject to analysis of variance (ANOVA) to compare means within and between groups to determine difference. From Cohen's (1988) power tables, at a power level of 0.8 we calculated that a sample n = 30 per group would be sufficient to detect a medium effect size at $\alpha = 0.05$. Data from the questions that invited narrative responses were analyzed thematically.

The 15 focus groups and 3 individual interviews were recorded, transcribed and subjected to thematic (qualitative) analysis. Qualitative analysis began following the first focus group – to inform decisions about data collection in subsequent focus groups. Transcript data were coded into recurring themes using ATLAS.ti©, a computer software program for qualitative data analysis that allows sections of text to be grouped into categories identified by the researcher. Two researchers independently reviewed several transcripts to identify key themes and agree on a framework for coding all data. The coding framework was guided by the research questions and existing literature but also considered emergent themes. Coded themes were organized into a narrative, supported by examples from participants' own words, in relation to each of the research study questions.

Chapter 3: Results

3.0 Presentation of results

Results follow in order of the three major questions: Does the Talk to Your Doc workshop fit the needs? What are the outcomes? And how could it be improved? The current needs assessment gave similar results to those upon which the workshop objectives were designed, a decade ago. The students changed their behaviour, though not always in an expected or hoped-for fashion. The high school students, medical student facilitators, high school teachers and parents had a variety of ideas for enhancements and extending the reach, some easy to do, some not.

3.1 Are the objectives of the intervention appropriate for the needs of the target group?

3.1.1 Results of 2008 (Grade 9) needs assessment survey

a) Overall summary

A total 146 questionnaires were returned (average 24 students per school; range 17 to 28). A few questionnaires were rejected because of apparently deliberate spoiling (such as ticking all of the boxes in a line down the page or profuse ‘rude’ written comments), leaving 142 useable. The mean age of the respondents was 14.3 years; 73 were male (51%) and 69 female.

The full results of the needs assessment are presented in Appendix 29. The following were the most relevant findings with respect to the appropriateness of the intervention.

- 94% of students had the same doctor as their parents and 90% usually saw a doctor with their parent/guardian; only 5% saw a doctor on their own.
- Top 3 problems they wanted to talk to the doctor about but don’t were: exercise / dieting / body weight (23%); emotional and mental well being or family problems (23%) and sexual problems (22%).
- Top 3 sources of health information were: a doctor (65%), family member (63%) and the Internet (48%).
- Main reason for the last visit to a doctor was a cold, cough, flu or infection (52%).

- Major problems they had with a doctor were: feeling awkward or shy (29%); uncomfortable discussing some things (19%) and not knowing how to ask questions (16%).
- Satisfaction with the relationship with their family doctor ranged from 28% (school E) to 44% (school C).
- No students rated communication with their family doctor as below average or poor.
- The majority (74%) said they preferred a collaborative style of decision making.
- The top 3 things they wanted doctors to do to improve the relationship were: make them feel more comfortable (37%), explain health information in words they understand (28%) and encourage and give them time to ask questions (28%). 36% of students said they were satisfied with the relationship and the doctor did not need to do anything further.
- 25% said they would like to learn how to talk to their doctor better; 35% were not sure. Things they most wanted to be able to do were: to describe how they have been feeling (34%), ask more questions (31%) and express their thoughts and opinions about their health concerns (21%); 37% were satisfied with their communication.
- Only 10% wanted to change their doctor; 26% were not sure. Only 16% knew how to find or change a doctor; 27% were not sure.

A few gender differences were present.

- 41% of females (16% of males) said they felt awkward or shy talking about their problems.
- 33% of females (7% of males) got health related information from friends.
- 41% of females (22% of males) said they would like to be able to ask more questions if they did not understand the doctor.
- 42% of females (26% of males) would like to know how to describe how they have been feeling and what their symptoms are.

Questions students would like to ask during a workshop:

The Grade 9 students were asked if there were questions they would like to ask medical students if they went to a 'Talk to Your Doc' workshop. They generally referred to 2 types of questions: about becoming a doctor (eg, "How long does it take to become a doctor? How much money do doctors make? Why did you decide to become a doctor?") and about medical students' personal

experiences or medical care issues (eg, “How is your relationship with your doctor? Why do you want young people to have better relationships with their doctors? How hard is it to communicate with patients?”).

b) Differences between schools

The results of the Grade 9 needs assessment survey were generally similar across the six schools (A to F) with the following exceptions:

- Gender: in School F 73% of class were female.
- Topics students wanted to see their doctor about: drugs (F 11%, E 24%); sexual matters (B 15%, D 30%); emotional issues (B & C 15%, A 35%).
- Sources of health information (Table 3.1). School C had the highest proportion of students getting information from their doctor and lowest for TV/radio and friends. School F had the highest proportion getting information from family, friends and magazines and the lowest from a doctor.
- School C had the highest proportion who did not have the same doctor as their parent (31%) compared to 0-4% at the 5 other schools.
- None of the students at schools B, D and F go to see the doctor alone compared to 12% at each of C and E.
- School C has the highest proportion of students who know how to find a doctor (32%, compared to a low of 8% in school E).

The needs assessments were performed in the second half of the school year in Grade 9 (the grade prior to that in which Talk to Your Doc workshops were given) and to one class only, from each school. We chose the intervention and control schools to have similar profiles – cultural, socio-economic and location. There may be some clues in the Grade 9 needs assessment results that point to other school-wide factors that could influence the outcomes observed in Grade 10. However, the sample is too small and variation too great to support more than speculation.

c) Sources of health information

Students (Grade 9) were asked to pick their top sources of health information from a list. There was a large variation from school to school in the sources most and least likely to appear on their list of the top 3 (Table 3.1).

Table 3.1: Sources of health information reported by students in a single Grade 9 class at each school. Students were asked to select their top 3 sources from a list of 7. The table shows the percent of students from each school that chose any particular source as being in their top 3. The most popular source for each school is highlighted in **bold;** the least popular source is underlined.

	Source of health information						
School	Doctor	School	Family	Friend	TV	Mags / books	Internet
A	**71%**	29%	59%	24%	18%	29%	65%
B	**73%**	65%	50%	23%	23%	15%	35%
C	**77%**	46%	73%	12%	12%	27%	46%
D	**70%**	**70%**	65%	13%	13%	30%	39%
E	**56%**	32%	40%	24%	36%	24%	**56%**
F	46%	32%	**86%**	29%	14%	36%	54%

d) Preferences for decision making

Grade 9 students were asked to identify their preferred mode of decision making when consulting with a physician. The choices were: The doctor decides what is best for me and tells me what to do (*Doctor decides*). The doctor talks to me about different choices and we decide together what is best for me (*We decide*). The doctor explains for me what the different choices are and I decide what I think is best for me (*I decide*). Most students chose 'shared decision making' (*We decide*) but the variation between schools is large (Table 3.2).

Table 3.2: Preferences for decision making reported by students from a single Grade 9 class from each school. The numbers are the percent of students that chose each of 3 modes or styles of decision-making about medical care in consultation with a physician. The extremes are highlighted (hightest **bold**, lowest underlined).

School	Doctor decides	We decide	I decide
A	6%	82%	12%
B	**32%**	60%	8%
C	12%	71%	**17%**
D	9%	87%	4%

E	28%	56%	16%
F	11%	**90%**	0%
Mean	17%	74%	9%

3.1.2 Comparison of the 2008 survey with 1999-2000 needs assessment survey

The Talk to Your Doc workshop was designed to respond to needs identified in surveys conducted in Vancouver high schools in 1999 and 2000. The workshops at that time were presented largely to Grades 11 and 12. After the curriculum changed, the workshops were presented largely to Grade 10 and, considering the passage of a decade and the younger grade, it was important to check the earlier needs against those identified by current students (pre-Grade 10). The results of the 2008 survey summarized above were compared with those from 217 questionnaires collected from Grades 11 and 12 classes in 6 VSB schools in 1999 and 2000.

a) Similarities

Major similarities (Appendix 30) between the Grade 9 (2008) survey and the Grade 11/12 (1999-2000) survey were:

- Top 3 things they wanted to talk to the doctor about (sexual problems; emotional and mental wellbeing; exercise, dieting & body weight) but don't were the same. However, the proportion wanting to talk about sexual problems was much lower (22% compared to 46% in 1999-2000), perhaps due to the age difference.
- Reason for the last visit to a doctor: cold, cough, flu or infection (approximately 50%).
- Top 3 communication problems experienced during a visit with the family doctor: (I felt awkward or shy ...; I did not feel comfortable ...; I did not know how to ask ...).
- Ratings of the communication between themselves and their doctor.
- Top 3 things they wanted the doctor to do to improve their relationship: (Make me feel comfortable ...; Explain health information ...; Encourage and give me time ...).
- Proportion who wanted to learn how to talk to their doctor: (Yes 24-25%; Not sure 31-35%; No 40-45%).

b) Differences

Major differences (Appendix 30) between the Grade 9 (2008) survey and the Grade 11/12 (1999-2000) survey were:

- More who saw same doctor as parent: 94% (compared to 81%)
- More who saw doctor with parent: 90% (compared to 60%)
- Less who saw the doctor on their own 5% (compared to 30%)
- Less who wanted to change doctors: 10% (compared to 55%)
- Less who knew how to change doctors: 16% (compared to 43%)
- Less who wanted improvements to the relationship:
  64% wanted the doctor to do something (compared to 88%)
  63% wanted to be able to do something themselves (compared to 91%).
- Internet as source of health information from 0% in 1999/2000 to 48% in 2008.

In the 1999/2000 Grade 11/12 survey the average age at which students found their own doctor was 14.4 years. There were insufficient valid responses to determine this for the 2008 Grade 9 students.

3.1.3 Student needs identified by teachers and parents

Qualitative data on perceived student needs were obtained from the focus groups and interviews with teachers and parents.

Quotes are identified by Focus group or Interview number (FG# or INT#); page number (p#); and speaker number (S# = Student, T# = Teacher, P# = Parent, M#= Medical student, I= Interviewer).

a) Teachers' views

Most of the needs teachers identified related to their desire for Grade 10 students to begin to take responsibility and a more active role in their own health care rather than relying on their parents.

T1: Well actually not only that I think many of our students in Grade 10, they're used to, you know, if they're sick their parents will tell them 'okay, time to go see the doctor'. They're not gonna say well I want to go see the doctor. You know, they're used to, so for them to take the initiative but I think maybe perhaps we need to, if we're going to be having these students coming, medical students come in maybe encourage them, you know, take the

initiative and be responsible for your own personal health. (FG15p15-16)

In order to do this they should be encouraged to begin to ask questions, be critical and not just take what the doctor says for granted.

T1: *... doctors make mistakes and you know the kids need to know that ... they're allowed to question, they're allowed to research. ... research things before they go into the doctor so that they have some idea. (INT2p11)*

Students should know the basics of confidentiality and that they can change their doctor if they are not comfortable.

T3: *Just basics, you know, through the process, I don't know, not all doctors talk about confidentiality and I think that's important for the students to know that, okay by a certain age ..., you know what you tell the doctor stays with the doctor and your parents can't ask them ...*

T1: *I think that's very important because my students {unclear}, they were concerned, they were first of all learned that if they phoned and made the appointment with the receptionist, are they gonna tell the mother? Are they gonna get a phone call home or something ...? (FG15p8)*

T: *And you know and then you tell the kids well you know you can change, you can, you know, you don't have to stick with somebody if you're not comfortable. (INT2p7)*

They should learn that the visit to the doctor is not always a negative or intimidating experience.

T1: *That fear factor is a big issue as well, you know. I mean when you go see the doctor there's generally something wrong, you're sick or you're hurt and I think with this transition with them being a teen, they have to know that they can go to the doctor if it's something else, whether it's contraception or a problem or an issue they might want to know more or they get more information about, then it doesn't, it's not associated with pain or something unpleasant, you know. (FG15p9)*

The teachers linked learning how to communicate with a doctor to the development in adolescents of good communication with other people more generally.

T1: *Communication is something all teachers are working on with their students in being able to express yourself and recognize that taking responsibility for action… in my classroom I don't say this is how you talk to a doctor, I say this is how you talk to another person, this is how you express your feelings or this is how you broach an idea with someone else, so yeah not specific ... and recognizing that the young persons are often in a position of less power and how you can make conversations still work to your advantage when you have sometimes less structural power, whether it's just on age or experience or whatever. (INT3p2)*

b) Parents' views

Parents also related the need for adolescents to develop a good relationship with the doctor to the formation of other important independent relationships at this time of their lives. They also identified the importance of adolescents learning to take an active role in their own health care.

P2: *I think it is important because that's what adolescence is all about, it's about building independent relationships and so to put your relationship with your doctor in the same context as what is happening with all your other relationships that you are fostering during that time in your life really I think normalizes the relationship with the doctor, right, if you're doing the same thing with your doctor that you're doing with your best buddy or, you know, your aunt. (FG13p13)*

Other things that parents identified were the need for adolescents to learn correct terminology so that they were able to explain their concerns or symptoms or ask appropriate questions, the need for demystification of the medical profession so that they do not feel intimidated, and the encouragement to find a doctor that they are comfortable communicating with.

P2: *The strongest tool maybe that kids could have is sort of a demystification of the whole medical profession so that they don't feel when they are going to speak to a doctor that the doctor is a different from the other people in their lives that you can speak the same way to a doctor as you would speak to a parent or to a teacher and not to be sort of intimidated by the profession at large (FG13p4).*

P2: Maybe letting teens know that just because you don't have good communication with any specific doctor, doesn't mean that the opportunity for communication isn't there. It just means that maybe you need to seek a different practitioner and find one that you are able to communicate with and that you as the patient or as the receiver of the service are entitled to that good communication." (FG13p5)

c) Teacher and parent views on specific workshop objectives

Teachers and parents were asked to comment on the workshop objectives and identify which they thought were most important. Teachers thought that although confidentiality (Objective 4) was likely to be the most important objective for the students, they personally thought that taking an active role in making decisions about their health (Objective 3) was the most important. On the other hand it was recognized that once students feel that their privacy is secured and they know it's a safe place to talk then the rest would follow.

T1: I agree, number four the students will make that their priority. I think for us as educators we would pick number three, you know, and the rest will come if you have, you know, number four and three are linked. (INT3p22)

Parents identified the need for taking an active role as the most important.

P2: I would want to, I would see number three as being for teenagers particularly, I mean for anyone, um, would be the most important. (FG13p11)

3.2 What are the outcomes of the intervention?

In this section are presented data from Grade 10 high school student evaluations of the Talk to Your Doc workshops (usually collected immediately after each workshop), the effect survey (administered as part of this study) and focus groups and interviews conducted with all of the players and stake holders (high school students, teachers, medical school facilitators, VSB representatives and parents).

3.2.1 Workshop acceptability (Kirkpatrick level 1: reaction)

At conclusion of each workshop an evaluation questionnaire (Appendix 6) was distributed to the high school students. They were asked to rate what they learned (items based on workshop objectives) and satisfaction with facilitation by medical students. They generally rated workshops highly and the majority agreed that the objectives had been covered (Figure 3.1).

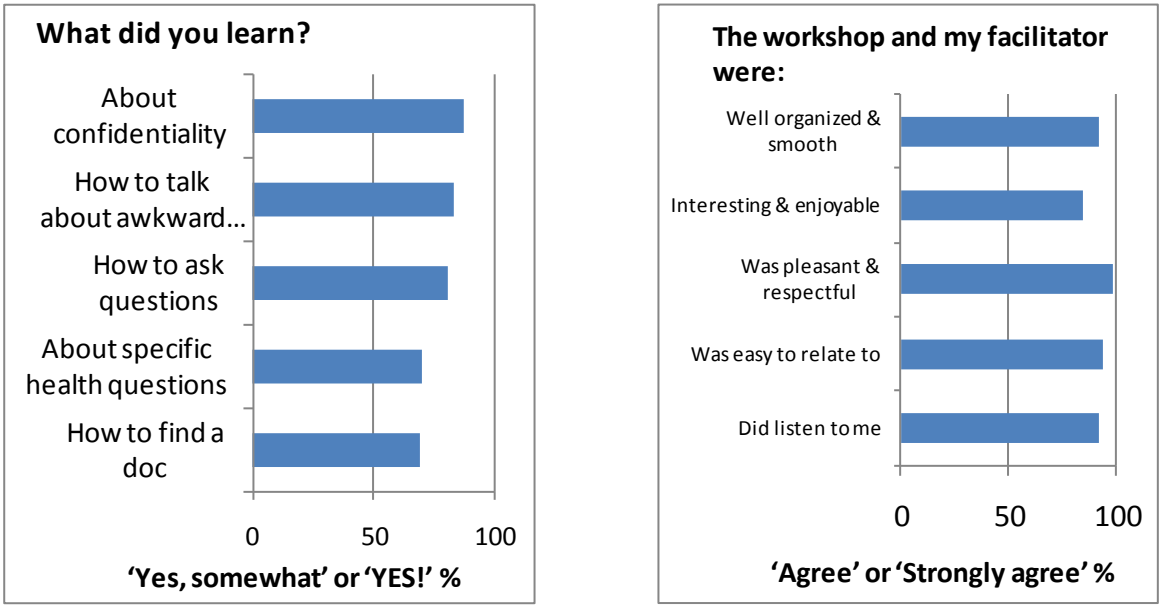

Figure 3.1 Grade 10 students' responses on post-workshop questionnaires administered after each workshop facilitated by medical students. The "What did you learn?" section asked the degree to which they learned the objectives of the workshop (on a 5 point Likert scale with range 'NO' to 'YES'). The "Workshop and my facilitator" sections asked them to rate characteristics of the workshop and facilitators (on a 5 point Likert scale with range 'Strongly disagree' to 'Strongly agree').

3.2.2 Impact on high school students: effect survey (quantitative data)

Students were recruited from ten Grade 10 classes in 6 schools. Mean age was 15.5 years; 52% were male; 91% had the same family doctor as their parents. There were 213 surveys returned. Valid records varied dependent upon the questions; in some cases the questionnaire was incomplete, eg, only the first page completed or all the questions in a group answered by circling the numbers in a column. For most questions the number of valid records was 207 (Table 3.3).

Table 3.3: Effect Survey respondents. Numbers of students from each school that were administered the effect survey.

School	Workshop	Control
A		17
B		26
C		26
D	22	14
E	23	20
F	45 (in 2 classes)	20

In the three schools where workshops were given students were asked whether or not they had attended a workshop (Yes, No, Not sure). If they were in a class that received a workshop and responded "Yes" they counted as having had a workshop. If they responded "No" or "Not sure" they were invalid. If they were in a class that had not had a workshop and they responded "No" they were counted as controls; if they responded "Yes" or "Not sure" they were invalid.

Doctor visits.

The high school students who had a workshop were half as likely as controls to have visited a physician in the previous two months and 5 times as likely to have seen a new doctor (Table 3.4)

Table 3.4: Consultation with a Physician. Occurrence of having seen a doctor (and the kind of physician) in the past 2 months by high school students who had been to a Talk to Your Doc workshop (intervention group) or had not (control group).

	Workshop n = 76	**Control n = 104**	**Not sure if had workshop n= 27**
Seen a doctor in the past 2 months?	15 (20%)	50 (48%)	12 (44%)
Kind of doctor seen	**% of 15 above**	**% of 50 above**	**% of 12 above**
Regular family doctor?	67%	78%	75%
Specialist	40%	20%	8%
Drop-in clinic	7%	24%	25%
New doctor	20%	4%	0%

Help-seeking intentions (Kirkpatrick Level 2)

Questions to measure help-seeking intentions (Appendix 8, Question 13) were taken from Wilson *et al* (2005) and compared with their results in Table 3.5. No differences were apparent between students who attended a workshop and controls, though fewer students in the workshop group had an "intimate partner". In both this study and Wilson *et al*, workshops were intended to encourage greater use of health professionals for management of emotional problems. Greater identification of mental health professional and doctor by the Vancouver students may indicate various age, educational and social differences from Wilson's sample in Australia.

Table 3.5: Help-seeking intentions in this study (Workshop and Control) and comparison with Wilson *et al* (2005). Question was: *If you were having a personal-emotional problem, how likely is it that you would seek help from the following people?* Responses were on a 7 point Likert scale: *Extremely Unlikely (1) – Extremely Likely (7).*A score of 4.00 is midpoint.

Source of help likely to be sought for emotional problems	This study: mean age = 15.5, Grade 10, 52% Male		Wilson *et al*: mean age = 16.4, Grs 7-12, 51% Male
	Workshop N = 64	Control N = 105	N = 218
Intimate partner*	5.38 (37% response)	5.33 (50% response)	4.77
Friend	4.97	4.95	5.13
Parent	4.69	4.63	4.84
Relative	3.94	3.90	3.75
Mental health professional*	3.47	3.70	2.68
Help line	1.95	2.15	2.14
Doctor*	3.16	3.45	2.73
No-one	2.93	3.00	2.86
Other	3.25 (13%)	4.21 (18%)	

* Significantly (ANOVA at the $p<0.05$ level) greater in this study than in Wilson *et al.* study. The 'intimate partner' choice was optional, dependent upon the existence of an 'intimate partner'; students were advised to skip it if they did not have one.

Preferences for participation in healthcare decision making (Kirkpatrick Level 2)

One of the aims of the workshop was to encourage involvement in health care decision making with a health care professional (physician). In the needs assessment the majority of Grade 9 students (the year prior to that in which workshops were offered) expressed a preference for

shared decision making. Flynn *et al* (2006) pointed out that the paternalist (doctor decides), shared (decide together) and autonomist (patient decides) models are over-simplistic and do not allow for other factors that are important in the patient's preference for decision making. Since such preferences might be important to understand the effect of the workshop upon high school students we used the instrument devised by Flynn *et al* to categorize the students across domains of preferences for: information exchange (in either direction), deliberation and control of the final decision. The resulting typology permitted classification of respondents into one of six types identified by Flynn *et al* in a long term study of 5,199 adults.

There were no significant differences between students who had workshops and controls. The most preferred decision making type of an adult population (Flynn *et al*) was the 'Deliberative autonomist.' This was *least* preferred by high school students, one third of whom preferred the Non-deliberative delegator, ie, "I'd like information but *you* make the decision." (Table 3.6)

Table 3.6 'Preference for Decision Making' types: frequency and percent of Grade 10 students classified according to their responses to 4 questions (taken from Flynn *et al.* and compared with their results). (Appendix 8, Question 12). Four questions were scored on a 5 point Likert scale: *Disagree strongly (1) – Agree strongly (5)*; Questions 3 & 4 were reverse scored for analysis.
"Please think about the doctor that you usually go to when you are sick or need advice about your health and indicate how much you agree or disagree with each statement."
1. When there is more than one method to treat a problem, I should be told about each one. [preference for disclosure of treatment choices: high = Informed, low = Uninformed].
2. I believe that my doctor needs to know everything about my medical history to take good care of me. [preference for physician knowledge of patient: high = Trusting, low = Suspicious].
3. I would rather have my doctor make decisions about what's best for my health than to be given a whole lot of choices. [preference for discussion of treatment choices (reverse scored): high = Deliberative, low = Non-deliberative].
4. The important medical decisions should be made by my doctor, not by me. [preference for selection of treatment choice (reverse scored): high = Autonomist, low = Delegator]

Type (pattern of scores on the 4 questions; H=high, M=medium, L=low)	Had TtYD workshop N = 69	No workshop N = 111	All N = 207	Flynn N = 5,199

Deliberative autonomist (H – H – H – H)	5 (7%)	11 (10%)	18 (**9**%) [least]	**46**% [most]
Deliberative delegator (H – H – M – L)	18 (26%	22 (20%)	46 (22%)	16%
Non-deliberative autonomist (H – H – L – H)	12 (17%)	13 (12%)	26 (13%)	11%
Non-deliberative delegator (H – H – L – L)	20 (29%)	36 (32%)	66 (**32**%) [most]	23%
Suspicious deliberative autonomist (H – L – H – H)	9 (13%)	17 (15%)	30 (15%)	3%
Uninformed deliberative autonomist (L – H – M – M)	5 (7%)	12 (11%)	21 (10%)	**1**% [least]

Problems experienced during a visit with a doctor (Kirkpatrick Level 2)

Contrary to our expectations, the intervention group (Grade 10 workshop) reported the greatest number of problems during a visit with a doctor and the Grade 9 students, the least (Table 3.7).

Table 3.7: Frequency of problems when visiting a doctor reported by high school students, the Grade 10 intervention group, the Grade 10 controls and the Grade 9 students. The question was: *Have you had any of these **problems** during a visit with a doctor? Circle **any** that apply.* The same question appeared in both the Needs Assessment (Grade 9) and the Effect Survey (Grade 10).

Problem	Gr 10, Workshop, 100%=69 N (%)	Gr 10, Control, 100%=111 N (%)	Gr 9 100%=142 N (%)
I felt awkward or shy about talking about my problems.	28 (41%)	30 (27%)	42 (29%)
I did not feel comfortable discussing some things (things that were very private, embarrassing or sensitive).	22 (32%)	25 (23%)	27 (19%)
I did not know how to ask the doctor the questions I really wanted answers to.	21 (30%)	19 (17%)	24 (16%)
I did not feel the doctor dealt with my problem properly.	17 (25%)	21 (19%)	14 (10%)
I did not feel the doctor gave me a chance to ask all my questions or fully explain what I felt	11 (16%)	12 (11%)	15 (10%)

I did not feel the doctor listened very carefully to my thoughts, opinions or feelings about my health problem(s).	11 (16%)	11 (10%)	6 (4%)
I did not understand all the information or advice my doctor gave me.	9 (13%)	14 (13%)	14 (10%)
I was afraid the doctor would not keep our discussions private and confidential.	9 (13%)	11 (10%)	12 (8%)
I did not understand why the doctor was asking some questions or how to answer the doctor's questions.	7 (10%)	8 (7%)	14 (10%)
Other (please specify) ……	2 (3%)	10 (9%)	6 (4%)
Mean number of problems per student =	**1.99**	**1.45**	**1.22**

Kruskal-Wallis Test, Chi-square = 13.4, df = 2, Asymp Sig = 0.001

Confidentiality (Kirkpatrick Level 2)

Medical students, in training workshops and materials, were told to teach the high school students that they should explicitly enquire of their physician whether or not what they tell will be kept confidential (response B to this question). Contrary to this advice the students who had the workshop were more inclined to directly tell the doctor to keep a secret (Table 3.9).

Table 3.9: **Response to concerns about confidentiality.** What high school students said when asked to consider: *If I am concerned that my doctor might not keep confidential what I say then I would: Circle one.* Options were the responses listed in the first column.

Response	Grade 10 students from Control schools N = 66	Grade 10 students who did not have a Workshop (Control schools + TtYD program schools, students from non-workshop classes who indicated they had not been to a workshop) N= 110	Grade 10 students who had a Workshop (had the TtYD workshop and indicated that they had) N = 64
Not tell him/her	35%	42%	41%
Ask if he/she will keep it a secret	26%	21%	20%
Tell him/her not to	21%	22%	28%

tell anyone else			
Not go to see my regular doctor	9%	8%	8%
Other	9%	7%	3%

Self-rated health (Kirkpatrick Level 3)

Health behaviours are associated with the individual's perception of their general health. We intended to look at such associations. However, very few students rated their health as less than "Good" and there were no significant differences across samples. This measure is from Lorig *et al*. (1996): *In general, would you say your health is: Excellent (1) – Very good (2) – Good (3) – Fair (4) – Poor (5).* The combined result for the Grade 10 students, all groups, all valid records, all schools, all classes N = 207 was a range 1-5, mean = 2.54, SD = 0.96. Thus our students' average assessment of their own health was between Good and Very Good. Lorig *et al* report a high test-retest reliability for this question (0.92). By comparison Lorig's results for 1129 subjects with chronic disease yielded a range 1-5, mean = 3.29, SD = 0.91.

Communication with physicians (Kirkpatrick level 3)

Effective communication between doctor and patient is characterized by patient behaviours such as preparation for the visit, asking questions and candid expression of concerns. These were explicit messages that medical student facilitators were instructed to incorporate in the workshops. A standardized instrument from Lorig *et al* (1966) was used to to measure these behaviours (self-reported) with a sequence of 3 questions. There was no significant difference in the means between the workshop and control groups (Table 3.10).

Table 3.10: Self-reported communication with a doctor. Grade 10 students responded to this question: *When you visit your doctor, how often do you do the following: 1 Prepare a list of questions for your doctor; 2 Ask questions about the things you want to know and things you don't understand about your treatment; 3 Discuss any personal problems that may be related to your illness.* Scored on a 6 point Likert scale: *Never (0) –Almost never(1) – Sometimes (2) – Fairly often (3) – Very often – Always (5).* Overall score is the mean of the 3 questions.

Subjects	Valid N	Range	Mean*	SD
Control schools	66	0-4.33	1.76	1.13

No workshop (control schools + TtYD program schools, students in non-workshop classes and indicated they had not been to a workshop)	111	0-4.33	1.74	1.07
Workshop (had TtYD workshop and indicated that they had)	69	0-4.33	1.67	1.14

*No significant differences in the means (control *vs* workshop): t(133) = -0.456, P=0.65). For a significant difference at P<0.05 the workshop mean would have had to be >2.1, as a result of students scoring, on average, in the *sometimes* to *fairly often* range. 1130 subjects with chronic disease reported by Lorig *et al*: Range 0-5, Mean = 3.08, SD = 1.20, Internal consistency = 0.73, Test-retest reliability = 0.89

Confidence with physician (Kirkpatrick Level 3)

Self-efficacy is an important component of behavioural change. We asked questions that measured the confidence students felt in being able to perform tasks that fit with the workshop objectives. There was a tendency (not significant) for students who had the workshop to be ***less*** confident in their ability to perform these tasks (Table 3.11).

Table 3.11: Self-efficacy as reported by high school students in putting objectives of the Talk to Your Doc workshop into practice. Each question was scored on a 10 point scale: *Not at all confident (1) – Totally confident (10).* The overall score is the mean of responses to the five questions:. *How confident are you that ... 1. you can ask your doctor things about your illness that concern you? 2. you can discuss openly with your doctor any personal problems that may be related to your illness? 3. you can work out differences with your doctor when they arise? 4. what you tell your doctor will be confidential (a secret between the two of you)? 5. you know how to find a different doctor if you want one?*

Subjects	Valid N	Range	Mean*	SD
No workshop (control schools + TtYD program schools, students in non-workshop classes who indicated they had not been to a workshop)	111	1.00-10.00	7.06	2.00
Workshop (had the TtYD workshop and indicated they had)	69	2.60-10.00	6.62	2.05

*Non-significant difference in the means: t(178) = 1.416, P=0.16). Internal consistency reliability (5 items) for 204 valid cases (Cronbach's alpha) = 0.86.

Health values (Kirkpatrick Level 3)

Health hardiness (a personality characteristic thought to express commitment to respond to challenges and control one's life) has been associated with good general health practices. The Health values factor (one of four that make up Health hardiness) was highly associated with preventive health behaviour (Gebhardt *et al* (2001). If the workshop encouraged health values it might result in better health behaviours. Or, if the health values were a personality trait it might explain a greater or lesser impact of the workshop. Students who had the workshop indicated lower health values than controls (Table 3.12).

Table 3.12: Reported Health Values (a component of the Revised Health Hardiness Inventory) by Grade 10 students who had and had not been to a Talk to Your Doc workshop. The items were scored on a 5 point Likert scale: *Disagree strongly(1) –Disagree(2) – Neutral(3) – Agree(4) – Agree strongly(5).* Score is mean of responses to 6 statements:. *1. I handle myself well with respect to my health. 2. I don't give up easily on efforts to improve my health. 3. I am willing to make daily sacrifices for good health. 4. I am determined to be as healthy as I can be. 5. I take care of my health as a matter of principle. 6. When something goes wrong with my health I do everything I can to get to the root of the problem.*

Subjects	Valid N	Range	Mean	SD
No workshop (control schools + TtYD program schools, students who were in non-workshop classes and indicated that they had not been to a workshop)	111	2.33-5.00	3.80	0.63
Workshop (had the TtYD workshop and indicated that they had)	69	1.00-5.00	3.61	0.73

Non-significant difference in the means: t(178) = 1.850, P=0.08. Internal consistency reliability (6 items) for 207 valid cases (Cronbach's alpha) = 0.87; compared to Gebhardt *et al* Who reported 205 subjects age 18-26 years: Mean = 3.69, SD = 0.73 and a significant trend to increase with age (mean = 4.25, SD = 0.66 for subjects >65 years). Internal consistency (Cronbach's alpha) = 0.79.

Effect survey: summary of comparative data

Overall there was little effect of the workshop as measured by the items of the effect survey. Table 3.13 summarizes the data.

Table 3.13: Summary of differences between intervention group (workshop) and controls for data from Effect Survey.

Scale	*Workshop (n = 90) *vs* Control (n = 123)	Examples, comparative scores and notes
Self-rated health	W ≅ C	Good – Very good
Help-seeking intentions	W ≅ C	From '*intimate partner, mental health professional, doctor'* was greater than literature reports.
Preference for participation in healthcare decision making	W ≅ C	9% Deliberative autonomists (least) 32% Non-deliberative delegators (most) Cf. Adults are mostly Deliberative autonomists (46%)
Communication with a doctor	W ≅ C	eg, *Prepare; ask questions; discuss personal problems* were done Almost Never-Sometimes)
Confidence with doctor	W ≤ C	Moderately confident
Health values (hardiness)	W ≤ C	eg, "*I take care of my health ... "* Neutral-Agree Cf. Overall same as 18-20 yr olds in literature report, increases with age.
"If I am concerned about confidentiality then ... "	W > C	"*Tell him not to tell*" W: 30% *vs* C: 20% "*Not tell*" W = C, 41%
Problems experienced with doc	W > C	Average problems/student: W=2.0, C=1.5, Gr 9=1.2
Been to see a doc recently	W < C	W: 20% *vs* C: 46%
Acquired a new doc	W > C	W: 20% *vs* C: 4%

*****W ≅ C: no significant difference between Workshop and Control groups; W ≤ C: Workshop less than Control but a tendency not significant at the P<0.05 level; W > C: Workshop group greater than Control significant at P<0.05 level; W < C: Workshop group less than Control at P<0.05 level.

3.2.3 Impact of intervention: focus groups (qualitative data)

Quotes are identified by Focus group or Interview number (FG# or INT#); page number (p#); and speaker number (S# = Student, T# = Teacher, P# = Parent, M#= Medical Student, I= Interviewer).

a) Workshop acceptability (Kirkpatrick level 1: reaction)

In the focus groups high school students remembered the workshop as "informative", "interesting", "fun", "cool", "interactive." The medical school facilitators were "informative", "easy to talk to", "friendly", "listened to us". These comments are consistent with evaluations collected after each workshop when the high school students were invited to add narrative comments in addition to numeric ratings (Section 3.2.1).

Benefits / acceptability of workshop to teachers

Teachers who had workshops in their classes confirmed that the workshop objectives fitted with the with Planning 10 objectives.

T: *So and how does it meet the intended learning outcomes of the Planning Ten curriculum? Well there's the personal development piece of Planning Ten where I think it fits beautifully where encouraging young people to open up and be to implicate the idea that it's okay to ask questions and be responsible for your own health and to take initiative and to do a little bit of research and to ask questions and not assume that the doctor knows everything about you or will know everything about you. (INT1p4)*

Teachers thought that the workshop was important because it opened students' eyes to the possibilities of the doctor-patient relationship, the need to play a more active role and the importance of adolescents seeing the doctor as a member of their community rather than a person in a strange room.

T1: *So I think the Talk to your Doc is a really wonderful idea because it's a, I mean those are relationships we will have forever, whether it's being an advocate for an elderly parent later on in life or thinking for yourself being proactive with our health care, making sure that you understand what your body does normally and what it's about, recognizing what's different and I think those are great skills that young people need to*

know. (INT3p4)

Teachers liked having the medical students come into their classroom and noted that having multiple student facilitators made it especially memorable for their class who were more used to single guest speakers. Medical students were good role models.

Teachers also believed that it benefited the medical students as future doctors to interact with the adolescents.

T1: *… and you're giving your also your doctors an opportunity to develop their skills to also recognize who's the adult and who's the child, um, that recognizing that the adult being the doctor or the med student has to think about how these questions need to come about and recognizing their place of power and, um, recognizing that they really do need to facilitate these little micro-lessons every time they meet with a patient. (INT3p14)*

Focus group data from students, parents and teachers identified a number of strengths of the intervention in relation to relevance of objectives (see section 3.1.1), format of the workshop and timing. In particular, teachers identified the importance of the interactions with medical students. Even if the conversations were tangential to the workshop objectives (eg, how much do doctors earn?) they helped to establish a relationship.

T1: *…the central point of what you do is those small conversations with individual med students and I think just recognizing that that is valuable and you don't have to, there's not another wheel that needs to be created. That one is a really good one and it works very well and I think it delivers your central objectives in a most effective way. It might not be the most cost effective or time effective, but it's going to really develop the most sincere relationship or hope for whether it's, yeah so I mean yeah you can make worksheets and you can make handouts and fill in the blanks and you can make games and those sorts of things but yeah, just the essential point I think is a good thing. I don't think you need to change it. (INT3p20)*

The timing of the intervention (in Grade 10) was seen to be appropriate for the stage that adolescents were at in their wider development of independent relationships and taking responsibility for their actions.

T1: It's probably a good time because they are gaining some independence, some of them are starting to learn how to drive so actually getting themselves to and from appointments is probably more realistic. And cognitively they're probably more able to understand the active role of making decisions about health care. (INT3p15)

The medical students felt that the objectives covered the important issues and that the format (skits and small groups) worked well. They felt they got more attention than the teachers.

M5: Like well I thought they saw us as medical students and at least probably they gave it a little bit more attention than normal. (FG1p6)

M3: The good thing about the workshop to me is that in a large group the kids at this school cumulatively have a lot of behavior problems but when you split them into a small group that kind of fades away and they're individually really nice kids. So the small group is really good for this kind of thing. (FG p6)

b) What students learned from the workshop (Kirkpatrick level 2: learning)

The most frequent thing that students said they learned was about confidentiality (objective 4). Some students indicated that they had not heard about confidentiality before or realized its implications.

S5: No. I thought, I didn't know that the doctor could like not tell the parents.

S1: Yeah, yeah, I didn't know that. (FG11p8)

S1: And, um, that it's sort of because we have a family doctor, like one that you've been through like basically when you get born to the point like now, you know that even though they're your family doctor and like practically your mom talks, gossips about politics or celebrities with them, you can still talk, tell them about your personal health and your parents won't find out, like that's sort of helpful because sometimes your parents develop that relationship with your doctor that you sort of think you're more friends with patient and doctor, so it helps to know that they won't leak any information out I guess. (FG9p8)

The second most important thing that students said they learned related to going to see a doctor on their own and finding a doctor (Objective 5). Many students said they did not realize they could see a doctor without their parents' consent (go on their own). They noted that the workshop had provided them with phone numbers and website information about how to find a doctor.

S2: *We also learned that like you don't have to have an adult with you to change doctors if you want to. Like it can be alright if you're not comfortable you can just change doctors. (FG6p4)*

S4: *Yeah, like some phone numbers and stuff and they're like you can go to your doctor without your parents' consent or whatever, yeah…Cause I guess we always thought that the communication has to involve your parents.*

S8: *Yeah, with your parents, like your parents knowing. (FG5p8)*

Many students said they learned that they can go to see the doctor about things other than medical problems.

S6: *Yeah, I learned like stuff that I didn't know like you can ask your doctor anything, like basically anything, like not just medical stuff. (FG5p4)*

Students learned some specific things about communicating with their doctor such as talking about difficult issues, asking questions and preparing for the visit (Objective 2).

S7: *Um, probably just like the best part was like what we would, what we were able to talk, how we were told to talk to our doctors, like how we practiced it while we were in our groups. (FG6p4)*

Students identified the importance of talking more about their concerns so the doctor can help them (Objective 1).

S1: *Maybe tell your doctor a little bit more to help him out, to help you, to help him to help you. (FG11p9)*

S6: *To not let them like, just say okay actually make sure they understand what you're talking about, not just let them like be like okay I get it but like make sure they understand.*

(FG6p7)

Students gave examples of how the workshop had changed their attitude towards the doctor, made them less afraid to talk and increased their confidence (a foundation for Objective 5).

S4: Cause now you know that like you can ask more questions and like a lot of people sometimes are afraid that if they tell them something that maybe they're gonna judge them. But like people have told me that doctors don't really judge, they just try and help you, so you can like ask whatever you want. (FG6p11)

Students also identified things they had learned that were additional to the workshop objectives, such as learning that other people have difficulty talking to doctors and the different expectations about the doctor-patient relationship in Canada compared with their country of origin.

S1: And I learned another thing from workshop. I never, um, think you have the activities like this how to improve you talk to your doctor and it's very curious and very surprised and this can make me, make me understand the, uh, understand the condition of Canada. (FG7p10)

There was evidence from the focus groups that the workshop had stimulated the students to talk about what they learned to family, friends and teachers.

S4: I talked to my parents.

I: Oh yeah, what did you talk about?

S4: How, um, you know you need to talk to your doctor and stuff.

I: Yeah. Did they talk to you about that, like did you like that, did they think that was a good idea?

S4: Yeah, cause they always did the talking for me sometimes and they're like yeah you should talk on your own. (FG12p5)

S6: Yeah, she hurt herself Saturday but then she wouldn't tell her mom because her mom would pull her out of sports. So then she was like physically like injured and she wouldn't go to the doctor because she was afraid her mom would find out from the doctor. And I told her that it's confidential, the doctor's not allowed to tell your mom if you don't want

the doctor to tell your mom. And she said yeah well I'm still scared and I said okay then go to the clinic and then go find another doctor. And she's like but don't I need like my mom present and then I told her no. You just need your care card. (FG6p13)

T: *Oh my goodness, yes, huge awareness, huge awareness. So many questions I got. [I: Really?] So many, yeah. I'll have to keep more of a journal. But I mean I got so many questions. (INT2p6)*

c) What students did differently when they saw their doctor after a workshop (Kirkpatrick level 3: change in behaviour)

The behavioural changes that students who had been to see a doctor after the workshop noted were generally tentative. In relation to the workshop objectives students said they talked more, were more open (Objective 1) and asked more questions (preliminary steps to talking an active role, Objective 3) and felt less intimidated, more trusting (preliminary steps to establishing an independent relationship, Objective 5).

S6: *Um, when I went to my doctor I asked general questions about stuff I wanted to know. (FG12 p16)*

I: *Did everyone find it hard to talk to their doctor before the workshop?*

S7: *Yeah.*

I: *Yeah.*

S7: *It was awkward.*

I: *Yeah.*

S4: *Yeah, awkward.*

I: *Awkward, and now how do you feel about it?*

S8: *It's easier.*

S7: *Yeah.*

I: *Is it?*

S7: *Yeah.*

S4: *Sometimes.*

I: *So why do you find it easier now?*

S4: Just cause like you become friends with them now, like I don't know cause before you never used to do the talking and now that you start talking with them, feel like really close to them I guess.

I: Yeah.

S7: Cause you never like trusted them before. You can like trust them. (FG12p7-8)

S4: And he paid more attention I guess cause now that we, I was talking and he actually answered, before I never used to ask him anything, so yeah. (FG12p18)

S2: I guess I'm a tiny bit more open, like that like even though my parents were there it still kind of feels weird. I don't usually go to the doctor all that often, but then I guess like the comfortability of like the level of comfort, it kind of rose a bit because I knew that, I guess what really helped me is that level of confidentiality that was there cause I understood that my doctor wouldn't be going telling people everything so that really helped. (FG7p9-10)

S2: You're not as intimidated I guess. Before it was like they're in charge but then now you can think about it, it's more about the reason that the doctor's there is because you have a problem. They don't have to be doing most of it, most of the talking and it can be, yeah.(FG12p18)

Some students said "not much" had changed and some said it was "the same".

I: How about you guys, is there anything different?

S3: No, practically the same.

I: The same?

S3: Yeah.

S5: Still got in there, get in, get out ...(FG11p16)

In summary there was weak evidence that students changed their approach to the doctor-patient encounter or changed their communication with the doctor.

d) What medical students learned

Medical students gained insight into the perspectives and different stages in development of the teens at the workshop. They found they were not yet ready to change and were suspicious about confidentiality.

M2: a lot of them knew like what they could talk to their doctors about but a lot of them weren't willing to or they felt that the relationship wasn't there and they just weren't going to talk to them, talk to their doctors. (FG1p1)

M1: And a lot of like the few of the ones in my group weren't quite comfortable with the fact knowing that they could go alone, they still wanted their mom to go with them or their sisters or brothers or whatever to go with them. So even though they knew they could go alone, they weren't ready to. (FG1p1)

M1: They knew that they're supposed to get confidentiality but whether the doctor would actually perform that was another issue. (FG1p2)

Medical students said that they gained a greater awareness of how difficult it is for teens to visit the doctor and identified several things that they might do to improve adolescent health care when they are in practice. They noted the importance of trust on the part of the adolescent and patience on the part of the doctor, and the need to take time to get to know them. They identified the importance of reinforcing confidentiality and encouraging adolescents to come on their own.

M1: I think it made me a little bit more open to the fact that it is sensitive for, like it's something different for them and it's a step from them going away from their cocoon that they're comfortable with and at the same time it's also putting them in a place where they can be even more comfortable, right, cause they don't have to go with their parents. (FG1p2)

M3: The trust is a really important thing, even more than in the usual doctor/patient situations. They're kind of suspicious and wondering what you're gonna do with anything that they tell you. (FG1p2)

M2: I think it might be important to kind of get to know them before they actually come in for a visit about a sensitive issue, so maybe just to meet them in a 15 minute session beforehand when they start becoming your patient and getting to know them a little bit more. (FG1p2)

M4: Even if, um, like a child comes in or like an adolescent comes in with their parent you can even talk to them and just say, you know, like you can come on your own, it's okay. (FG1p2)

M5: I think it's also important to reinforce the fact that everything would be confidential. (FG1p2)

e) Barriers to workshop effectiveness

Four major themes emerged from the qualitative data that related to the direct or indirect impact of the intervention: (1) how adolescents learned how to talk to doctors, (2) what made it difficult for adolescents to talk to the doctor, (3) what made it easier for adolescents to talk to the doctor, and (4) barriers to behavioural change.

How adolescents learn to talk to the doctor

Parents and teachers confirmed that adolescents learn about doctor-patient relationships primarily from their parents, often through watching what they do. The limitations of this were that parents themselves may need help with doctor-patient relationships; they may be poor role models; there may be cultural differences in attitudes towards doctors or lack of familiarity with the Canadian health care system, and students were unlikely to observe their parents' own appointments (adult interactions). If parents had negative experiences with the medical system this may be communicated to their children. Students may also learn from TV and other media. There was limited direct teaching in schools, but it may occur indirectly, eg, when appropriate touching, the role of the doctor, or sex education was addressed. The data demonstrated that students often did not know what a good doctor-patient relationship might be.

T: They're getting, but if their parents are not, you know like I think they role model after what they see their parents do and so if the parents are, you know, they shut their mouth

and they don't ask any questions is the way the kids are gonna play it….So then it just kind of compounds on itself and you have, you know, generation after generation that are meek and ill informed, uneducated and you know whatever the doctor says…(INT2p2)

P2: *I mean people parent according to, you know, often their parenting style is influenced by their own, to what their personal experience has been so if it's a progression of, you know, poor experiences with medical people, then that might be communicated (FG13p7)*

P2: *Um, I would say that the students who do have had any information on how to talk to their docs would have probably got it mainly through their parents. There's some opportunities through the health instruction in the school where, um, particularly for very young students, um, and I don't know that the focus would be on verbal communication. I think it would be more on setting boundaries around their bodies, right, and who is, who has access to them and who doesn't. I know that for my son what he has come home from the school system has more to do with identifying what will doctors and medical practitioners play in terms of his own protection of his body. (FG13p2)*

What makes it difficult for adolescents to talk to the doctor?

Students identified many reasons why going to see the doctor was a difficult experience. The data demonstrated that there were many real or perceived barriers to establishing an independent doctor-patient relationship.

Age: generational differences, older doctor.

S1: *It's like hard to communicate 'cause he's like really old, so like it's difficult. Like I think it would be easier if the doctor was younger. Yeah. (FG4p2)*

S4: *And also like cause not all the doctors like they're, well they're not old but I mean like they're not, you know, I guess they don't all like the new generation like have, you know, what kind of problems we all have and then, it's kind of weird {unclear} it's kind of like it's hard to tell your parents…(FG5p11)*

Gender: doctor of different gender.

S2: And like also if my doctor is a guy so it's pretty hard to tell them personal stuff. (FG4p3)

S5: Um, they might not, like because they don't have the same body parts as you they may not understand, um, like how you feel and how it's affecting you, like you think they might not understand. (FG2p2)

Adolescent characteristics: shyness, embarrassment, lack of confidence/knowledge; status as patient:

S3: No, because if I'm shy I can't say much what's happening (FG4p4)

S3: And, um, the embarrassment part, what if it's something that's normal but you went there and you think it's abnormal and they laugh at you, that whole, that's the embarrassment part. (FG2p13)

S3: The lack of knowledge that you have, {S3: Yeah} like they have like probably a Ph.D. or whatever, right, but you were just, yeah. (FG2p13)

S2: And sometimes it's intimidating 'cause if you don't know all of like the big terms, like you don't know how to explain how you're feeling sometimes. So you might be thinking to yourself, what if I'm not saying it right and they will be giving me the right information, so ... (FG2p13)

S3: Like they don't really take you serious and like there's certain things that they think that they can't tell you because you're, you wouldn't understand or something. (FG3p8)

Doctor characteristics: doctor in a hurry; doesn't listen; too serious; critical/judgemental; mannerisms; uses jargon

S3: I don't know, it just kind of feels like he's like rushing. And you want a doctor that's gonna like take the time to listen to you and find what's wrong. (FG6p13)

S3: Yeah, and they don't have time to answer your questions, your doctors. (FG2p15)

S3: My doctor doesn't really listen. He kind of assumes that he knows what I'm talking about and doesn't ask or get like all the like the symptoms and details. (FG6p12)

S3: I hate it, I hate how doctors speak, or at least my doctor, my family doctor. No I just, he seems really like serious, that's all. He'll talk like monotone and all that. It really freaks me out. (FG3 p7)

S2: The one thing when I turn really quiet I'm just like scared that he's gonna nail me for not

going to see him in awhile cause he always asks me, 'where do you go these days,' like so I'll be really quiet until he makes some jokes or something, and I'll be oh okay so I feel free to talk. (FG4 p16)

S4: *Mine's shifty. Yeah, I don't like shifty ... The whole like raising of the eyebrow while jotting down notes. (FG3p29)*

S1: *Yeah, I don't understand it though. Maybe if they like simplified it, you could understand it. (FG3p9)*

Environmental factors: waiting times; short appointments; don't see doctor often (don't know well enough to talk about personal things); going to doctor is a strange experience (scary, sick, stranger)

S1: *It takes a lot of your time and a lot of time and a lot of energy that you sit there and wait for the doctor a long time. (FG7p12)*

S3: *So I think it's easier to talk to a counsellor or a therapist about things maybe because of the time that a doctor has. (FG3p31)*

S5: *Yeah, and so if you visit them probably like once or twice a year, even though you might feel comfortable with them it's gonna be hard 'cause you haven't been communicating with them as much so ...(FG2p11)*

S1: *Well you barely know the doctor sometimes so it's really hard to open up. (FG2p2)*

S2: *Doctors just kind of scary ...Well I mean you're not happy when you go to the doctor. (FG3p3)*

Confidentiality and parental presence:

S1: *Yeah. 'Cause like you never know 'cause if it's something really serious they might go and tell your parents. (FG4p6)*

S1: *Usually my mom's with me so it's kind of awkward. (FG3p2)*

What makes it easier for adolescents to talk to the doctor?

Students identified things that would make talking to the doctor easier. The data demonstrate their reliance on the doctor (and sometimes parent) to facilitate the encounter.

Doctor makes it safe to talk:

S6: If the doctor's like really like positive and happy and like, you know, having like this welcoming kind of attitude, like it was 'come on, I'm here to listen to you,' it might help the person to open up more, like 'my job here is to listen to you so open up,' you know. (FG2p28-9)

S8: Yeah, like make you feel this is the place where you can like tell. (FG5p20)

Doctor asks questions but doesn't interrogate:

S6: I think the doctor should ask more questions about your symptoms and like how do you feel 'cause sometimes when you go there, like sometimes you would forget to describe some of the symptoms and like you remember it after you went home so like yeah, doctors should ask more questions about that. (FG2p5)

S5: And how they don't make it seem like your check-up is an interview, they just make the, like they make it sound like a conversation so it isn't like question after question after question, they think you seem like more comfortable and just ...(FG2p12)

Doctor treats them as an individual: interested in them as a person (asks about school; gives advice about studying):

S2 … so he's like giving me advices on school courses which makes him like helping me as well which gives a better relationship. So again like helping me with school and making it better, yeah. (FG4 p15)

Doctor invites them to come again:

S1: Well I went to a clinic doctor once and he said that to come and see him again, even if like if the bruise is still there or not and so I think that's what makes him good, like no matter what, like I'll also have to come, go and see him.(FG4p11)

Doctor is not too serious:

S1: And also if the doctor isn't so serious, like if the doctor smiles a lot and like is more easy going then it would be easier to communicate… 'Cause if the doctor's really serious it's like you feel pressure and yeah… to like be careful about your words. (FG4p8)

Doctor listens and demonstrates active listening through body language:

S2: Um, like maybe if they actually like listen to us and won't feel like doing something else when we're talking cause that will be like one of the big things that I experience all the time, like they're doing something else and then I'm like oh are you listening, I'm not sure, so yeah. (FG4p7)

S2: Like maybe like eye contact. [I: Mmm, Mmm.] Or like nodding and telling me oh yeah I understand. (FG4p8)

Doctor explains and uses words they can understand:

S1: Um, like use words that I would understand.

S2: Yeah, he uses professional words and I'm like yeah I think I get it. (FG4p4)

S6: Yeah, cause when I think most of the time when you like, when you're sick you're scared cause you don't know what's going on so like once the doctor explains everything, like that part of your burden kind of drops so like at least you know what's gonna happen, what's going on, like what, like if there's a cure for it or anything like yeah if you know what's going on it's a lot easier. (FG2p12)

Doctor competence/takes job seriously (builds trust):

S1: Yeah. When she talks really strongly means that she's good doctor, she knows everything. She can be a good doctor for me, trustable. (FG4p10)

S1: And also if your doctor's like willing to work overtime, like it just shows that you, um, like he takes his work really seriously. Yeah. (Fg4p16)

Knowing the doctor:

S4: I don't know, like I feel, I think it's easier if like I know the doctor better so I just kind of wait a bit, like I see him a few times and I just think obviously this is what you're like and then I know like if I can trust him or not. (FG3p24)

Doctor is arms length:

S3: *Just the fact that you know that you won't disappoint them 'cause they're not your parents or anybody, they're just a bling so if you have something going on that you are afraid to tell your family members 'cause it might disappoint them or it might, it might change their opinions of you, you're worried, then you don't have to worry about that when you tell your doctor 'cause he's totally not gonna affect you in your life in any emotional way. So that's a good thing. (FG2p4)*

Having support (someone with them):

S5: *Like when I, before I go to the doctor I tell everything what I feel and stuff to my mom so that she can explain it 'cause then I'm shy and stuff and then I can know what's happening and yeah. (FG2p20)*

S2: *Mostly I'd want to go with my mom, I'd want my mom to be with me but she's like no I think you go in fine cause I sort of feel insecure with a guy doctor cause I'm just sort of not comfortable, yeah. (FG4p10)*

Nature of visit (easier to talk about minor problems):

S2: *Well it's just like the minor ones, like oh which part hurts, and then oh my eyes hurt or something, yeah. (FG4p6)*

Barriers to behavioural change

Students and teachers identified a number of reasons why changing the behaviour of adolescents in relation to the workshop objectives would be difficult.

No reinforcement following the workshop

S5: *This is about 2 months ago and we barely remember any of it. (FG6p5)*

S2: *…like I could use some of the stuff that I remember but the fact that it was so long ago there hasn't been like anything coming around to reinforce that for what we learned. It might be kind of hard to use what we had. (FG6p11)*

Readiness for change

Active involvement in the doctor-patient relationship was a new idea.

T: I think that's kind of an empowering point but many of them likely haven't considered that they actually are agents in their own health care rather than just active recipients of the doctor being all knowing and they're going to make me better. (INT3p4)

T: Like that to a student would be really novel, that I am an agent in helping my health care. I mean other than you know eating healthy and exercising and those sorts of things, but when it comes down to the decisions that need to be made it's not just tell the doctor or the health team that I have the potential to make the input. (INT3p5)

Grade 10 students were at a transition stage.

T2: I think it's a pattern too, it's something they've always done and they're at that point where they're still young enough to be going with their parents but they're just on that edge of now I'm gonna have to start doing this on my own. So it's, I think it's just a habit and they're not ready to quite break that habit yet. (FG15p5)

T3: I think the key to that is giving them the information to be able to make those decisions and make them wisely, but also letting them know that they're not alone in having to do that, that if they have a question they can ask. Otherwise it may seem like such an onerous task or a huge responsibility, um, but they're still quite young so to make a big decision about their health or to take some steps, you know, if they want to ask a question or two. (FG15p17)

Students were not ready to change their doctor yet.

S2: Like, like, like I don't plan to have the same doctor when I'm older. I like I know I'm going to change doctors later on just cause {unclear} and I'd probably choose like a female doctor 'cause I know I'd probably be more comfortable with her. (FG7p17)

S5: I wouldn't actually do it [change doctor] at this point. (FG11p16)

Students were not ready to go to the doctor alone.

S2: Probably wouldn't right now. I don't know, I find it easier when there's someone older with me. Like it could even be like an older sibling, as long as someone's with me then if

it's just like we'll approach it alone it feels kind of weird. (FG7p16)

S1: And if I go to the, see a doctor just by myself I feel lonely and will much miss my family. (FG7p16)

Barriers to changing existing arrangements

Parents wouldn't understand why they wanted to change (lack of support/encouragement from parents).

S4: And if your parents like your doctor and you have the same as them then they're not gonna understand why you want to change. If yeah, if you don't like the doctor but they do. (FG6p9)

Parents would want to know why they wanted to go alone.

S4: And probably 'cause like your parents probably will be like "Why do you have to go to your doctor by yourself?" you know, "Why can't we ..".(FG5p10)

Students couldn't ask parents to leave the room.

S6: But my parents are in the room with me and I can't just say: "Can you, like, go?" And that was it. (FG6p11)

Doctors were part of the family.

S1: Yeah. And also mention how you could communicate if your family doctor is more family, less doctor. (FG9p22)

T3: Well to play off of that, in our school we have a number of students who have family members who are doctors, parents or aunts/uncles and so a couple months ago I had one student say "I'm not going for my immunization, my dad just gave it to me at home last night. He just sat down while I was watching TV, 'do you want your shots,' 'okay, sure'." So how much information they're getting from parents too is a little bit of an unknown. FG15p7)

Doctor was friends with parents:

S3: It's really hard to build the relationship with the doctor when your parents arriving cause they have a relationship probably, like a friendship with our parents and the family doctor 'cause they're the same age, they talk while we do our check-ups and everything. But we, we don't get that till we get older and parents are there so we can't just casually talk and interrupt what they're talking about, right, so it's difficult for us to build that relationship with the doctor. (FG2p9)

S8: And then also like my doctor's really good friends with my dad so it's kind of awkward. (FG5p11)

Reliance on parents

Students wanted someone with them for company or support.

S2: Mostly I'd want to go with my mom, I'd want my mom to be with me but she's like "No I think you go in fine" cause I sort of feel insecure with a guy doctor cause I'm just sort of not comfortable, yeah. (FG4p10)

Students only went to see the doctor if they were really sick; then they went with their parents.

S1: If I had to go to the doctor with my parents, I'm pretty sure I'd be really sick.

I: Okay. So normally you would go by yourself or you just wouldn't go?

S1: If I could go myself I'm pretty sure I don't need to go. (FG8p12)

Parents/relatives did the talking

S8: Overcoming that he's your doctor and that like you talk to him about like being sick and stuff and your mom usually tells him like what's wrong with you. (FG5p9)

T: But when they go to the doctors they usually at this age they're going with their parents so, but a lot of the times when they go with their parents the parents are asking all the questions. The kids are just sitting mute, you know, the parents are doing all the work. (INT2p2)

Parents decided when going to see the doctor was necessary.

S6: Yeah me too, like well normally I would tell my mom first and then like if she's like "oh you know what, just to do this," like say {unclear} then like I wouldn't have to go to

doctors but then if it's something more serious and I tell her then she would be like "yeah, then you go to the doctors, yeah." (FG2p6)

S1: Well they make the appointment, then they tell me. "You're going to the doctor." I'm like "Okay." (FG11p20)

Confidentiality

Despite what they were told in the workshop (Objective 4), students still suspected that confidentiality would not be maintained. When asked directly no students said they would be willing or able ask the doctor about confidentiality.

S1: Well, um, it was I guess sort of the same but then like it, I'm not saying like the workshop wasn't good enough but it's still kind of weird to talk to your doctor. I mean like you know how they told you it's okay and everything but like you never know, right. I mean like yeah, sure the laws and that, you know, and all that, there's a rule saying that they can't tell you but, you know, my parents are like you're gonna ask stuff and I'm just gonna be like I'm just not like a hundred percent sure that he's not gonna tell her, right. (FG11p17)

S4: It's harder to actually believe if you have the same doctor as your family. But if you like, if the family's waiting outside and then but you come out and they're like oh so what happened? It's just like if the doctor didn't know them then they wouldn't probably be more likely to not tell them. (FG6p12)

Talking to the doctor is difficult

Students still found it difficult to talk about their problems (Objective 2) even after the workshop.

S1: …you're always patient and you're always the helpless one, you're always the, you're always the one that doesn't know what they're doing and stuff so then, so mine's kind of weird and then if you ask a question and the doctor doesn't understand what you're talking about that would be like okay I just asked a really, really dumb question here to a really, really professional doctor. (FG11p17)

S4: Like they didn't specifically go into the that part of the how to make it less [awkward], they just said it's okay, you don't have to be awkward. (FG11p23)

Students felt intimidated (doctor as God)"

T: Because you go into a room with no window, the door shuts and you've got somebody right in front of you and if you're immature and you're, you know, not, you don't have any experience, you're totally intimidated... Yeah, yeah. I'm not, you know, I'm gonna just freeze. I don't feel comfortable with you, I'm not gonna discuss any of my questions. (INT2p6-7)

Students were reluctant to divulge information:

T: Young people are often very reluctant to divulge information or sometimes are reluctant to describe what's going on in their lives as especially if they feel that somehow something it's their fault or something like that. So I'm sure that beyond the conversations the student would have with the parent or maybe with the teacher or with the principal, there's an additional level of probably apprehension when a student is talking to a doctor (INT3p1)

Students perceived it will be hard to start a new relationship:

S2: …so if I do go to another doctor, like it would be weird cause I'd have to have a new start, a brand new start of getting to know the doctor and the doctor to know more about me. (FG4 p11)

S4: Okay, like I just got a new family doctor and so I'm not that comfortable with him yet, so he was asking me all these questions, like "Do you drink, do you smoke?", and I'm just like "no." (FG3 p16)

The environment

Doctor was in a rush – had no time to develop a relationship (Objective 5):

S8: So yeah. Yeah, you can't really talk to them very much cause then they like tell me to like hurry quickly, tell the problem and then yeah, you know, they just like check your symptoms and write you a prescription and then you're kind of go. (FG5p10)

Students didn't see the doctor often enough to build relationship:

S6: And it's kind of hard to build like a good relationship when you're like not visiting them in a way like you don't have problems that often, like if you have problems that often you'd probably like to see them on a regular basis and you'd get to know them more and then it deepens, but then like if you don't have a lot of problems, like you see them once or twice a year then, yeah it's hard. (FG2p11)

S5: Yeah. It's like trust, it's like build up for like a long term because you don't really know that doctor, right, it's just like a five minute or ten minute ...

S4: Yeah, cause you only see him once a year.

S5: Yeah, once a year, right. (FG11 p22)

The health care system (Objective 5)

Students didn't know how to make appointments (parents made them) or understand the payment system.

S8: And they can show us how to actually go to our doctor, well our parents like actually make an appointment and everything. [I: Okay.] Because some of us have never done that without, like your parents have done it for you. (FG5p12)

S8: Like I'm still not sure how you like get a family doctor. Like do you just go, you get an application and ... (FG12 p4)

Access to health care is limited:

T4: I teach at an eastside school and we have found in this subject there is a divide between access to healthcare for the westside kids and what we find is most of our kids do not have a family doctor, they go to clinics and they go to anyone, like it's not even a same clinic. More often their doctors are locums that either they might really make a connection and go back to the clinic later but the doctor's not there, so most of them really, and they're not that aware of what's available in the community even.(FG16p7)

Perceived lack of younger doctors:

S1: Like even like you know how there's like a shortage of family doctors in like B.C. anyways as there already is so it's hard to find because a lot of the older doctors are retiring and a lot of younger people don't want to go into the family doctoring, they want to be specialists and stuff like that. So it's hard to find younger doctors as it already is. (FG9p20)

Barriers for new immigrants:

S1: Like I, I from the, my own experience or from immigrate experience, when you first come to China, um, someone tell you go to hospital, it's very {unclear} you must have a family doctor and it's hard for the immigration is that how can you find a family doctor and you don't know anything about this new country and how can I find and where or how to find something like that. Maybe government or something like that can ...(FG7p18-19)

f) Roles of parents

Parents were used to being in charge of their child's health and wanted to know about the health of their child first hand.

P2: You tell them what's coming, you know, and that it's time to go in for your annual or whatever, the reason it should be {unclear} you know if the kid's not feeling well, yeah you're always gonna, you're not gonna just say "Get in the car", yeah. (FG14p5)

P2: Um, I've always, my approach to it has always been, you know, very matter of fact, right. There is a health issue here and that's who we go and see is the doctor …we're going to go to the doctor, probably this and this and this will happen, they may ask you about this or that, right. (FG13p6)

P1: And as a parent you want to know too, right, you'd kind of like to know first hand and that's why myself I do be in the doctor's office with my kid too and so I guess just {Chuckle} I want to know what happened and what needs to be done, right, rather than that it fell from the second hand knowledge time you know. (FG14p6)

Attitudes of parents towards their child developing an independent relationship with the doctor

were related to their attitudes towards their children's independence in other areas of their lives, the age/maturity of the child, cultural norms and the nature of the health problem.

P2: Um, I think that you're probably gonna find a lot of diverse answers around how parents prepare their kids to be independent of the doctor cause you know you're gonna have the protective parent or the anxious child for one thing and then you know another situation you might have a kid who's just, you know, right off the starting blocks and not a problem so I think you're gonna find a pretty diverse group to work with there and the parent about the same. (FG14p15)

P1: I myself I'm not comfortable with my kid at Grade 7 going to see the doctor by themselves. But Grade 8 I would try it out.

P2: It could be an independent relationship too. I mean again Grade 7s, some of them are taking the bus but some are not, so it would depend on the individual kid as to how mature they were, if they're ready to have that independent relationship. (FG14p18-19)

P2: Again I think that it would vary widely depending on the child and depending on the parent. I mean there's a lot of struggles between parents and adolescents and I think a lot of times it's got to do with that movement toward independent relationships and, you know, and I think sometimes parents are, can be reluctant to have that transition go forward and then that creates conflict for between the parents and the child, so you know maybe it's for your workshops and, you know, teenagers are given the information that this is a good thing to do and, you know, they can have somebody back them up on it if they do happen to have a parent who's saying no no, I, you know, you go and see this doctor and tell me what they say and, you know, is not wanting to relinquish that control, right. So maybe teenagers hearing it from someone else would empower them. (FG13 p14)

Parents had an ability to facilitate the transition to an independent relationship, by encouraging their child to talk, going with the child but waiting outside the office, identifying appropriate opportunities for independence, building confidence.

P2: Well going along with her and but just waiting in the room is a big one. (FG14p3)

P1: I would say one of the problem is you remember you can talk to over anything you know, the doctor need to know, you know, from the beginning to now since when, what happened you know, where does it hurt, you know, so you just have to tell the doctor everything basically speaking so they have more understanding about the situation.

I: So you tell your son?

P1: Yeah. So you have to explain to the doctor what the problem is, what the big signs, stuff like that, yeah. (FG14p5)

P2: …because it would be dependent upon the child and the parent, you know, as to when, um, the parent and first of all the child felt confident going in on their own and the parent felt confident allowing them to go on their own. I would say, I'm trying to think the last time my son was at the doctor, not recently. But I would imagine what I know about him now sort of halfway through, you know, a 10 year old, uh, it could go either way at this point if we were going in to see the doctor. I think he might want to do it on his own or he might want me to be there. It would probably also be dependent upon what was going to be happening. [I: Right] You know, what the issue was. If it was, you know, a crisis situation where he'd broken a limb or, you know, been struck by a car on his bicycle or something like that, then definitely he would want me to be there. If it were something more normal, if he were going in for a physical examination, we were to a physical examination I suspect that he would ask me to wait outside. (FG13p7-8)

3.3 How can the intervention be improved and adapted to reach a wider audience?

3.3.1 Limitations of the intervention

Teachers identified several limitations to the effectiveness of the intervention that were based on their general experience of teaching students at this age, and not specific to the intervention.

Students were at different stages in their development.

T1: Over half of them are definitely going to be empowered by the information that you gave

and brought them something totally new that they wouldn't have known. And the other half might clue in but it might take a little while, like probably most of them haven't seen a doctor since, yeah but although a few of them have. But yeah they might think about it differently. I would definitely say experience is going to change them somehow but will you have exactly what you want at the end, no. (FG15p9)

T1: *Well I think really your objectives, I mean they might not be met with every single student, but they're gonna be met fully with some, exceeding expectations with some and, um, even if you meet them, half of them with half of the students, I really see that as success, like you're getting information out (INT3p14)*

School classrooms were unpredictable learning environments.

T1: *I mean it's like school, right, you have, um, I mean you have intentions and then they can be co-opted by a noisy student or wrong time of the day or.. (INT3p8-9)*

The medical students perceived that there was a lack of discipline in the classes that made it difficult for them to control the class.

M4: *I really found the class was out of control and the teacher didn't really do much to try to get discipline… And so I mean for example when we wanted to start people were talking and talking and talking and we had to be pretty loud to just get their attention at first. It just seemed like better control on their side to maybe be, for better attention and better like just listening. (FG1p3)*

Planning 10 classes were under-valued.

T: *Again because Planning 10, just the way it's, is not totally valued in schools and it tends to be this add-on which is frustrating cause maybe it's probably some of the most important information. (INT3p12)*

Students were distracted by superficial stuff (how to become a doctor, how much do doctors earn) rather than focusing on workshop objectives.

T: there was more conversation about like sort of the superficial stuff than really like I understand when I go to a doctor I should say this phrase or whatever (INT3p14)

A major limitation is that the intervention only scratches the surface and requires reinforcement so that students remember the key messages.

T: Um, yeah, it scratches the surface. You know like there, I think there needs to be more. I think there needs to be more discussion. (INT2p11)

3.3.2 Improvements to the intervention

a) Workshop objectives

Students wanted more information about confidentiality and the consequences if broken.

S5: They didn't give us enough information when we wanted to know like why they had to keep it confidential pretty much. (FG6p3)

S6: So doing a workshop, they didn't really give us like information about like what could happen to the doctor if they did tell your parents or anything. Well they did kind of but not really. Like they just, does the doctor get sued or what happens. (FG6p12)

S1: Yeah, he didn't really, wasn't overly thorough, um, like what would happen if the doctor did tell other people. So what would you have liked to have seen? (FG6p12)

Students wanted more illustrations of what good communication with a doctor actually looked like.

S5: But I don't remember them showing any like good scenarios of how a doc, a good doctor would actually talk to you. (FG6p5)

S8: If they showed a video of like kids our age actually going to the doctor {S4: Yeah} topic, it would have just showed...(FG5p6)

S2: Cause like if a real doctor comes in and gives like his own testimony about like the secrecy, you know, like you can trust the doctor cause it just, you know, it's his job, it's his, that's what he does. (FG5p6)

Teachers suggested fewer objectives.

T1: I think sometimes fewer objectives are better and, um, and ability to just kind of bring it all together again and getting kids to reinforce their own message and like reframe your objectives helps remind them. (INT3p8-9)

Both teachers and parents raised the needs of ESL and other special needs students and the importance of addressing cultural differences and similarities.

T2: I think it's important for ESL students that they're aware of how going to the doctor works here, 'cause their experiences might be different, right. Maybe you're not supposed to see the doctor, you know, unless you're like dying or something, right. (FG15p14)

T3: Yeah, not maybe just what happens when you're there, but what might lead to you needing to go to the doctor in the first place.

T1: I guess what we're talking about here is that there's, you know, a different cultural background and in terms of how they approach that issue and, you know, from what they've seen and in terms of what they discussed at home amongst their parents, their siblings and perhaps grandparents or whoever they live with. (FG15p15)

T3: It's almost like, um, conveying that everybody's unique but the same if that makes sense. To say that we're all gonna have health issues. We're all, we all have our health and we all need to look after it but our cultural backgrounds regarding health, our comfort levels regarding health, our knowledge regarding health is all gonna be different. And so but that's okay. Um, and that there are a variety of doctors out there and you need to find one, you know, that is comfortable. (FG15p23)

P1: How about the ESL students and the special needs students, you know, how can they deal with a situation by themselves? (FG14p8)

P2: Cultural differences too. For example, Muslim parents are going to have a very different health care experience. (FG14p9)

b) Workshop format

Teachers had several ideas for how to engage the students based on their experiences of successful classroom techniques, such as debates, Question and Answer (True/False) sessions, games and prizes. They suggested that medical students might go on a 'learning expedition' to see how other classes operate.

T1: it takes a lot of planning on your side to make sure that you have the right questions to get to the answers that to help those answers to be pulled out. Cause ultimately yeah, they don't know a lot but they do, they do have a lot of questions or answers and it's important to get them so they can validate their knowledge because they do, they do know a lot, whether it's from the media or from whatever or their families and ... (INT3p13)

T1: I don't know what it is when you mention the word free or prize, their ears perk up and you know they seem to be more attentive, I don't know what it is.

T3: And if it's a prize that only helps motivate them to participate in the class and take something away from it, but is a prize that has information that they can then take with them, um, [T1: Right] and hopefully use even though ...(FG15p42)

c) Class composition

Teachers noted that some schools had large populations of first generation immigrants to Canada, especially of Asian origin, and/or English as a Second Language (ESL) students. These students might be in Planning 10 classes even if they were not ready to go into the regular stream for other classes. They tended to be quiet and reserved, either because of cultural norms or language limitations (fear of being laughed at or not being able to express themselves). The medical students also commented that ESL students were more hesitant to participate. Teachers recommended finding out from them about the composition of the class ahead of time in case adjustments needed to be made to the workshop format to accommodate class diversity.

T4: And at our school we only recently have had that they might not be deemed as a proper level of English, grasp of English to be going into the regular stream like Socials or English, but they, because Planning 10 is what they need to graduate, they'll put them in when they're like maybe a year away from really being, having the language and hoping the system go through and maybe pass it at least and it's really frustrating for the kids

and if any fail it tends to be them and, um, and then they realize later that well yeah we knew they weren't really ready..

T1: It might be valuable to, you know, talk to the planning teachers so we can just maybe tell you what the make-up of the class is. You know like I have special needs incorporated in my class as well and I think we booked in one a guest speaker and it was a nutritionist talking about diet and stuff and the next thing we know is mother wrote this long letter and complained and, you know, he, they incorporate, they try to eat healthy and it was like totally blown out of proportion but it was just like the way he interpreted it, you know, the talk in terms of what he thought he had heard. (FG15p39-40)

d) Preparation and training of workshop facilitators

Medical students identified improvements that could be made to their training and facilitator packages that would help them to be more effective facilitators. They were not sure what to do with the scenarios provided to them in the kits – there was too much information, and they suggested addition of open ended questions. They suggested pre-scripting the skits so they did not have to invent them each time, and possibly videotaping the skit. They suggested creating teams of medical students, rather than random sign up, that could practice together before going go to the schools (ie, do some pre-planning).

M6: Like having teams, like team 1 will go this week, team 2 will go next week or something, yeah.

M3: Or even if you can't standardize the groups, maybe before any of us actually go and do a seminar we could get everyone in the program together just once and do a practice one for each other so that they're more or less standardized and so that when we're planning it we have the benefit of what everybody had to contribute.

M4: Or even during the orientation that could happen.

M3: Yeah.

M6: Yeah, I think that'd be a really good idea, especially since we went in and we're like what are we supposed to do in these scenarios, what {Chuckle}, we're writing skits out in the middle of recess. (FG1p17-18)

e) Post-workshop (reinforcement)

Three types of reinforcement activities were suggested: (1) follow up by the teacher (that could even include some activity before the workshop), (2) information for parents and (3) materials for students to reinforce key messages and provide further information for students to refer to when needed (eg, information on how to find a doctor), recognizing that students are at different stages in their readiness to change.

Resources for teachers, suggested by teachers included lesson plans for a follow up session and websites.

T: A follow-up is fine and if you wanted to put something together and then the teacher could choose to use it or pull it out in two weeks and say, you know, if you have time in a couple weeks or if you have some extra time in a month, could you pull this out and see what students remember. It might be, might be valuable. Again, depending on how closings happening or how a teacher might wrap up their course. I often talk about the different guest speakers that I've had in the year and what do we recall about them or what were some of their central speeches. So something like that that could be left with the classroom teacher might be valuable, yeah. (INT3p18)

T3: You know, if you had one lesson plan or you couldn't book the workshop or you couldn't get, the timing didn't fit with your particular health unit and then you could also have a supplementary lesson planned if you wanted to do that post-workshop. Or even pre-workshop, depending on what the plan entailed...

T4: ... things or like sometimes we are lucky and have a lot of computer access so that's their world, if there are a lot of, you know, it could be a follow-up thing where you are, you give us like 20 or 30 websites and the kids are evaluating them or they're, you know like kind of getting questions that they know they could find those answers through those websites or, you know, any sort of follow-up. (FG15p35)

Resources for parents - information that students could take home.

P2: Well certainly do provide, when you do the workshops do you provide any information for students to take home for their parents that they've done the workshop and this was what was covered and ...?(FG13p16)

Reference materials for students included fact sheets, posters, website.

T1: I mean maybe something as simple as an actual sheet or a pamphlet that clearly outlines them. Like you don't have to be vague. It'd just be what we intend to do and this is what we hope you learn and state them very explicitly, um, whether that be on a handout or a pamphlet or, you know, how to find a doctor or where can you go, that sort of information, just on a little leaflet and then specific to communities whether it be Vancouver (INT3p17)

T: Yeah. Posters would I think be a good idea. Sometimes I wonder if students even notice the posters or they ever look at them. But in a couple of cases I was amazed at the response when posters went out. (INT1p15)

T1: And if they had something to go look back at, like even websites they can refer to, things that would be concrete and useful I think, you know, instead of just having like a one class where it's still the fun activities they're gonna go walk away and like two months later forget everything.

T3: Yeah. Or yeah a little resource or even like a wallet card [T1: Exactly.] that they can keep with them, nothing that's gonna be vague like have them on a piece of paper that, you know, will be easily visible in the bedroom or something or you know get thrown out with the planning binder, like maybe a nice laminated card or something and had resources or an email address or, you know, whatever. (FG15 p36)

M3: I really like the idea actually of having a website even if it's just an addition to the workshop, instead of giving them the papers, you'd give them the card with the website, Talk to your Doc.ca or something and then once they've thrown out those papers and they realize they need them they can get them again. (FG1p14)

M3: If we could make some sort of interactive quiz on the website then the teacher could assign them go do it and they could be like which of the following would you talk to your doctor about and a whole list of things and then they could check off the ones they think

and then when they submit that actually they can talk to their doc about any of those things or like hypothetical situations, what would you do if you were Johnny and you went to the doctor and had this problem, they could go through a bunch of quick multiple choice things or something. (FG1p15)

f) Phasing the intervention

Teachers and parents thought that some of the basic ideas could be introduced earlier in a simplified version, even in elementary school. Teachers suggested that it might fit into the health and life skills section for Grade 8, although this is not a specific course on the timetable, unlike Planning 10.

T1: Well maybe a younger age, it just maybe more clearly focusing on a doctor as a member of your community and someone who looks, who helps you, um, like your teachers help you and your parents help you and all the people that help you. Um, something like that and there shouldn't be anything to be scared of or a doctor, and also like the, a doctor can be a bearer of wonderful news too, like it doesn't always have to be this negative thing (INT3p16)

T: Because you start the discussion, you start the conversation and then the kids become more knowledgeable and more active. (INT2p16)

T4: And then even when they hear of it now, like when we're talking about it go, you know, for a lot of kids Grade 10's too late, you know, they needed to go get some of that information earlier. (FG15p5)

P2: Which makes me wonder if this isn't something that should start in intermediate years and elementary school rather than at high school and sort of, you know, set the ball in motion. Motion it at an earlier age so that if there are parents there who aren't sure how to deal with the medical profession, um, that they get the information too…(FG13p16)

3.3.3 Extending the reach

a) Increasing capacity of the existing program

Other opportunities for the medical students to come into the schools that avoided the timetabling constraints of the planning 10 classes were suggested.

T1: Something like spotlight session at lunch time. You may not get them all but if you, if it was just impossible to, you know, jive with the school timetable because in some schools there are as many as 8 or 9 or 10 Planning Ten classes. How do you get to all of them? (INT1p7)

T1: Or if you get several medical students and it was really worth your while and there was enough student interest just have some kind of a panel and don't make it at lunch time, make it the, now schools get out at 1:30 on Friday, not all students disappear. If it was scheduled for 1:30 on Friday afternoon for example and really well advertised maybe you would get a good chunk and it was made an assignment from by Planning Ten teachers and they had them all attend on Friday afternoon. And you might get a good chunk of them that way in the school… And you may never get them all but if, you know, the teacher is really an important piece in this picture. If the teacher is one that is, how do I say this diplomatically, respected and liked by the students and the teacher has set this all up and gone to the trouble to organize all of this, the students respect that. In most of them, many of them will, they're okay with that, they'll go. (INT1p7)

Medical students suggested involving students from other health professional programs as facilitators.

b) Other classroom-based approaches

Teachers identified examples of lesson plans and support materials that they found useful in presenting classes on different topics. These would need to be flexible as schools and teachers vary greatly in how they address Planning10 objectives and individual teachers spent more or less time on health topics depending on how critical they thought they are. These materials could also be used by teachers who have workshops in their classrooms (see above).

T: I went to a workshop a couple years ago and I got a couple videos, I got a bunch of stuff and they gave me all this information, books of stuff, and I just take from it and use it to my, you know, my style. Like I can't do it in somebody else's file, I just, you just, I just

take it and I ... I like this, I like this. If I want to follow this I can follow this and then I, and then I branch off into other areas with it. (INT2p15)

T3: *Cause there's a website called* sexualityandyou.ca *and it's got AIDS, it's got information, it's got, um, video clips, it's got addictions of, you know, how to put on a condom, this sort of thing, you know, so it's kind of an all in one website that's visually appealing for the kids and they can go and click on different sections.*

I: *And you just kind of have them go play on that website or is that ...*

T3: *Yeah, and we structure it with a lesson and things we want them to do, read this information, take the quiz, evaluate, you know, the information on the website and kind of walk them through parts of it ... (FG15p44-45)*

T3: *... you can actually bring the website up yourself and guide them through it and then have them go through it section by section, you know. If it was a webcast and you can facilitate that, I think that would be great, yeah. (FG15p45)*

T3: *A fact sheet, some sort of fact sheet ...[I: Fact sheet …] Some case study to go with it so that students can ...*

T4: *And the ones that are most successful those fact sheet kind of packages are like from the {s/l fourth} are as much as possible teacher ready. So if there's a true/false again thing, you know, then it's there ready to be like typed, ready to go with the overhead things you'd have to do. (FG15p49).*

T1: *We could even do it up on computer and have them, you know, have the reception and print everything out, the lessons off or whatever ...*

T4: *It's just that so many people won't, like on a CD we can edit it and kind of, you know, print it off ourselves, like something like that. But if you're looking for success and use, like the more teacher/student friendly the better with, um, you know, the case studies. (FG15p50)*

There are various ways in which Planning 10 teachers could be provided with the materials,

through in-service training sessions run by the School Board, conferences, etc

T: Occasionally I bring them all together for a meeting or for an in-service or Pro-D or whatever and then phone somebody, I don't know who, from UBC to come and talk to them all when they're all in the room and say we've got this initiative, this is how it works, we'd really like to visit your school and your program and try and give them all the information. All of the people in the room at the same time, let them know what you're doing so they understand it and then they can perhaps understand how they can fit into your program or how you can fit into their schools. … Even if, um, you had a little poster or just a promo sheet or something with all the information on it, if you sent that to somebody like me, I could forward that to all the career planning contacts in every school. (INT1p9)

Medical students raised the possibility that teachers could involve older students to teach or mentor younger students.

M6: Like why can't we get like a, like a teacher will facilitate four in the group in the beginning and just get them the knowledge and maybe start in Grade 10 or something, and so that by the time they get into Grade 12 they can, they can show the Grade 10's what to do… There are kids there who are interested in doing a health profession and you don't have to be a doctor to really talk about going to visit your doctor, right? (FG1p7-8)

M2: There's actually a really good program in my high school, I don't know if it's still there or not, but it was called Students Offering Assistance and Reassurance or something, called SOAR and it's at Port Moody Secondary, you can contact them for program information and build off that. It's a really good program offered. Like it was a bunch of Grade 10s basically mentoring grade 9s that just came into the school and they talk about anything like academics, social, everything that might affect the Grade 9s. (FG1p8)

c) Educational technology

Teachers identified various technological solutions, including modules as part of the on-line

Planning 10 course, on-line seminars and videos. They noted that students were used to taking on-line courses.

T1: *But an online module somewhere on the Health Sciences site, I don't know where, somewhere at UBC, where if they cover this certain piece in their Planning Ten curriculum and the teacher knows that this is available, or maybe the teacher could even connect to it in the classroom... The other thing you could do is, I mean I'm doing stuff now where you, you know, you've got, you just connect to the internet and you're on the site and you're on a speaker phone with the person at the other end and the person on the speaker phone's walking you through it. … So that you don't need the person in the room. They can get the information, you can have a discussion, the person could be available online for questions afterwards, I don't know. Oh the other thing is something like, um, there are many online teaching schools now like a Webinar, Webinar which a seminar except you're online and all the people on the, the people could be all over the city or all over the province and you're all doing the same, you're accessing the same information being taught by the instructor online. (INT1p11-12)*

T1: *High school kids are getting quite sophisticated with online stuff because the learning network in every school, every school district, just about everything is online now and kids do not have to be sitting in desks in rows anymore. And they're figuring that out pretty quickly… They can take English 12, Physics 12, they can take anything they want online. (INT1p12)*

Medical students suggested an e-mail chat line ("*talk to your doc at UBCmed.com or something*") and on-line modules.

M4: *Yeah, another suggestion was just like a, like we do the online modules or different things we're learning, an online module… And then yeah it could be an assignment, instead of us coming to school for an hour it could be an assignment that they would do and they had to work their way through it and different questions would draw out different information for them. (FG1p15)*

However, teachers also noted the limitations of educational technology, including equipment,

and that, to engage students, it was best used as a resource accessed as part of a structured lesson.

T4: We'd have trouble, our equipment level is still really low but it's getting there, but we're not getting, we don't align with somebody else but, um, we'd be a bit ...(FG15p44)

T1: I mean, yes, the web path, that idea is fun and maybe it could be then, it could hit more people, um, how meaningful will it be, I don't know. (INT3p21)

T1: …a video, investing money in creating a video. But that gets quickly outdated and as soon as people and their clothes don't match what's going on and it doesn't matter how powerful the information is, you just can't engage or students won't engage. Um, yeah it might, the same with the use of technology and the internet and I mean YouTube kind of thing, like something that's updated more frequently and then the classroom teacher could download it and that might be kind of fun. (INT3p19)

T3: Yeah, and I don't think if it's being used as a lesson any teacher would just say get on this website. There's always gonna be some structure to that. (FG15p45)

d) Disseminating key messages to adolescents

Some of the reinforcement/follow up ideas (above) could be used independently of the workshop (ie, in schools that do not have the workshops) to get key messages out to the students. The students identified the need for a catchy message that could be included in posters or adverts, and thought that 'Talk to your Doc' met that requirement.

S1: Yeah, like, um, what's that, if you go to like the bus stop, or not bus stop, when you go into the bus there's all these, [S4: Advertisements] there's all these advertisements and there are some like that ask you about like oh if like, have you seen the one that says 'oh it's not weird to ask'? [S5:Oh yeah].There's that one, right. And even though like you go on the bus once or twice you see the ad and you remember it. And that one's talking to you about like sex and stuff, maybe you could do the same thing with like the doctor, it's not weird to ask anything to your doctor, like whatever it is. (FG9p12)

S2: I think Talk to your Doc is one strong statement already. (FG9p12)

S1: … like you need a catchy phrase or something to stick in people's head and they can get the main message. I mean maybe like probably five or ten people won't get it but I think the majority of people will get it. Talk to your doc is not too difficult to understand.

S2: It kind of rhymes too.

S1: It does, yeah. {Chuckle} It's catchy. (FG9p13)

T3: School newsletters, school websites, sometimes the teachers will have Planning 10 websites, otherwise just a general school website for information, you know, posters in the counselling.

I: For information for the teachers or for the students?

T3: For students. I mean if it's, if you wanted to get the information to students about whatever, not necessarily this particular program but if we're talking about input where they can access information.

T1: ... get information you can send it to, I guess I'm sure we could get it in some website.

T4: Or even if there are like 3 key leader questions, you know, like is it confidential to talk to your doctor or something, um, and then that kind of thing goes on the Planning 10 website or the school and then could seek here for more information, those kinds of things that pull them in. (FG15p42-43)

Medical students suggested adverts on the internet and in agenda books, posters in the schools and videos on You Tube.

S6: then have everybody in the faculty, like, click on it so it gets like the most hits so that it pops up ... {laughing} so that the kids will in their searching, cause I know most kids who go on YouTube they'll look for who gets the most hits and just watch those things, so if we could maybe do that {Laughing} we can, even worldwide. (FG1p14)

Using the internet or other media would enable the messages to get out to a wider audience of adolescents (beyond a school-based intervention).

T3: But yeah, I think when you said, asked the question about how to get this information to everybody country-wide, [I: Yeah] schools, yeah obviously, um, but if you're thinking

beyond that, you know, any form of media that they're going to be involved in, you know, whether it's internet. You know, you mentioned Facebook or something to do that, um, but you know, TV, magazines.

T4: Or in that local vicinity, I'm sorry, go ahead.

T1: You might even want to do a DVD or something, you know. (FG15p51)

e) Caution about extending the reach

Teachers cautioned against extending reach too far, stressing the importance of the personal relationship with the medical students, at least as an introduction to the topic.

T1: I suppose really the sensual point of talking to your doc is not talking to a teacher who has some information from Talk to your Doc and I think that's really the point of what you're trying to do and unfortunately that means human women and men power and individuals in a classroom and there's lots of, there's lots of gazillion resources on the healthcare system and access in healthcare and bla bla bla bla bla but I think that's central and again I would say don't, you don't have to go everywhere, just do what you do very comprehensively in smaller areas and recognize that's more valuable than cause a video outdates, um, and teachers won't use it and people engage with it and becomes like everything else. So I would just say yeah, the urgency to go wide-stream, you know, I would say it just misses actually the work that you're doing and the reality of those relationships that you're not gonna create with the TV or ...(INT3p19)

T1: In my mind I see the purpose of this is to understand that, um, this person is part of your community, is caring for you, you need to care about yourself too. You want to be able to trust your doctor to be able to share information, to be able to learn from them and recognize that that relationship is evolving and I don't know if that can happen when you just talk at a group.(INT3p25)

T1: I think the personal punch is always the best introduction, you know, having somebody come in and, you know, talking and I think that's always more touching. I mean the videos and workbooks and all that follow-up, but I think just having a role model then, you know, you have kids that think or may think that they want to go into a medical field

and then having actual people that are enrolled in these programs. I think it's quite advantageous for everybody (INT2p19)

Chapter 4: Discussion and Conclusions

4.1 Are the objectives, content and format of the intervention still appropriate for needs?

The communication problems that the Grade 9 students noted in the needs assessment survey in 2008 that are addressed in the workshop were similar to those identified by the Grade 11/12 students in the1999-2000 survey. The things they want to talk to the doctor about but do not, the problems they experience when visiting a doctor, what they would like the doctor to do, were the same. These are the same problems that are consistently identified in the literature and seem to be universal to all adolescents at all ages (eg, Gleeson *et al* 2002).

The differences that were seen are consistent with the expected earlier stage of maturity of the Grade 9 students compared to Grade 11/12. The younger students had more reliance on their parents as shown by the high proportion (94%) who saw the same doctor as the parent, and who went to see the doctor accompanied by someone (95%). Compared to Grade 11/12, there was a higher degree of satisfaction with the doctor and fewer students wanted to be able to do something to improve the relationship. Significantly fewer students wanted to change doctors or knew how to do so. In summary, there was little evidence that the students in Grade 9 yet feel the need for change or more independence in their relationship with the doctor, and therefore they displayed less interest in making changes. Although the workshop is targeted at Grade 10 students the time difference between when the needs assessment survey was done and when the earliest workshop would be held would be less than six months. It is to be expected that during that time some students may have begun to see the need for, and to take more responsibility for, their relationship with the doctor, but the quantitative and qualitative data collected from Grade 10 students indicate that even at the end of Grade 10 most students are still overwhelmingly dependent on their parents (see below).

The only other major difference between the two surveys was the appearance of the Internet as an important source of health information, and this is likely to be due more to the rapid growth of Internet use, especially among young people, since the 1999-2000 survey than to the age

difference of the respondents. Since the Internet has not replaced the physician (or family) as the major source of health information, we do not think there needs to be any change to the workshop objectives, content or format in response, but it does open up the possibility of utilizing the Internet as an additional avenue to reach this population.

Teachers and parents agreed that the workshop objectives were appropriate and important for Grade 10 students. They linked the idea of learning how to communicate with a doctor to the broader tasks of adolescence in developing healthy independent relationships with a variety of different people. The workshop objectives also fit with the need for adolescents to take responsibility for their own health. Teachers, students and medical students thought the workshop format appropriate for the target group.

We conclude that the workshop objectives and content are relevant for Grade 10 students. However, the workshop is being taken by students who have hardly begun to think about making the transition to an independent relationship with the doctor (workshop Objective 5). This suggests that the emphasis of the workshop, key messages, and expected outcomes may need to be modified to connect to this younger audience. For example, since the proportion of students who wanted to talk about sexual problems was lower (22%) than in the earlier survey (46%), some of the examples or role plays used in the workshops may need to be changed.

We need to be realistic about what the workshop can achieve in relationship to objectives about establishing and maintaining an independent relationship (see 4.2 below). The format seems appropriate for the Grade 10 students; improvements are discussed in section 4.3.

4.2 What are the outcomes of the intervention?

Reactions (Kirkpatrick level 1)

Data from this study are consistent with our ongoing evaluation of the intervention through the end-of-workshop surveys. High school students rated the workshops highly in terms of organization, interest and their relationship with the medical student facilitators. The teachers

said that it opens the students' eyes to the possibilities of the doctor-patient relationship and that the medical students are good role models. It fits with the Planning 10 curriculum objectives.

We conclude that the 'Talk to Your Doc' workshop is popular with high school students. Teachers identify benefits in relation to important curriculum goals: to encourage students to take responsibility for their health and to develop healthy independent relationships with others.

Learning (Kirkpatrick level 2)

Through the effect survey we aimed to identify differences between students who had the workshop and those who did not according to validated scales measuring different dimensions of health behaviour and the doctor-patient relationship.

There were no significant differences between control and intervention groups in relation to help-seeking intentions. The most likely sources from which to seek help were an intimate partner, a friend and a parent, and all indicated a doctor fairly high on their choice for severe emotional problems. The two named professionals, 'mental health professional' and 'doctor' were significantly more likely sources of help in this study than among the students reported by Wilson *et al* (2005). There was some evidence from the focus groups that the students may consider the school counsellor a mental health professional.

There were no significant differences as a consequence of having a workshop in relation to preferences for participation in healthcare decision making. Most tended to be non-deliberative delegators, ie, wanted information but wanted the doctor to make decisions. The high school students were more likely than Flynn's sample (Flynn *et al* 2006) to prefer to delegate the decision-making to the doctor. This is not surprising as Flynn's subjects were older adults (typically 60-64 years of age), 80% were married, and 62% had a relationship with their physician of more than 4 years.

A larger proportion of the students in the workshop group than controls identified problems they had when visiting a doctor. This was most notable for "I felt awkward or shy about talking about my problems", "I did not know how to ask the doctor questions I really wanted to ask", "I did

not feel the doctor listened very carefully to my thoughts, opinions or feelings about my health problem" and "I did not feel comfortable discussing some things that were very private, embarrassing or sensitive", but was true for most problems. Our hypothesis to explain this is that the 'Talk to Your Doc' workshop heightened awareness of communications issues or greater expectations. We expected to find, that as a consequence of the workshop, the students would have greater ability (and fewer problems); however, the workshop appears to have raised awareness without increasing ability to deal with the problems.

In relation to knowledge about confidentiality, there was a higher proportion in the workshop group that explicitly demanded secrecy. There was a higher proportion in the control schools that answered as predicted for the workshop group (ask doctor if s/he will keep it a secret). The single largest proportion (>40% of students) in both groups would not tell the doctor something if they were concerned about confidentiality. This predicted behavior, though contrary to what we teach (share information but explicitly invoke confidentiality) may be the most 'reasonable' response in having (from the student's view or heuristic) the least 'cost' in case of error. That is, the expected loss of misplaced trust (telling the secret and having the confidence broken) outweighs the expected gain of confidentiality (telling the secret and getting better health care).

In the focus groups the high school students said that the most important thing they learned from the workshop was about confidentiality (Objective 4), although there were differences in how much students said they already knew. The second most important thing related to going to see a doctor on their own (Objective 5). Many said they did not realize that they could see a doctor without their parent's consent. Students also said they learned how to talk about awkward topics (Objective 2) and that they can see the doctor about concerns other than medical.

We conclude that the workshop is partially successful in teaching students about confidentiality, some aspects of an independent relationship with a doctor, and talking about sensitive issues. Although students said that confidentiality was the thing they remembered most from the workshop, the effect survey showed they did not heed the message that they should explicitly ask the doctor if they were concerned that information would not be kept confidential. The workshop

appears to have raised the awareness of students about communication issues but did not increase their sense of competence in being able to deal with these problems.

We suggest these findings can be explained with reference to learning theory, especially the conscious competence theory or ‘four stages of learning’ that describes the psychological states involved in the process of progressing from incompetence to competence in a skill. We think that our results indicate a shift in the students from ‘unconscious incompetence’ (you don’t know that you don’t know something) to ‘conscious incompetence’ (you are now aware that you are incompetent at something), ie, they are more aware of their deficits and have higher goals. As discussed earlier, the needs assessment data indicate that these students have barely begun to feel the need for change or more independence in their relationship with the doctor. The workshop raises their awareness about good doctor-patient communication and that they will, sooner or later, need to make a change and will no longer be able to rely on their parents, and this heightens their anxiety and sense of incompetence.

Change in behaviour (Kirkpatrick Level 3)

Data from the effect survey indicated that the students who had the workshop had a *lower* rate of going to see a physician in the previous 2 months and a *larger* proportion who had acquired a new doctor compared to controls. In relation to self-rated health, as we expected, this group of young people rated their health, on average, good to very good.

In relation to communication with physicians, there were no significant differences as a consequence of having a workshop. On average these students almost never or sometimes reported these good communication behaviours: preparing a list of questions for the doctor, asking questions, discussing personal problems related to the illness. In relation to confidence with the physician, the control group appeared more confident than the workshop group but the difference was not significant. This result is contrary to the hypothesis that students in the workshop group would be more confident in their ability to manage communications with physicians as a consequence of exposure to the workshop. On average these students were moderately confident, a little above midpoint but the range was very wide.

In relation to health values, there was a non-significant difference in the means as a consequence of the workshop. This result is contrary to the hypothesis that students in the workshop group would value their health more as a consequence of exposure to the workshop, ie, health awareness. On average these students were neutral or agreed with these statements about the action they take, and the determination they have to be healthy.

In the focus groups high school students were tentative about whether they had changed: “not much”; some said that they thought that maybe they talked more, were more open, asked more questions and felt less intimidated when they went to see their doctors. Important findings from the focus groups were the many barriers to change that were revealed. Some of these barriers have been identified in the literature: especially concerns about confidentiality, physician gender, physician attitudes towards adolescents, and insufficient time. However, our data provide a much richer picture of the perceptions of this group of adolescents. They identified many more factors that make it difficult or easier to talk to a doctor than are in the literature. In particular the role of parents was an important theme that is hardly mentioned in the literature, apart from adolescents' concerns that their parents might be told confidential information. Our students were ambivalent about parental presence – it can be easier with them there, or more awkward.

Even though they were concerned about confidentiality and identified many difficulties in talking to the doctor, most students were not ready to make changes; they wanted the doctors to change their communications and attitudes, they preferred to go to with someone (usually their parent), they relied on their parents to decide when they needed to see the doctor, to make the appointment, take them there, accompany them into the consultation, and to speak and listen on their behalf. Parents are clearly key enablers of behaviour change. A strategy could be to facilitate a conversation between adolescents and their parents that would normalize a request to see the doctor on their own or find a new doctor. This might be done by providing students with a take home assignment or information sheet, that would make the conversation more about “What I’m learning at school” (this is for everyone) rather than “I want to see the doctor alone” (which may make the parent unnecessarily suspicious). This may be especially important for students whose parents are new immigrants to Canada and who may have very different experiences and expectations based on the health care system of their country of origin.

Teachers had a more realistic expectation of what the workshop would/could achieve than we did and were satisfied with the small steps (raising awareness, the relationships with the medical students).

We conclude that workshop students tended to have *lower* confidence with the doctor, reported *more problems* experienced during a visit with a doctor and a *lower* assessment of their health hardiness. We have identified many barriers to behavioural change: it is hard for students to explain to their parents why they want to change their doctor or go alone, it is hard to start a relationship with a new doctor, to go alone (without support) and tell a stranger (older and maybe of a different gender) about personal concerns; it's hard to find a doctor, make an appointment and trust in the confidentiality. The workshop needs to acknowledge these difficulties and help students with strategies to overcome these real and perceived barriers. Parents are key enablers of behavioural change and the workshop should facilitate dialogue between students and parents on these topics.

We suggest that our findings in relation to behavioural change (or lack of it) as a consequence of the workshop can be explained with reference to health behavioural change theory. Using the Stages of Change model that identifies categories along a continuum of motivational readiness to change a problem health behaviour (Cancer Prevention Research Center, n.d.), our results indicate that students have progressed from 'pre-contemplation' to 'contemplation'. Pre-contemplation is defined as the stage at which people are not intending to take action in the foreseeable future, whereas people in the contemplation stage are those intending to change in the next six months. A characteristic of the contemplation stage is that although people are more aware of the pros of changing, they are also acutely aware of the cons. Our focus group data demonstrate the ambivalence characteristic of this stage. However, a significant number of students had moved beyond the contemplation stage: they had acquired a new doctor and they knew they had a 'right' to confidentiality. We conclude that Grade 10 students are at different stages in the continuum of change. The workshop needs to take into account the fact that behavioural change is a process that will occur at different rates and provide strategies to help students make changes when they are ready to do so.

4.3 How can the intervention be improved and adapted to reach a wider audience?

The focus groups and interviews identified a variety of limitations to the workshop's effectiveness. Students wanted more information about confidentiality and practical information on how to find a doctor, make an appointment, etc.

Although the workshop format appears to work well, the medical student facilitators would benefit from more structured training and opportunities to work in teams to prepare for the workshops. In the multicultural environment of the Vancouver schools with a high proportion of ESL students, the workshop needs to address their needs both from the perspective that these students are often hesitant to participate in class and also that they may have different cultural norms in relation to health, health care and the workshop objectives.

Students learn about communicating with their doctor from their parents (or from television!). They do not necessarily have a model of a good doctor-patient encounter. A demonstration video could help to illustrate the key messages of the workshop.

The most serious limitation to the effectiveness of the workshop is the lack of reinforcement through some follow-up activity. This is especially important given the fact that students may not see their doctor very frequently and, as shown by the needs assessment, then usually for a cough, cold or flu which tends to be a quick and routine encounter with limited opportunities for relationship building or talking about more sensitive topics. So students may not have an early chance to put into practice what they learned at the workshop. In addition, given that most of the students appear to be in the pre-contemplation stage, they will have further needs for information, resources and support as they move through the stages of change. Reinforcement could be provided through additional resources for teachers, parents or through reference materials for students (websites, posters, fact sheets, etc).

The ideas for extending the reach that came out of the focus groups and interviews fell into four main categories:

- Increasing the capacity of the existing program through trying to find other slots in the schedule that might engage more students or involving facilitators from other health professional programs.
- Other classroom based approaches (not involving medical student facilitators), that would rely on providing resource materials for teachers.
- Use of educational technology such as on-line modules.
- Techniques for getting the 'Talk to Your Doc' messages out to adolescents directly, through advertising, websites, social networking technology.

There was a word of caution from the teachers not to lose the essence of what makes the workshop so successful: the personal relationship that is built between medical student and high school student that prepares the ground for the future relationship between independent adolescent and doctor.

4.4 Limitations of the study

We experienced some difficulties in recruiting to focus groups, especially high school students who had seen a doctor following the workshop. Based on previous data, we had expected that about 40% would have seen a doctor since the workshop and we aimed to recruit 6-8 from each school. We expected to recruit 18-24 students in each category, but the actual numbers were: workshop + seen doctor = 15; workshop + not seen doctor = 27; control = 13.

We would have liked to have added a survey for parents regarding their attitudes towards their child having an independent relationship with the doctor and even rating their child's attitudes and self-efficacy in relation to health visits. The time frame of this project did not permit a survey of parents and indeed, our co-investigator at the Vancouver School Board advised us that the response rate for surveys sent home to parents is poor. Although we solicited parents' attitudes towards their children's relationships with physicians during focus groups with the parents, the numbers were very small (n=4). In view of our findings about the important role that parents play in helping adolescents make the transition to an independent relationship with the physician, or not, we think that more research in this area is needed.

One confounding factor in interpreting the effectiveness of the intervention was the varying length of time between the intervention and the measurement of effect: the effect survey and focus groups were done at different times after the intervention. In Schools D and F they were done approximately 3 months after the intervention compared with 6 weeks for school E. One focus group was held with students who had the workshop in early Fall 2007 because fewer students than expected went to see their doctor between the intervention and effect study, and there was a shortage of students for the study. This variation likely had an impact on students' recall of the workshop and any subsequent visit to the doctor. It also makes it more difficult to attribute changes to the intervention rather than to the natural process of growing up that may be rapid in this age group, but also highly variable.

4.5 Practical implications

Implications for the 'Talk to Your Doc' program

The research project has identified the following important improvements to make the program more effective.

- Address the fact that students are at different stages of change (provide some strategies to help them to make changes).
- Provide more information on confidentiality and the consequences if broken.
- Provide more practical information such as how to find a doctor; make an appointment.
- Provide an example (eg, demonstration video) of what good communication looks like.
- Ask teachers to provide more information about class composition for medical student facilitators.
- Address the needs of ESL students and cultural differences.
- Incorporate additional techniques to engage students (especially quizzes).
- Improve the preparation and training of medical students and encourage them to form teams.
- Make revisions to facilitators' kits, especially with respect to scenarios.
- Plan reinforcement activities, eg, follow up session by teacher, information for parents, take home assignments, resources on website.

Implications for extending the reach of the 'Talk to Your Doc' program objectives

The most promising approaches to extending the reach appear to be provision of resources for teachers, on-line modules or direct messaging to adolescents through the Internet. The phrase ‘Talk to Your Doc’ appears to be a simple and understandable phrase that gives an important message to adolescents.

Implications for research

One important finding from our work is a better understanding of the stages of transition in this population of adolescents. Although the literature does indicate some changes in attitudes and behaviours between early and late adolescence with respect to the doctor-patient relationship, important questions are not addressed. These include the processes that adolescents go through in making those changes. How these processes are affected by parental and cultural factors, what leads to good outcomes (good communication with the physician and active participation in their health care) and how the processes might be influenced (through education, physician behaviour etc.) are themes not found in the literature. These are important areas for future research.

Implications for educational policy

Adolescents do not understand how the health care system works. Indeed, most people only learn by experience when they become parents or develop a chronic illness. Grade 10 students do not know the basics of how to find a doctor or make an appointment. The ‘Talk to Your Doc’ workshop fills a small niche, but more information about the health care system could be provided to high school students as part of the core curriculum, either by teachers or through educational technology. One does not need medical students to talk about these basics.

Grade 10 students display a wide spectrum of readiness to become more independent; the doctor-patient relationship is but one of many relationships that change during adolescence. Having the ‘Talk to Your Doc’, or any similar intervention, at one particular time does not address the stages of change. The doctor-patient relationship is an important one, a key to good health care. It is important for the school curriculum to address it and for students to be able to come back to it as they progress towards taking a more active role in communicating with their doctor.

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Appendices 1 – 30

Appendix 1: Letter to School Principals

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Letter to School Principals
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

January 11, 2008

Dear Principal:

We are seeking your permission to conduct a survey and some focus groups with grade 9 & 10 students in your school. The purpose of the study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physician. The workshops are currently held in Planning 10 classes in some Vancouver schools. The information from the study will be used to improve and extend the reach of the program.

This study is carried out by a team from the Division of Health Care Communication at the University of British Columbia in partnership with the Vancouver School Board. Team members are Angela Towle & William Godolphin (Co-Directors), Cathy Kline & Natasha Egeli (Research Coordinators), Valerie Overgaard (Associate Superintendent – Learning Services, Vancouver School Board).

With your permission, we would like to survey two Planning 10 classes and two grade 9 classes. The questionnaires are anonymous and explore students' health seeking behaviour as well as their experiences and feelings about communication with doctors. The surveys will take about 15-20 minutes to complete and would be administered by a research assistant during class time. Focus groups would be held outside of class time (e.g. lunch or after school) and would take about 1-1.5 hours. Parental permission will be sought.

The project is described in detail in the attached research proposal. If you have any questions about the study you may contact the researcher coordinator at 604-822-8002 or email isdm@interchange.ubc.ca for more information.

Sincerely,

Angela Towle
Principal Investigator

Appendix 2: Needs Assessment – Cover letter & consent form

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Cover Letter to a
SURVEY ABOUT COMMUNICATION BETWEEN YOU AND YOUR DOCTOR

Part of a study titled:
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

Principal Investigator: Dr. Angela Towle, Co-Director, Division of Health Care Communication, College of Health Disciplines and Associate Dean, MD Undergraduate Program, Faculty of Medicine.

Co-Investigators: Dr. Valerie Overgaard, Associate Superintendent – Learning Service, Vancouver School Board, Dr. William Godolphin, Co-Director Division of Health Care Communication; Cathy Kline & Natasha Egeli, Research Coordinators, Division of Health Care Communication, UBC.

Funding: This study is funded by the Canadian Council on Learning.

Purpose: The overall aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program. You have been asked to participate because you are a student enrolled in Grade 9 or Grade 10.

Study Procedure: You are asked to complete a questionnaire about your experiences and your feelings about your communication with your doctor. The questionnaire will take about 10-20 minutes to complete.

Confidentiality: The questionnaire is confidential. **Do not put your name on it**. Any personal information gathered from this study will be kept strictly confidential. You will not be identified by name in any records or reports in the completed study. Data records that are kept on a computer will be password protected, and other information will be kept in a locked filing cabinet in the project office. Only the researchers will have access to the data.

Risks: There are no known risks to participating in this study.

Contact: If you have any questions or want further information about this study, you may contact Cathy or Natasha at 604-822-8002. If you have any concerns about your treatment or

rights as a research participant you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Consent: Your participation in this study is entirely voluntary, You may refuse to participate or withdraw from the study at any time without jeopardy to your academic standing, health care or community services. If you complete the questionnaire, it is assumed that you consent to our use of the anonymous information.

Appendix 3: Needs Assessment – Survey
SURVEY ABOUT COMMUNICATION BETWEEN YOU AND YOUR DOCTOR

SCHOOL _____ DATE Day____/month_____/year_____

Purpose: We are developing a workshop to help high school students who wish to have an independent relationship with their family doctor. This is part of a larger research and development project. We are studying the way that doctors and patients communicate. This questionnaire is about your experience of different aspects of the relationship between you and your doctor.

Procedure: **This survey is confidential. Please DO NOT put your name on it.** No one else but you and the UBC research team named above will see your answers. You do not have to complete the survey; it is completely voluntary. If you complete it we will assume that you agree we may use the information. However, no one will be able to connect your answers with you.

a. Age: _____ **years** **b.** Grade: _____

Gender: *Circle one.*
Male Female

Questions 3 – 19 are about your relationship with a **Family Doctor *(general practitioner).***

Do you have the **same** family doctor as your **parents or guardian**? *Circle **one**.*
Yes No

Would you **like** to ask your doctor about any of these things, but you **don't** because you feel **uncomfortable**? *Circle the letter beside **any** that apply.*

A Your general health
B Exercise or dieting or body weight
C Drug use
D Sexual problems (such as birth control or sexually transmitted diseases)
E Emotional & mental well-being or family problems
F Alternative therapies (such as acupuncture or herbal medicines)
G Other (please specify)
……

What are your **top three** sources for health information? *Circle the letter beside **three**.*

A A doctor
B Your school (such as school nurse or teacher or counsellor)
C Family member or other relatives
D A friend
E TV/radio/video
F Magazines/newspapers/books
G The Internet
H Other (please specify)
……

How many times have you seen a family doctor in the **past year**? *Circle **one**.*

(Note: your family doctor or walk-in clinic; **not** a hospital, **not** a specialist)

0 1 2 3 or more

7. How many **different family doctors** did you see in the past year? *Circle **one**.*

0 1 2 3 or more (If you did not see a doctor circle **0**, if you always saw the same doctor then circle **1**

8. What was the reason for your **last** visit with a family doctor? *Circle **any** that apply*.

A Emergency or injury
B Cold, cough, flu, infection
C Regular physical check-up
D Chronic condition (for example, diabetes, asthma, physical disability)
E Birth control or other sexual concern
F Other (please specify)
……

9. Who do you **usually** see a family doctor with? *Circle **one**.*

A. No one. I usually see a doctor by myself.
B Parent or guardian
C Brother or sister or other family member
D A friend
E Other (please specify)
……

10. If you **usually** go to see a doctor **by yourself**, how old were you when you started?

…… **years**

11. Have you had any of these **problems** during a visit with a family doctor? *Circle **any** that apply*.

A I felt awkward or shy about talking about my problems.
B I did not feel the doctor gave me a chance to ask all my questions or fully explain what I felt.
C I did not know how to ask the doctor the questions I really wanted answers to.
D I did not feel the doctor listened very carefully to my thoughts, opinions or feelings about my health problem(s).
E I was afraid the doctor would not keep our discussions private and confidential.
F I did not feel comfortable discussing some things (things that were very private, embarrassing or sensitive).
G I did not understand why the doctor was asking some questions or how to answer the doctor's questions.
H I did not understand all the information or advice my doctor gave me.
I I did not feel the doctor dealt with my problem properly.
J Other (please specify)
……

12. How is the **communication** between you and your family doctor now? *Circle **one**.*

A Excellent
B Good

C Average
D Below average
E Poor

13. Which one of the following would you like **best**? *Circle **one**.*

A The **doctor decides** what is best for me and tells me what to do.
B The doctor talks to me about different choices and **we decide together** what is best for me.
C The doctor explains for me what the different choices are and **I decide** what I think is best for me.

14. Indicate **up to three** (3) things you would like your doctor to do most of all to improve the relationship between you. *Circle up to **three** responses.*

A Make me feel comfortable and put me at ease.
B Encourage and give me time to ask questions.
C Listen to my thoughts, opinions and feelings.
D Reassure me of confidentiality – that our discussions are private and confidential.
E Explain to me why they are asking the questions that they ask.
F Explain health information to me with words that I can understand; explain the meaning of the medical words.
G Tell me how to find another doctor for a second opinion.
H Other (please specify)
……
I Nothing. I am satisfied with my relationship with my doctor.

15. Would you like to learn how to talk to your doctor better? *Circle **one**.*
Yes No Not Sure

Circle the things that you **would most like to be able to do** to improve your relationship with your doctor: *Circle **any** that apply*
.
A Ask more questions when I do not understand what my doctor is telling me.
B Express my thoughts and opinions about my health concerns.
C Know how to describe how I have been feeling or what my symptoms are.
D Ask for direction to other sources of information.
E Ask for the opinion of another doctor.
F Know what to do if I disagree with my doctor or I am unhappy about my doctor's decision or opinion.
G Other (please specify)
……
H Nothing. I am satisfied with my relationship with my doctor.

Would you like to **change** your doctor? *Circle **one**.*
Yes No Not Sure

18. Do you know **how to find a doctor** or **change your doctor** if you want to? *Circle **one**.*
Yes No Not Sure

19. If you answered (**Yes**) to question **18.**: How **did** you find your own doctor? or How **would** you find your own doctor?

……

Your answers to this survey may be used to develop a class put on by medical students (young people training to be doctors). If you attended one of these classes what is a question you would like to ask?

……

IF YOU REGULARLY SEE A SPECIALIST DOCTOR (one who looks after a chronic disorder that you have had for a long time, or a problem that needs special treatment, or a problem that needs care often or regularly) please fill out the following questions.

For how long have you been seeing a specialist? *Circle **one**.*

A Less than six months
B Six months to a year
C 1 to 2 years
D more than 2 years

For what health problem do you see the specialist?

……

My relationship with my **specialist** doctor is (Your relationship is your ability to ask questions, comfort in talking to, friendship with, and satisfaction with treatment): *Circle **one**.*

A Better than with my family doctor
B About the same as with my family doctor.
C Worse than with my family doctor.

Appendix 4: Needs Assessment – Parent information letter

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3

Tel: 604.822.8002
Fax: 604.822.2495
www.health-disciplines.ubc.ca/DHCC

Parent Information Letter
(Grade 9 Needs Assessment)
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

January 11, 2008

Dear Parent:
This letter is to inform you about a study taking place in your child's school. The purpose of the study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physician. The information will be used to improve and extend the reach of the program.

This study is carried out by a team from the Division of Health Care Communication at the University of British Columbia in partnership with the Vancouver School Board. Team members are Angela Towle & William Godolphin (Co-Directors), Cathy Kline & Natash Egeli (Research Coordinators), Valerie Overgaard (Associate Superintendent – Learning Services, Vancouver School Board).

If your child is enrolled in Grade 9, he/she will be asked to complete a survey about how they get their health care information and their experience communicating with their doctor. The survey will take about 15-20 minutes to complete and will be administered during one of their regularly scheduled classes. A copy of the questionnaire is available on request.

The survey is confidential and anonymous (no one will be able to connect your child's answers with him/her). Your child will not have to complete the survey; it is completely voluntary. If you do not want your child to participate in this study, please complete the attached 'Request to Opt Out of Study' form and return it to your child's school by the following date _____. If you return the attached '**Request to Opt out of Study**' form by the date indicated, your child will be asked to study independently during the time of the survey. **If you do not return the form it is assumed that you consent to have your child complete the survey.**

If you have any questions about the study you may contact the researchers at 604-822-8002 or email isdm@interchange.ubc.ca for more information.

Sincerely,

Angela Towle
Principal Investigator

Appendix 5: Needs Assessment – Opt-out-of-study form

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

#400 - 2194 Health Sciences Mall
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www.health-disciplines.ubc.ca/DHCC

Request to Opt out of Study

'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

Principal Investigator: Dr. Angela Towle, Associate Dean, MD Undergraduate Program, Faculty of Medicine, UBC and Co-Director, Division of Health Care Communication, College of Health Disciplines.

Co-investigators: Dr. William Godolphin, Co-Director Division of Health Care Communication; Cathy Kline & Natasha Egeli, Research Coordinators, Division of Health Care Communication; Dr. Valerie Overgaard, Associate Superintendent – Learning Service, Vancouver School Board.

If you **DO NOT** want your child to participate in this survey, please complete this form and return it to your child's school.

Date: _____ **School: _____**

Please print your name and your child's name:

I, _____ do not want my child _____ to participate in the study titled, *'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach.*

Parent/Guardian Signature: _____

Appendix 6: Workshop Evaluation Questionnaire
'Talk to Your Doc' – Evaluation for High School Students_____
Please take the time to fill out the evaluation. This information will help us improve the workshop in the future.

School:_____ Grade:_____ Group Facilitator:_____

What did you like best about the workshop?

How could we improve the workshop?

What did you learn?

What would you have liked to learn but did not?

Did you learn ...	NO!	Not really		Yes somewhat	YES!!!
-how to ask your doctor questions?	1	2	3	4	5
-what confidentiality is?	1	2	3	4	5
-how to find a new doctor?	1	2	3	4	5
-about a specific health question/problem, (e.g. birth control)?	1	2	3	4	5
-how to talk about things that you feel awkward about (e.g. emotional, family problems, sexual problems)?	1	2	3	4	5

My group facilitator…	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
-did listen to me	1	2	3	4	5
-explained what he/she meant	1	2	3	4	5
-was informative	1	2	3	4	5
-spoke clearly and audibly	1	2	3	4	5
-was pleasant and respectful	1	2	3	4	5
-was easy to relate to	1	2	3	4	5
-was enthusiastic	1	2	3	4	5

What did you like about your facilitator?

What could this facilitator improve?

The workshop…	NO!	Not really		Yes somewhat	YES!!!
-was well organised and ran smoothly	1	2	3	4	5
-was interesting and enjoyabl	1	2	3	4	5

The information was	Too simple	Just right	Too difficult

Other comments (Please use the back of this page):

Appendix 7: Effect Survey – Cover letter & consent form

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

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Cover Letter to a

SURVEY ABOUT EXPERIENCE WITH HEALTH CARE & COMMUNICATION

Part of a study titled:
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

Principal Investigator: Dr. Angela Towle, Co-Director, Division of Health Care Communication, College of Health Disciplines and Associate Dean, MD Undergraduate Program, Faculty of Medicine.

Co-Investigators: Dr. Valerie Overgaard, Associate Superintendent – Learning Service, Vancouver School Board, Dr. William Godolphin, Co-Director Division of Health Care Communication; Cathy Kline & Natasha Egeli, Research Coordinators, Division of Health Care Communication, UBC.

Funding: This study is funded by the Canadian Council on Learning.

Purpose: The overall aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program. You have been asked to participate because you are a student enrolled in Grade 9 or Grade 10.

Study Procedure: You are asked to complete a questionnaire about your experiences and your feelings about your communication with your doctor. The questionnaire will take about 10-20 minutes to complete.

Confidentiality: The questionnaire is confidential. **Do not put your name on it**. Any personal information gathered from this study will be kept strictly confidential. You will not be identified by name in any records or reports in the completed study. Data records that are kept on a computer will be password protected, and other information will be kept in a locked filing cabinet in the project office. Only the researchers will have access to the data.

Risks: There are no known risks to participating in this study.

Contact: If you have any questions or want further information about this study, you may contact Cathy or Natasha at 604-822-8002. If you have any concerns about your treatment or

rights as a research participant you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Consent: Your participation in this study is entirely voluntary, You may refuse to participate or withdraw from the study at any time without jeopardy to your academic standing, health care or community services. If you complete the questionnaire, it is assumed that you consent to our use of the anonymous information

Appendix 8: Effect Survey
SURVEY ABOUT EXPERIENCE WITH HEALTH CARE & COMMUNICATION

SCHOOL _____ DATE day____/month_____/year_____

Purpose: We are studying the way that doctors and patients communicate. This questionnaire is about your experiences and your feelings about your communication with your doctor.

Procedure: This survey is confidential. Please DO NOT put your name on it. No one else but you and the UBC research team named above will see your answers. You do not have to complete the survey; it is completely voluntary. If you complete it we will assume that you agree we may use the information. However, no one will be able to connect your answers with you.

1. a. Age: _____ years b. Grade: _____

2. Gender: *Circle one.*
Male Female

3. In general, would you say your health is:…*(Circle one)*

1 Excellent
2 Very good
3 Good
4 Fair
5 Poor

4. In the past 2 months, have you seen any doctor? *Circle one.*
Yes No

5. If you answered Yes to question 4. did you see any of the following? C*ircle any that apply*.

A Your regular (family) doctor
B A specialist
C A doctor at a drop-in clinic
D A new doctor, who you may want to see on a regular basis.
E Other, (please specify)
……

6. Do you have the same regular (family) doctor as your parents? *Circle one.*
Yes No

7. If you answered No to question 6. how old were you when you first had your own regular doctor?
…… years

8. Have you had any of these problems during a visit with a doctor? *Circle any that apply.*

A. I felt awkward or shy about talking about my problems.
B. I did not feel the doctor gave me a chance to ask all my questions or fully explain what I felt.

C. I did not know how to ask the doctor the questions I really wanted answers to.
D. I did not feel the doctor listened very carefully to my thoughts, opinions or feelings about my health problem(s).
E. I was afraid the doctor would not keep our discussions private and confidential.
F. I did not feel comfortable discussing some things (things that were very private, embarrassing or sensitive).
G. I did not understand why the doctor was asking some questions or how to answer the doctor's questions.
H. I did not understand all the information or advice my doctor gave me.
I. I did not feel the doctor dealt with my problem properly.
J. Other (please specify) ……

Confidentiality

9. If I am concerned that my doctor might not keep confidential what I say then I would: *Circle one.*

A Not tell him/her.
B Ask if he/she will keep it a secret.
C Tell him/her not to tell anyone else.
D Not go to see my regular doctor.
E Other, (please specify)
……

Communication

10. When you visit your doctor, how often do you do the following *(Circle one number for each question)*:

	Never	Almost never	Some-times	Fairly often	Very often	Always
10.1. Prepare a list of questions for your doctor	0	1	2	3	4	5
10.2. Ask questions about the things you want to know and things you don't understand about your treatment	0	1	2	3	4	5
10.3. Discuss any personal problems that may be related to your illness	0	1	2	3	4	5

Confidence With Physician

11. We would like to know how confident you are in doing certain activities. For each of the following questions, please choose the number that corresponds to your confidence that you can do the tasks regularly at the present time. *(Circle one number for each question)*

11.1. How confident are you that you can ask your doctor things about your illness that concern you?

not at all confident 1 2 3 4 5 6 7 8 9 10 totally confident

11.2. How confident are you that you can discuss openly with your doctor any personal problems that may be

not at all confident 1 2 3 4 5 6 7 8 9 10 totally confident

related to your illness?

11.3. How confident are you that you can work out differences with your doctor when they arise?

not at all confident | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | totally confident

11.4. How confident are you that what you tell your doctor will be confidential (a secret between the two of you)?

not at all confident | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | totally confident

11.5. How confident are you that you know how to find a different doctor if you want one?

not at all confident | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | totally confident

Preferences for Decision Making

12. Please think about the doctor that you usually go to when you are sick or need advice about your health and indicate how much you agree or disagree with each statement."

12.1. When there is more than one method to treat a problem, I should be told about each one.

Disagree strongly 1 | Disagree 2 | Neutral 3 | Agree 4 | Agree strongly 5

12.2. I believe that my doctor needs to know everything about my medical history to take good care of me.

Disagree strongly 1 | Disagree 2 | Neutral 3 | Agree 4 | Agree strongly 5

12.3. I would rather have my doctor make decisions about what's best for my health than to be given a whole lot of choices.

Disagree strongly 1 | Disagree 2 | Neutral 3 | Agree 4 | Agree strongly 5

12.4. The important medical decisions should be made by my doctor, not by me.

Disagree strongly 1 | Disagree 2 | Neutral 3 | Agree 4 | Agree strongly 5

Help-seeking Intentions

13. If you were having a personal-emotional problem, how likely is it that you would seek help from the following people?

13.1. Intimate partner (e.g., significant boyfriend or girlfriend). NOTE: If you do not have an intimate partner, please skip this question. Please answer all the remaining questions.

Extremely Unlikely 1 | 2 | 3 | 4 | 5 | 6 | Extremely Likely 7

13.2. Friend (not related to you)

Extremely Unlikely 1 | 2 | 3 | 4 | 5 | 6 | Extremely Likely 7

13.3. Parent

Extremely Unlikely | Extremely Likely

13.4. Other relative/family member

Extremely Unlikely 1 | 2 | 3 | 4 | 5 | 6 | Extremely Likely 7

13.5. Mental health professional (e.g., counsellor, psychologist, psychiatrist)	Extremely Unlikely 1	2	3	4	5	6	Extremely Likely 7
13.6. Phone help line (e.g., Lifeline)	Extremely Unlikely						Extremely Likely
13.7. Doctor/GP	Extremely Unlikely						Extremely Likely
13.8. I would not seek help from anyone.	Extremely Unlikely						Extremely Likely
13.9. Other not listed above (Please list) …… (If no other, leave blank.	Extremely Unlikely 1	2	3	4	5	6	Extremely Likely 7

Health Values

14. Each item on this questionnaire is a belief statement, referring to one's position regarding his or her health. Please indicate on the five-point scale how strongly you agree with each statement.

14.1. I handle myself well with respect to my health.	Disagree	Disagree	Neutral	Agree	Agree
14.2. I don't give up easily on efforts to improve my health	Disagree stronaly	Disagree	Neutral	Agree	Agree stronaly
14.3. I am willing to make daily sacrifices for good health.	Disagree strongly	Disagree	Neutral	Agree	Agree strongly
14.4. I am determined to be as healthy as I can be.	Disagree strongly 1	Disagree 2	Neutral 3	Agree 4	Agree strongly 5
14.5. I take care of my health as a matter of principle.	Disagree	Disagree	Neutral	Agree	Agree
14.6. When something goes wrong with my health I do everything I can to get to the root of the problem.	Disagree strongly 1	Disagree 2	Neutral 3	Agree 4	Agree strongly 5

Appendix 9: Effect Survey – Parent information letter

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

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www.health-disciplines.ubc.ca/DHCC

Parent Information Letter
(Planning 10 Effect Survey)
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

January 11, 2008

Dear Parent:
This letter is to inform you about a study taking place in your child's school. The purpose of the study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physician. The information will be used to improve and extend the reach of the program.

This study is carried out by a team from the Division of Health Care Communication at the University of British Columbia in partnership with the Vancouver School Board. Team members are Angela Towle & William Godolphin (Co-Directors), Cathy Kline & Natash Egeli (Research Coordinators), Valerie Overgaard (Associate Superintendent – Learning Services, Vancouver School Board).

If your child is enrolled in a Planning 10 class, he/she may be asked to complete a survey about their experiences and feelings about communication with their doctor. The survey will take about 15-20 minutes to complete and will be administered during one of their regularly scheduled classes. A copy of the questionnaire is available on request.

The survey is confidential and anonymous (no one will be able to connect your child's answers with him/her). Your child will not have to complete the survey; it is completely voluntary. If you do not want your child to participate in this study, please complete the attached 'Request to Opt Out of Study' form and return it to your child's school by the following date _____. If you return the attached '**Request to Opt out of Study**' form by the date indicated, your child will be asked to study independently during the time of the survey. **If you do not return the form it is assumed that you consent to have your child complete the survey.**

If you have any questions about the study you may contact the researchers at 604-822-8002 or email isdm@interchange.ubc.ca for more information.

Sincerely,

Angela Towle
Principal Investigator

Appendix 10: Effect Survey – Opt-out-of-study form

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

#400 - 2194 Health Sciences Mall
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Tel: 604.822.8002
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www.health-disciplines.ubc.ca/DHCC

Request to Opt out of Study

'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

Principal Investigator: Dr. Angela Towle, Associate Dean, MD Undergraduate Program, Faculty of Medicine, UBC and Co-Director, Division of Health Care Communication, College of Health Disciplines.

Co-investigators: Dr. William Godolphin, Co-Director Division of Health Care Communication; Cathy Kline & Natasha Egeli, Research Coordinators, Division of Health Care Communication; Dr. Valerie Overgaard, Associate Superintendent – Learning Service, Vancouver School Board.

If you **DO NOT** want your child to participate in this survey, please complete this form and return it to your child's school.

Date: _____ **School: _____**

Please print your name and your child's name:

I, _____ do not want my child _____ to participate in the study titled, *'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach.*

Parent/Guardian Signature: _____

Appendix 11: Focus group – Parent information letter

THE UNIVERSITY OF BRITISH COLUMBIA

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3
Tel: 604.822.8002
Fax: 604.822.2495
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Parent Information Letter (Student Focus Group)
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

January 11, 2008

Dear Parent:
This letter is to inform you about a study taking place in your child's school. The purpose of the study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physician. The information will be used to improve and extend the reach of the program.

This study is carried out by a team from the Division of Health Care Communication at the University of British Columbia in partnership with the Vancouver School Board. Team members are Angela Towle & William Godolphin (Co-Directors), Cathy Kline & Natasha Egeli (Research Coordinators), Valerie Overgaard (Associate Superintendent – Learning Services, Vancouver School Board).

Your child is asked to attend a focus group with other students in their class to discuss their experiences and feelings about communication with their doctor. The focus group will take about 60-90 minutes and will be held after school hours or during a lunch break.

The focus group is completely voluntary. Your child may refuse to participate or withdraw from the study at any time without jeopardy to his/her academic standing, health care or community services. Any personal information will be kept confidential. Audiotapes will be transcribed and any names or personal references will be removed. Participants will not be identified by name in any records or reports of the completed study.

If you have any questions about the study you may contact the researchers at 604-822-8002 or email isdm@interchange.ubc.ca for more information. If you consent to have your child participate in the focus group please complete one of the attached consent forms and have your child bring it with him/her to the focus group on the following date _____. Please keep the second copy of the consent form for your records.

Sincerely,

Angela Towle
Principal Investigator

Appendix 12: Focus Group – High school student parental consent form

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
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Fax: 604.822.2495
www.health-disciplines.ubc.ca/DHCC

Parental Consent for Student Focus Group
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

Principal Investigator: Dr. Angela Towle, Associate Dean, MD Undergraduate Program, Faculty of Medicine, UBC and Co-Director, Division of Health Care Communication, College of Health Disciplines.

Co-Investigators: Dr. William Godolphin, Co-Director Division of Health Care Communication; Cathy Kline & Natasha Egeli, Research Coordinators, Division of Health Care Communication; Dr. Valerie Overgaard, Associate Superintendent – Learning Service, Vancouver School Board.

Funding: This study is funded by the Canadian Council on Learning.

Purpose: The aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program. Your child has been asked to participate as he/she is enrolled in Grade 9/10.

Study Procedure: You are asked to consent for your child to participate in a 60-90 minute focus group with other students to discuss their experiences with communicating with their doctor. Your child will not be required to share personal health information. With your permission the focus group will be audio-taped. Your child may ask for the recorder to be turned off at any time.

Potential Risks: One possible risk to participation is breach of confidentiality. Focus group participants will be asked to keep any personal information shared during the focus group confidential. However, we cannot control what participants might say outside the group.

Potential Benefits: Your child may or may not benefit from participating in this study. It is hoped that the study will result in improvements to the 'Talk to Your Doc' program.

Confidentiality: Any personal information resulting from this research study will be kept strictly confidential. Your child will not be identified by name in any records or reports in the completed

study. Data records that are kept on a computer will be secured by password, and other information will be kept in a locked filing cabinet. The audiotape recording will be transcribed and any names or personal references will be removed.

Compensation: In order to defray costs of transportation, each focus group participant will receive an honorarium of $20 for their participation.

Contact: If you have any questions or want further information with respect to this study, you may contact Dr. Angela Towle at 604-822-4526 or the research coordinator, Cathy Kline at 604-822-8002.

If you have any concerns about your treatment or rights as a research participant you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Consent: Your child's participation in this study is entirely voluntary and he/she may refuse to participate or withdraw at anytime from the study without jeopardy to his/her academic standing, health care or community services.

Please complete and return the section below to the researchers and keep the above information for you own records.

✂----------

Please complete and return this form to the researchers in the envelope provided.

I consent / I do not consent (circle one) to my child's participation in the study titled, **'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach**.

Signature of Parent or Guardian:

_____ Date: _____

Print name of parent: _____

Print name of child: _____

Appendix 13: Focus Group – Teacher invitation

THE UNIVERSITY OF BRITISH COLUMBIA

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3

Tel: 604.822.8002
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Teacher Invitation Letter
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

January 11, 2008

Dear:
You are invited to take part in an evaluation of the 'Talk to Your Doc' program. You are asked to participate because you teach Planning 10 classes.

The aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program.

This study is carried out by a team from the Division of Health Care Communication at the University of British Columbia in partnership with the Vancouver School Board. Team members are Angela Towle & William Godolphin (Co-Directors), Cathy Kline & Natasha Egeli (Research Coordinators), Valerie Overgaard, Associate Superintendent – Learning Services, Vancouver School Board.

We ask you to take part in a focus group (60-90 minutes) to discuss how the program could better support adolescents to communicate more effectively with physicians and meet the intended learning outcomes of the Planning 10 curriculum. The focus group would be audio-taped with your consent.

Your participation is entirely voluntary. You may refuse to participate or withdraw from the study at any time without jeopardy to your professional standing, health care or community services. You will be asked to sign a consent form. Any personal information will be kept confidential. Audiotapes will be transcribed and any names or personal references will be removed. Participants will not be identified by name in any records or reports of the completed study.

If you are interested in taking part in this study, please contact the researchers at 604-822-8002 or email isdm@interchange.ubc.ca.

Sincerely,

Angela Towle
Principal Investigator

Appendix 14: Focus Group – VSB coordinator invitation

THE UNIVERSITY OF BRITISH COLUMBIA

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3
Tel: 604.822.8002
Fax: 604.822.2495
www.health-disciplines.ubc.ca/DHCC

VSB Coordinator Invitation Letter
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

January 11, 2008

Dear:
You are invited to take part in an evaluation of the 'Talk to Your Doc' program. You are asked to participate because you are a Coordinator for Career Programs with the Vancouver School Board.

The aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program.

This study is carried out by a team from the Division of Health Care Communication at the University of British Columbia in partnership with the Vancouver School Board. Team members are Angela Towle & William Godolphin (Co-Directors), Cathy Kline & Natasha Egeli (Research Coordinators), Valerie Overgaard, Associate Superintendent – Learning Services, Vancouver School Board.

We ask you to take part in an interview (30-60 minutes) with one of the researchers to discuss the impact of the workshops at the district level and any benefits/challenges of partnering with the UBC Medical School on this program. The focus group would be audio-taped with your consent.

Your participation is entirely voluntary. You may refuse to participate or withdraw from the study at any time without jeopardy to your professional standing, health care or community services. You will be asked to sign a consent form. Any personal information will be kept confidential. Audiotapes will be transcribed and any names or personal references will be removed. Participants will not be identified by name in any records or reports of the completed study.

If you are interested in taking part in this study, please contact the researchers at 604-822-8002 or email isdm@interchange.ubc.ca.

Sincerely,

Angela Towle
Principal Investigator

Appendix 15: Focus Group – Parent invitation

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3

Tel: 604.822.8002
Fax: 604.822.2495
www.health-disciplines.ubc.ca/DHCC

Parent Invitation Letter
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

January 11, 2008

Dear:

You are invited to take part in an evaluation of the 'Talk to Your Doc' program. You are asked to participate because you are a member of the Parent Advisory Council or a parent of a student enrolled in Grade 10.

The aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program.

This study is carried out by a team from the Division of Health Care Communication at the University of British Columbia in partnership with the Vancouver School Board. Team members are Angela Towle & William Godolphin (Co-Directors), Cathy Kline & Natasha Egeli (Research Coordinators), Valerie Overgaard, Associate Superintendent – Learning Services, Vancouver School Board.

We ask you to take part in a focus group (60-90 minutes) to discuss how parents and the 'Talk to Your Doc' program could support adolescents to communicate more effectively with physicians. The focus group would be audio-taped with your consent.

Your participation is entirely voluntary. You may refuse to participate or withdraw from the study at any time without jeopardy to your health care or community services. You will be asked to sign a consent form. Any personal information will be kept confidential. Audiotapes will be transcribed and any names or personal references will be removed. Participants will not be identified by name in any records or reports of the completed study.

If you are interested in taking part in this study, please contact the researchers at 604-822-8002 or email isdm@interchange.ubc.ca.

Sincerely,

Angela Towle
Principal Investigator

Appendix 16: Focus Group – Medical student invitation

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3

Tel: 604.822.8002
Fax: 604.822.2495
www.health-disciplines.ubc.ca/DHCC

Medical Student Invitation Letter
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

January 11, 2008

Dear:
You are invited to take part in an evaluation of the 'Talk to Your Doc' program. You are asked to participate because you have facilitated a 'Talk to Your Doc' workshop.

The aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program.

This study is carried out by a team from the Division of Health Care Communication at the University of British Columbia in partnership with the Vancouver School Board. Team members are Angela Towle & William Godolphin (Co-Directors), Cathy Kline & Natasha Egeli (Research Coordinators), Valerie Overgaard, Associate Superintendent – Learning Services, Vancouver School Board.

We ask you to take part in a focus group (60-90 minutes) to discuss your experiences with facilitating the 'Talk to Your Doc' workshops. The focus group would be audio-taped with your consent.

Your participation is entirely voluntary. You may refuse to participate or withdraw from the study at any time without jeopardy to your academic standing, health care or community services. You will be asked to sign a consent form. Any personal information will be kept confidential. Audiotapes will be transcribed and any names or personal references will be removed. Participants will not be identified by name in any records or reports of the completed study.

If you are interested in taking part in this study, please contact the researchers at 604-822-8002 or email isdm@interchange.ubc.ca.

Sincerely,

Angela Towle
Principal Investigator

Appendix 17: Focus Group – Student assent form

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3

Tel: 604.822.8002
Fax: 604.822.2495
www.health-disciplines.ubc.ca/DHCC

Assent form for Student Focus Group
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

Principal Investigator: Dr. Angela Towle, Associate Dean, MD Undergraduate Program, Faculty of Medicine, UBC and Co-Director, Division of Health Care Communication, College of Health Disciplines.

Co-Investigators: Dr. William Godolphin, Co-Director Division of Health Care Communication; Cathy Kline & Natasha Egeli, Research Coordinators, Division of Health Care Communication; Dr. Valerie Overgaard, Associate Superintendent – Learning Service, Vancouver School Board.

Funding: This study is funded by the Canadian Council on Learning.

Purpose: The aim of this study is to evaluate 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program. You have been asked to participate because you are enrolled in Grade 9 /10.

Study Procedure: You are asked to participate in a 60-90 minute focus group with other students to discuss your experiences with communicating with their doctor. You will not be required to share personal health information. With your permission the focus group will be audio-taped. You may ask for the recorder to be turned off at any time.

Potential Risks: One possible risk to participation is that other students might tell others what you said during the focus group. Participants will be asked not to share what is said during the focus group outside the group. However, we cannot control what participants might say outside the group.

Potential Benefits: You may or may not benefit from participating in this study. It is hoped that the study will result in improvements to the 'Talk to Your Doc' program.

Confidentiality: Any personal information resulting from this research study will be kept strictly confidential. You will not be identified by name in any records or reports in the completed study. Data records that are kept on a computer will be secured by password, and other information will be kept in a locked filing cabinet. The audiotape recording will be transcribed and any names or personal references will be removed.

Compensation: In order to cover costs of transportation, each focus group participant will receive an honorarium of $20 for their participation.

Contact: If you have any questions or want further information with respect to this study, you may contact Dr. Angela Towle at 604-822-4526 or the research coordinator, Cathy Kline at 604-822-8002.

If you have any concerns about your treatment or rights as a research participant you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw at anytime from the study without jeopardy to your academic standing, health care or community services.

Your signature below indicates that you have a consent form signed by your parent / guardian providing permission for you to participate in this study.

Your signature indicates that you consent to participate in the study.

Your signature indicates that you have received a copy of this form for your own records.

Signature of Student:

_____ Date: _____

Print name: _____

Appendix 18: Focus Group – Teacher consent form

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3

Tel: 604.822.8002
Fax: 604.822.2495
www.health-disciplines.ubc.ca/DHCC

Teacher Focus Group Consent Form
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

Principal Investigator: Dr. Angela Towle, Associate Dean, MD Undergraduate Program, Faculty of Medicine, UBC and Co-Director, Division of Health Care Communication, College of Health Disciplines.

Co-Investigators: Dr. William Godolphin, Co-Director Division of Health Care Communication; Cathy Kline & Natasha Egeli, Research Coordinators, Division of Health Care Communication; Dr. Valerie Overgaard, Associate Superintendent – Learning Service, Vancouver School Board.

Funding: This study is funded by the Canadian Council on Learning.

Purpose: The aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program. You have been asked to participate as you teach Planning 10.

Study Procedure: You are asked to consent to participate in a 60-90 minute focus group to discuss how the 'Talk to Your Doc' program could better support adolescents to communicate more effectively with physicians and meet the intended learning outcomes of the Planning 10 curriculum outlined by the Ministry of Education. With your permission the focus group will be audio-taped. You may ask for the recorder to be turned off at any time.

Potential Risks: One possible risk to participation is breach of confidentiality. Focus group participants will be asked to keep any personal information shared during the focus group confidential. However, we cannot control what participants might say outside the group.

Potential Benefits: You may or may not benefit from participating in this study. It is hoped that the study will result in improvements to the 'Talk to Your Doc' program.

Confidentiality: Any personal information resulting from this research study will be kept strictly confidential. You will not be identified by name in any records or reports in the completed study.

Data records that are kept on a computer will be secured by password, and other information will be kept in a locked filing cabinet. The audiotape recording will be transcribed and any names or personal references will be removed.

Compensation: In order to defray costs of transportation, each focus group participant will receive an honorarium of $20 for their participation.

Contact: If you have any questions or want further information with respect to this study, you may contact Dr. Angela Towle at 604-822-4526 or the research coordinator, Cathy Kline at 604-822-8002.

If you have any concerns about your treatment or rights as a research participant you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw at anytime from the study without jeopardy to your professional status, health care or community services.

Your signature below indicates that you have received a copy of this consent form for your own records.

Your signature indicates that you consent to participate in this study.

Signature of participant: _____ Date: _____

Print name of participant: _____

Code: _____

Appendix 19: Focus Group – VSB coordinator consent form

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3

Tel: 604.822.8002
Fax: 604.822.2495
www.health-disciplines.ubc.ca/DHCC

Vancouver School Board Interview Consent Form
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

Principal Investigator: Dr. Angela Towle, Associate Dean, MD Undergraduate Program, Faculty of Medicine, UBC and Co-Director, Division of Health Care Communication, College of Health Disciplines.

Co-Investigators: Dr. William Godolphin, Co-Director Division of Health Care Communication; Cathy Kline & Natasha Egeli, Research Coordinators, Division of Health Care Communication; Dr. Valerie Overgaard, Associate Superintendent – Learning Service, Vancouver School Board.

Funding: This study is funded by the Canadian Council on Learning.

Purpose: The aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program. You have been asked to participate as you coordinate career programs of the Vancouver School Board (VSB).

Study Procedure: You are asked to consent to participate in a 60 minute interview to discuss the outcomes of the partnership between the UBC Medical School and the VSB as well as explore how the 'Talk to Your Doc' program could better meet the intended learning outcomes of the Planning 10 curriculum outlined by the Ministry of Education. With your permission the interview will be audio-taped. You may ask for the recorder to be turned off at any time.

Potential Risks: One possible risk to participating in this study is breach of confidentiality. The researchers will do the following to minimize this risk:

Confidentiality: Any personal information resulting from this research study will be kept strictly confidential. You will not be identified by name in any records or reports in the completed study. Data records that are kept on a computer will be secured by password, and other information will

be kept in a locked filing cabinet. The audiotape recording will be transcribed and any names or personal references will be removed.

Potential Benefits: You may or may not benefit from participating in this study. It is hoped that the study will result in improvements to the 'Talk to Your Doc' program.

Contact: If you have any questions or want further information with respect to this study, you may contact Dr. Angela Towle at 604-822-4526 or the research coordinator, Cathy Kline at 604-822-8002.

If you have any concerns about your treatment or rights as a research participant you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw at anytime from the study without jeopardy to your professional status, health care or community services.

Your signature below indicates that you have received a copy of this consent form for your own records.

Your signature indicates that you consent to participate in this study.

Signature of participant: _____ Date: _____

Print name of participant: _____

Code: _____

Appendix 20: Focus Group – Parent consent form

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3

Tel: 604.822.8002
Fax: 604.822.2495
www.health-disciplines.ubc.ca/DHCC

Parent Focus Group Consent Form
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

Principal Investigator: Dr. Angela Towle, Associate Dean, MD Undergraduate Program, Faculty of Medicine, UBC and Co-Director, Division of Health Care Communication, College of Health Disciplines.

Co-Investigators: Dr. William Godolphin, Co-Director Division of Health Care Communication; Cathy Kline & Natasha Egeli, Research Coordinators, Division of Health Care Communication; Dr. Valerie Overgaard, Associate Superintendent – Learning Service, Vancouver School Board.

Funding: This study is funded by the Canadian Council on Learning.

Purpose: The aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program. You have been asked to participate as you are member of the Parents Advisory Council or a parent of a student enrolled in Grades 9 /10.

Study Procedure: You are asked to consent to participate in a 60-90 minute focus group to discuss how parents and the 'Talk to Your Doc' program could support adolescents to communicate more effectively with physicians. With your permission the focus group will be audio-taped. You may ask for the recorder to be turned off at any time.

Potential Risks: One possible risk to participation is breach of confidentiality. Focus group participants will be asked to keep any personal information shared during the focus group confidential. However, we cannot control what participants might say outside the group.

Potential Benefits: You may or may not benefit from participating in this study. It is hoped that the study will result in improvements to the 'Talk to Your Doc' program.

Confidentiality: Any personal information resulting from this research study will be kept strictly confidential. You will not be identified by name in any records or reports in the completed study. Data records that are kept on a computer will be secured by password, and other information will be kept in a locked filing cabinet. The audiotape recording will be transcribed and any names or personal references will be removed.

Compensation: In order to defray costs of transportation, each focus group participant will receive an honorarium of $20 for their participation.

Contact: If you have any questions or want further information with respect to this study, you may contact Dr. Angela Towle at 604-822-4526 or the research coordinator, Cathy Kline at 604-822-8002.

If you have any concerns about your treatment or rights as a research participant you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw at anytime from the study without jeopardy to your professional status, health care or community services.

Your signature below indicates that you have received a copy of this consent form for your own records.

Your signature indicates that you consent to participate in this study.

Signature of participant: _____ Date: _____

Print name of participant: _____

Code: _____

Appendix 21: Focus Group – Medical student consent form

THE UNIVERSITY OF BRITISH COLUMBIA

Division of Health Care Communication
informed and shared decision making

#400 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z3

Tel: 604.822.8002
Fax: 604.822.2495
www.health-disciplines.ubc.ca/DHCC

Medical Student Focus Group Consent Form
'Talk to Your Doc' – Helping Adolescents make Health Care Transitions – Evaluation and Design to Extend the Reach

Principal Investigator: Dr. Angela Towle, Associate Dean, MD Undergraduate Program, Faculty of Medicine, UBC and Co-Director, Division of Health Care Communication, College of Health Disciplines.

Co-Investigators: Dr. William Godolphin, Co-Director Division of Health Care Communication; Cathy Kline & Natasha Egeli, Research Coordinators, Division of Health Care Communication; Dr. Valerie Overgaard, Associate Superintendent – Learning Service, Vancouver School Board.

Funding: This study is funded by the Canadian Council on Learning.

Purpose: The aim of this study is to examine outcomes of 'Talk to Your Doc', a workshop by medical students to help high school students develop an independent and active relationship with their physicians. The information will be used to improve and extend the reach of the program. You have been asked to participate as you have facilitated 'Talk to Your Doc' workshops.

Study Procedure: You are asked to consent to participate in a 60-90 minute focus group to discuss your experiences with facilitating 'Talk to Your Doc' workshops. With your permission the focus group will be audio-taped. You may ask for the recorder to be turned off at any time.

Potential Risks: One possible risk to participation is breach of confidentiality. Focus group participants will be asked to keep any personal information shared during the focus group confidential. However, we cannot control what participants might say outside the group.

Potential Benefits: You may or may not benefit from participating in this study. It is hoped that the study will result in improvements to the 'Talk to Your Doc' program.

Confidentiality: Any personal information resulting from this research study will be kept strictly confidential. You will not be identified by name in any records or reports in the completed study.

Data records that are kept on a computer will be secured by password, and other information will be kept in a locked filing cabinet. The audiotape recording will be transcribed and any names or personal references will be removed.
Compensation: In order to defray costs of transportation, each focus group participant will receive an honorarium of $20 for their participation.

Contact: If you have any questions or want further information with respect to this study, you may contact Dr. Angela Towle at 604-822-4526 or the research coordinator, Cathy Kline at 604-822-8002.

If you have any concerns about your treatment or rights as a research participant you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw at anytime from the study without jeopardy to your academic standing, professional status, health care or community services.

Your signature below indicates that you have received a copy of this consent form for your own records.

Your signature indicates that you consent to participate in this study.

Signature of participant: _____ Date: _____

Print name of participant: _____

Code: _____

Appendix 22: Focus Group Questions – High school student (workshop; seen doctor)

Student focus group questions: attended workshop

Hello and thank-you for being here. The purpose of this focus group is to get information from all of you about your experiences with the TTYD workshop.

The information we collect here to today will be recorded. Anything you share is completely confidential and will not get back to your teachers or parents. We also ask that all of you agree not to share what you hear today with anyone outside this room. That means what is said in here stays in here.

A - Now you have all said to me that you have been to the doctor since the workshop just over a month ago, is there anyone who this is not true for? I just want to make sure we are all in the right group.
OR
B - Now you have all said to me that you have not been to the doctor since the workshop just over a month ago, is there anyone who this is not true for? I just want to make sure we are all in the right group.

So anytime we are talking about your visit with the doctor, I don't want you to tell me why you were there just about your thoughts and feelings about the visit… for example, if I was to say I went to the doctor last week, I might tell you that I felt like I couldn't tell my doc anything because I was scared. Notice that I didn't tell you WHY I was there. Any questions about that?

Great lets get started!

So I would like for us to go around the circle and say our name and something about us, like where you were born or something… I will start, My name is_____ and I was born in ____.

1. What did you think of the Talk to Your Doc Workshop?
    i. What did you like about the workshop?
    ii. What didn't you like about the workshop?
2. What was the most useful aspect of the workshop?
3. What do you think might have made the workshop better?
    i. Is there anything you might have taken out or added to the workshop?
    ii. Why?
4. After the workshop did you talk to anyone about it?

i. Did you talk to friends, family or others about anything from the workshop?

ii. What did you talk about?

5. How else have you learned about communicating with your doctor?
   i. Have you learned any skills for communicating with your doctor anywhere other than from the workshop? (eg. Skills for getting your questions answered or for asking questions)

6. If you couldn't go to a workshop with medical students, what other ways would you like to learn things that you did during the workshop?
   i. How else could you get that same information?
   ii. What about for student's who do not have the option of medical students coming to their class, how could they get the same information?

So you were all in a workshop that was intended to teach you how to talk to your doctor, we're going to talk a bit about your last visit with your doctor now:

7. Was there anything different about your visit with the doctor?
   a. What was different?
   b. Did you use some of the information you learned in the workshop?
   c. Did you feel different at that visit? Did you think about your doctor differently?

8. *What is still hard for you about visiting your doctor?*
   a. *What about talking to your doctor, specifically?*

9. What do you find hard when talking to your doctor?

10. (after question 8 or 9) Is there anything we could add to the workshop to address that?

Appendix 23: Focus Group Questions – High school student (no workshop)

High School Student Focus Group Questions (Not Attended a Workshop)

1. What does good doctor-patient communication mean to you?

2. What do you feel is important in a good relationship between a patient and doctor? Other health professionals?

3. What are the best things about the way you communicate with your doctor (ie, things you do to make communication easier?). How does this compare with your experience with other health professionals?

4. What, if anything, are the difficulties you have in communicating with your doctor? How does this compare with your experience with other health professionals?

5. Have you tried to overcome these difficulties?
If yes: How? What happened?
If no: what are some of the things that prevent you from overcoming these difficulties?

6. How do you and your doctor make decisions about your medical care? Can you give me an example from your own experience? How does this compare with your experience with other health professionals?

7. Are there times when you would like to have more input into decision about your health care? If Yes, could you give me a specific example? What, if anything did you try? What made it difficult?

Appendix 24: Focus Group Questions – Teachers (schools with workshops)

Teacher Focus Group Questions
Schools with Workshops

1. Lets start by talking about how students learn to talk to their doctors
    a. What do students need to know about talking to their doctor?
    b. Do students receive information or learn about talking to their doctors at any other time in their education?

2. These are the objectives that are taught to the youth in the Talk to Your Doc workshop. What do you think of:
    a. Sharing thoughts and opinions with your doctor.
    b. Talk about sensitive and embarrassing issues.
    c. Taking an active role in making decisions about your health.
    d. Confidentiality between you and your doctor and how it works.
    e. Establish and maintain an independent relationship with your doctor.

3. Is there anything else that you think is important that these objectives do not address?

4. In what ways does the 'Talk to Your Doc' workshop meet the intended learning outcomes of the Planning 10 curriculum?

5. How does 'Talk to Your Doc' compare with other activities in the Planning 10 curriculum?
    a. How might the workshop be improved to better address the Planning 10 learning objectives?
    b. What other types of activities would be most effective in teaching students about communication skills? (As teachers you can provide us with a wealth of knowledge and experience about what types of things youth respond most to)

6. How is the workshop received by students?

    a. What are the benefits of the workshop? (Probe: What do the students take away from the workshop?)
    b. Do you think the workshop is being offered at the right time in terms of student's ages? (younger grades/older grades)
        i. *(If younger mentioned)*: If this was presented to a younger group are there any objectives you think should be left out or added?

7. What other support materials / resources could be developed to reinforce the workshop's learning objectives?
    a. How can these objectives be reinforced for youth who have had the workshop?

8. What are some alternative ways the information in the workshops could be taught or provided to students where workshops are not possible (e.g. too far for medical students to travel)?
    a. What are the advantages of these alternatives?
    b. What are the limitations of these alternatives?

Appendix 25: Focus Group Questions – Teachers (schools with no workshops)

Teacher Focus Group Questions
Schools without Workshops

1. Lets start by talking about how students learn to talk to their doctors
    a. What do students need to know about talking to their doctor?
    b. Do students receive information or learn about talking to their doctors at any other time in their education?

2. Have any of you heard of the Talk to Your Doc workshop?
    These are the objectives that are taught to the youth in the Talk to Your Doc workshop. What do you think of: (If you could rank these objectives, what would you say is the most important one)
        1. Sharing thoughts and opinions with your doctor.
        2. Talk about sensitive and embarrassing issues.
        3. Taking an active role in making decisions about your health.
        4. Confidentiality between you and your doctor and how it works.
        5. Establish and maintain an independent relationship with your doctor.

3. Is there anything else that you think is important that these objectives do not address?

4. In what ways does the 'Talk to Your Doc' workshop meet the intended learning outcomes of the Planning 10 curriculum?

5. How does 'Talk to Your Doc' compare with other activities in the Planning 10 curriculum?
    A How might the workshop be improved to better address the Planning 10 learning objectives?
    B What other types of activities would be most effective in teaching students about communication skills? (As teachers you can provide us with a wealth of knowledge and experience about what types of things youth respond most to)

6. Do you think the workshop is being offered at the right time in terms of student's ages? (younger grades/older grades)
    a.(*If younger mentioned*): If this was presented to a younger group are there any objectives you think should be left out or added?

7. What other support materials / resources could be developed to reinforce the workshop's learning objectives?
    a. How can these objectives be reinforced for youth who have had the workshop?

8. What are some alternative ways the information in the workshops could be taught or provided to students where workshops are not possible (e.g. too far for medical students to travel)?
    c. What are the advantages of these alternatives?
    d. What are the limitations of these alternatives?

Appendix 26: Interview questions – VSB coordinator

VSB Coordinator Interview Questions

1. How are the 'Talk to Your Doc' workshops viewed at the district level?

2. How does the program compare to other school board initiatives / partnerships?

3. In what ways does the 'Talk to Your Doc' workshop meet the intended learning outcomes of the Planning 10 curriculum?

4. What are some of the benefits for the district in partnering with the UBC Medical School on this program?

5. What are some of the challenges to partnering with the UBC Medical School?

6. How might we extend the reach of the program to other schools in the district?
(Probe) are there other ways we can provide Talk to Your Doc information to students?

Appendix 27: Focus Group Questions – Parents

Parent Focus Group Questions

1. Lets start by talking about how students learn to talk to their doctors?
   - What do students need to know then about talking to their doctor?
   - How do parents help their children make transitions from seeing their family doctors to seeing their own doctors?

2. What do you do or say to your child(ren) to prepare them for a doctors visit? What about other parents you know?

3. Are any of you familiar with the Talk to Your Doc Workshop?
   - Have any of your children or other children you know been through the workshop?
   - What, if any, information did your child share with you about the 'Talk to Your Doc' program?

4. These are the objectives that are taught to the youth in the Talk to Your Doc workshop. What do you think of:
   - Sharing thoughts and opinions with your doctor.
   - Talk about sensitive and embarrassing issues.
   - Taking an active role in making decisions about your health.
   - Confidentiality between you and your doctor and how it works.
   - Establish and maintain an independent relationship with your doctor.

5. What are things that parents could do to support the 'Talk to Your Doc' workshops objectives (such as knowledge of confidentiality in the doctor-patient relationship; how to find a doctor, communication skills, how to ask embarrassing questions, etc)?

6. Is there anything else that you think is important that these objectives do not address?

7. What other ways could the workshop lessons be taught to students where workshops are not possible (e.g. too far for medical students to travel)?

Appendix 28: Focus Group Questions – Medical students

Medical Student Focus Group Questions

1. What did you learn about adolescent health care when you facilitated ‘Talk to Your Doc’?

2. How could you use what you’ve learned in your future practice?

3. How could the workshop be improved?

4. Rather than workshops, in what other ways could the workshop objectives be met?

5. What are the advantages of the alternatives to giving workshops?

6. *Probe for fuller descriptions of those ideas that appear most advantageous*
(What would that look like?)

7. What role could medical students take on, if information was taught using these new approaches?

Appendix 29: Needs Assessment 2008 Summary of data

Summary of 2008 Needs Assessment Data: Grade 9

Question	Number	%
Male	73	51%
Female	69	49%
Same family doctor as parents?		
Yes	134	94%
No	8	6%
Want to see your doctor about but don't?		
General health	30	21%
Exercise/ Dieting/ Body weight	33	23%
Drug use	26	18%
Sexual problems	32	22%
Emotional and mental well-being or family problems	33	23%
Alternative therapies	12	8%
Other	11	8%
Sources of health information (top 3)		
A doctor	94	65%
Your School (Nurse, teacher, or counsellor)	67	46%
Family Member	91	63%
A friend	30	21%
TV/ Radio/ Video	28	19%
Magazines/ Newspapers/ books	39	27%
The Internet	70	48%
Other	7	5%
Number of times seen a family doctor in past year		
0 times	21	15%
1 time	37	25%
2 times	27	19%
3 or more times	60	41%
How many different family doctors seen in the past year?		
0	37	26%
1	79	55%
2	21	15%
3 or More	6	4%
Reason for last visit		
Emergency or Injury	19	13%
Cold, cough, flu, infection	76	52%
Regular physical check-up	28	19%

Chronic condition	5	3%
Birth Control or Sexual concern	9	4%
Other	27	19%
Who do you usually see a doctor with?		
No one; by myself	7	5%
Parent or guardian	130	90%
Brother, sister or other family member	9	6%
A friend	4	3%
Other	3	2%
Have you had any of these problems when visiting a doctor?		
I felt awkward or shy	42	29%
I did not feel the doctor gave me a chance to ask questions	15	10%
I did not know how to ask the doctor questions	24	16%
I did not feel the doctor listened	6	4%
I was afraid the doctor would not keep things private	12	8%
I did not feel comfortable discussing some things	27	19%
I did not understand why the doctor was asking some questions	14	10%
I did not understand all the information or advice my doctor gave	14	10%
I did not feel the doctor dealt with my problem properly	14	10%
Other	6	4%
How is communication between you and your doctor?		
Excellent	15	11%
Good	48	34%
Average	59	41%
Below Average	9	6%
Poor	12	8%
Which one of the following would you like best?		
Doctor decides what's best and tells me what to do	24	17%
Doctor talks to me about choices and we decide together	105	74%
Doctor explains what the choices are and I decide	13	9%
What would like your doctor to do to improve your relationship (up to 3)?		
Make me feel more comfortable	54	37%
Encourage and give me time to ask questions	37	26%
Listen to my thoughts, opinions and feelings	32	22%
Reassure me of confidentiality	24	17%
Explain to me why they are asking the questions	31	21%
Explain health information to me in words I can understand	40	28%
Tell me how to find another doctor for a second opinion	16	11%
Other	4	3%
Nothing. I am satisfied	52	36%
Would you like to learn how to talk to your doc better?		
Yes	36	25%

No	58	40%
Not sure	50	35%
Things you would most like to be able to do to improve your relationship with your doc		
Ask more questions when I do not understand	45	31%
Express my thoughts and opinions about my health concerns	30	21%
Know how to describe how I have been feeling or what my symptoms are	49	34%
Ask for direction to other sources of information	17	12%
Ask for the opinion of another doctor	11	8%
Know what to do if I disagree with my doctor	22	15%
Other	5	3%
Nothing. I am satisfied	53	37%
Would you like to change your doctor?		
Yes	14	10%
No	90	64%
Not sure	37	26%
Do you know how to find a doctor or change your doctor?		
Yes	23	16%
No	80	57%
Not sure	38	27%
Proportion of students seeing a specialist		25%
For how long have you been seeing a specialist?		
Less than six months	14	44%
Six months to a year	3	9%
1 to 2 years	7	22%
More than 2 years	8	25%
Compared with my family doctor, my relationship with my specialist is:		
Better	13	36%
Same	20	56%
Worse	3	8%

Appendix 30: Needs Assessment – comparison 2008 vs 1999/2000

Needs Assessment comparison: Grade 11/12 (1999/2000) and Grade 9 (2008)

	Grade 11/12 (1999/2000) N=217	Grade 9 (2008) N=146
Percentage of students who see the same doctor as their parents:	81% Differences between schools – Range from 69% to 95%	94% Differences between schools – Range from 65% to 100%
Top three things students would like to talk to their doctor about but don't because they feel uncomfortable	Sexual Problems: 42% Emotional and Mental Wellbeing: 29% Exercise, dieting, and body weight: 13%	Sexual Problems: 22% Emotional and Mental Wellbeing: 23% Exercise, dieting, and body weight: 23%
Top three sources of health information	Doctor: 76% Family member: 63% Magazines, newspaper or books: 20%	Doctor: 65% Family member: 63% The internet: 48%
Number of times seen a family doctor in the past year	Zero: 15% Once: 18% Twice: 28% 3 or more: 39%	Zero: 15% Once: 25% Twice: 19% 3 or more: 41%
Number of students who saw more than one family doctor in the past year	43%	19%
Reasons for last doctors visit	Emergency/Injury: 14% Cold, cough, flu, infection: 50% Regular physical: 12% Birth control/sexual concern: 4% Other: 20%	Emergency /Injury: 13% Cold, cough, flu, infection: 52% Regular physical: 19% Birth control/ sexual concern: 4% Other: 19%
Percent of students who see the doctor with their parent	66%	90%
Percent that usually see a doctor on their own	30% Average age: 14.4 years	5% Average age: unknown [insufficient valid responses]
Top three communication problems experienced during a visit with their family doctor	30% 'I felt awkward or shy about talking about my problems' 25% 'I did not feel comfortable discussing some things' 21% 'I did not know how to ask the doctor the questions I wanted answers to'	29% 'I felt awkward or shy about talking about my problems' 19% 'I did not feel comfortable discussing some things' 16% 'I did not know how to ask the doctor the questions I wanted answers to'
How students rated communication between themselves and their	Excellent: 9% Good: 37%	Excellent: 11% Good: 34%

doctors now	Average: 43% Below Average: 7% Poor: 4%	Average: 41% Below Average: 6% Poor: 8%
Preferred decision making style	Doctor decides: 12% We decide together: 74% I decide: 14%	Doctor decides: 17% We decide together: 74% I decide: 9%
Top three things students would like their doctors to do to improve their relationship	39% 'Make me feel comfortable and put me at ease' 36% 'Explain health information in words that I can understand' 34% 'Encourage and give me time to ask questions'	37% 'Make me feel comfortable and put me at ease' 28% 'Explain health information in words that I can understand' 26% 'Encourage and give me time to ask questions'
Nothing, I am satisfied	11%	36%
Percent of students who would like to learn how to talk to their doctor better	Yes: 24% No: 45% Not sure: 31%	Yes: 25% No: 40% Not sure 35%
Top three things that students would most likely to be able to do to have a better relationship with their doctor	40% 'Know how to describe what I am feeling and what my symptoms are' 38% 'Ask more questions when I do not understand what my doctor is telling me' 38% 'Express my thoughts and opinions about my health concerns'	34% 'Know how to describe what I am feeling and what my symptoms are' 31% 'Ask more questions when I do not understand what the doctor is telling me' 21% 'Express my thoughts and opinions about health concerns'
Nothing, I am satisfied	9%	37%
Percent of students who would like to change their doctor	Yes: 55% No: 22% Not sure: 23%	Yes: 10% No: 64% Not sure: 26%
Percent of students who know how to find a doctor or change their doctor	Yes: 43% No: 27% Not sure: 23%	Yes: 16% No: 57% Not sure: 27%
Proportion of student seeing a specialist	26%	25%
Average length of time seeing a specialist	Less than 6 months: 42% 6 months to a year: 16% 1-2 years: 19% More than 2 years: 23%	Less than 6 months: 44% 6 months to a year: 9% 1-2 years: 22% More than 2 years: 25%
Relationship with specialist compared to relationship with family doctor	Better: 51% About the same: 33% Worse: 16%	Better: 36% About the same: 56% Worse: 8%