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BENCHMARKING DESIGN PERFORMANCE OF SELECTED CANADIAN ACADEMIC DETAILING MATERIALS

ABSTRACT

This paper describes our adaptation of what we refer to as the performance-based redesign method developed by David Sless and his group at the Communication Research Institute (Sless 1997). The research process consists of seven stages: scoping, benchmarking, designing, testing, refining, implementing and monitoring. Our project consisted of only the first two stages. We dealt with scoping and benchmarking the performance of print documents provided primarily to rural doctors in two Canadian provinces. By "benchmarking," we mean measurement of whether or not doctors were able to find and correctly describe the use of information in a given document. Once a benchmark is set, a redesign can be evaluated against that level. The documents we used were developed by the Canadian Academic Detailing Collaborative. We interviewed 19 doctors and had 18 of them carry out sample tasks in order to provide benchmarking results for materials dealing with Dyslipidemia from four of the five participating provinces. We demonstrate that it is possible to obtain useful indications of performance benchmarking, using only sample tasks, rather than the full set of tasks that would be optimal and are recommended by Sless (1997).

1. INTRODUCTION

The Canadian Academic Detailing Collaborative is a group of doctors, pharmacists, and other health information workers who develop materials to help keep working doctors up to date on clinical best practices involving drug therapy. The Collaborative has representatives from five Canadian provinces: Alberta (AB), Saskatchewan (SK), Manitoba (MB), Nova Scotia (NS), and British Columbia (BC).

This project was aimed at identifying good features in the existing academic detailing materials from AB, SK, NS, and BC and maximizing the knowledge of those good features across the provinces. It also aimed at bringing new information into the design of the existing instruments in order to improve performance above existing standards.

The process we used is an adaptation of what we refer to as the performance-based redesign method developed by David Sless and his group at the Communication Research Institute of Australia (Sless 1997). In Sless's method, a stakeholder group agrees on a comprehensive lists of tasks that a person should be able to carry out in using a particular piece of information design. The research process consists of seven stages: scoping, benchmarking, designing, testing, refining, implementing and monitoring.

Our project consisted of only the first two stages in this process. We dealt with scoping and benchmarking the performance of documents that are typically designed to be discussed with doctors during a personal visit from a detailer. Information for the materials comes from a variety of sources, including the Clinical Best Practice Guidelines; the form of the material varies widely between provinces. This work built on a previous study by Frascara and Ruecker (2007), who carried out a preliminary benchmarking study of the Alberta materials on Chronic Obstructive Pulmonary Disease (COPD).

In this follow-up project, we had doctors carry out sample tasks in order to provide benchmarking results for materials dealing with Dyslipidemia from four of the five participating provinces. The project was rather tightly constrained by the availability of doctors and the variety of documents; we demonstrate, however, that even under these conditions it is possible to obtain useful indications of performance benchmarking, using only sample tasks, rather than the full set of tasks as recommended by Sless (1997).

2. LITERATURE REVIEW

There are a variety of approaches to information design research, including a wealth of useful methods borrowed from the social sciences. Examples include standard data-collection procedures such as interviews, questionnaires, and focus groups, as well as higher-tech options involving screen captures, thinkaloud protocols, photovoice (using still photos), and video ethnographies.

Other information design research methods can be classified not so much as being borrowed from other disciplines as having been born-design. Sless (1997, 2003), for instance, outlines a method for benchmarking the performance of a given piece of information design, in order to support the redesign process. This performance-based redesign process has been applied by researchers at the Communication Research Institute (CRI) to a wide range of information materials, including telephone bills,

insurance policies, and health information, such as medicine instructions and medicine packaging. The process consists of several stages:

- Scoping, where an advisory panel with representatives from each stakeholder group agrees on the comprehensive list of tasks the design should support.
- Benchmarking, in which designers observe participants most at risk of failing to use the materials, in order to see where the specific information necessary for each task cannot be located or used correctly.
- Designing, where the designers create the next version based on the benchmarking results and the best practices of information design.
- Testing, where the performance of the redesign is evaluated using the same benchmarking criteria with a new group of participants.
- Refining, where the design and testing phases may iterate as many times as necessary. It may take as many as four or five cycles to bring the material to the desired level of performance.
- Implementing, where the result of the performance-based redesign cycle is put into production.
- Monitoring, where designers continue to observe the performance of the new document as circumstances change over time.

The Communication Research Institute web site contains a wealth of information and useful publications in this area, including Shrensky and Sless (2007), Sless (1992) and Sless (2005). Frascara and Ruecker (2007) describe an adaptation of the CRI method in their study of an academic detailing document in Alberta. Working under highly specific constraints, they conflated the process by developing the first prototype and testing it in the same sessions as the original. This procedure allowed them to reduce the number of sessions required with doctors, while still providing useful comparative information on performance of the original document and one redesign. They also identified the difficulty inherent in working with materials where there is not a pre-existing consensus for appropriate tasks, based on organizational policies, or, in some cases, legislation.

3. METHODOLOGY

Our goal in this project was to provide preliminary benchmarking results for a wide range of document formats used by four provinces in the Canadian Academic Detailing Collaborative. To that end, the

optimal procedure described by Sless (1997) is to develop in consultation with a panel of stakeholders a complete set of tasks that the information materials can be used to accomplish. This process is referred to as the scoping phase. The benchmarking phase consists of testing performance against each of these tasks, with a new iteration of testing occurring as each new design revision is complete. The results of the iterative tests can be compared with the benchmarks from the original materials in order to indicate design improvement, with the measure being whether or not participants could locate the appropriate information and correctly describe its use.

In this study, we faced the same two obstacles to the adoption of the standard methodology that were described by Frascara and Ruecker (2007). First, it was not straightforward to create a comprehensive list of tasks, in part because the nature of the information is not dictated by legislative requirement or other clear mandates, and in part because the process of diagnosis and prescription of drug therapy is embedded in the individual practices of each doctor, which can vary significantly. Second, it would have been prohibitive to test a comprehensive list with these participants, since their time is difficult to obtain. Doctors tend to be people in heavy demand, and we hoped to benchmark several documents with each participant. As a result, we opted for developing two representative questions for each instrument, to serve as a kind of qualitative sample of responses.

We believe that many of the academic detailing materials can be used in two distinct ways. The first is in updating the doctor and managing the conversation at the time of the visit by the detailer. The second is for the doctor to refer back to the materials for specific information at a later time. The purpose of this research project was to obtain a preliminary benchmark of various materials for the second kind of use.

To that end, we carried out a set of benchmarking interviews where we met with a total of 19 doctors from Saskatchewan and Alberta. We asked questions about academic detailing and had each doctor carry out a small number of benchmarking tasks (two per province) with items pre-selected from the dyslipidemia materials from Alberta, Saskatchewan, Nova Scotia, and British Columbia.

We interviewed a total of 13 doctors in Alberta (AB) and 6 in Saskatchewan (SK). These participants were from a group of candidates pre-selected by the academic detailers in each province. One AB doctor had recently undergone a root canal and we consequently didn't press him to carry out the benchmarking tasks. He did, however, provide useful answers to the discussion questions.

We therefore observed the remaining doctors as they located specific information within each kind of document. We asked them to start with the full documents, but if they had difficulty locating the right page, we made a note and led them to it. This allowed us to get some sense of how they handled both the entire document and the specific page or table. We included a question about previous experience with the

materials. To begin the process, we reiterated that we were testing the design of the documents and not the doctors.

In terms of the timings, they may be indicative but are not definitive. The interviews had a fairly tight time constraint, since we needed to cover 16 comprehension questions to set a benchmark in less than twenty minutes. For the part of the process that involved the participant locating the correct page in the whole document, we therefore allowed at least a minute before intervening to prompt the participants by directing them to the appropriate page.

4. ANALYSIS AND RESULTS

We received a variety of positive feedback from participants on all the materials from the academic detailing program. However, other constructive feedback and the results of the sample benchmarking tasks suggest that there is room for improvement in the designs. The following sections outline the details of the benchmarking activities for our four sample dyslipidemia materials from Alberta, Saskatchewan, Nova Scotia, and British Columbia. The materials consisted respectively of a risk calculator sheet, coil-bound book, newsletter, and informational package including both a summary sheet and details.

4.1 ALBERTA'S FRAMINGHAM RISK CALCULATOR

This is a single tearaway sheet intended for insertion in patient files (Figure 1). A similar calculator in a different format is also used by Nova Scotia. The RxFiles includes what one participant described as the New Zealand version.

Model for Estimating the 10-Year Risk of Coronary Artery Disease (death or non-fatal MI)

Risk calculator should **NOT** be used for patients with DIABETES MELLITUS, ANY ATHEROSCLEROTIC DISEASE, PATIENTS WITH CHRONIC KIDNEY DISEASE OR UNDERGOING LONG TERM DIALYSIS. These patients are automatically in the HIGH RISK category.

Risk factor	Risk points Men					Risk points Women				
Age Group, Yr										
20-34	-9					-7				
35-39	-4					-3				
40-44	0					0				
45-49	3					3				
50-54	6					6				
55-59	8					8				
60-64	10					10				
65-69	11					12				
70-74	12					14				
75-79	13					16				
Total cholesterol level, mmol/L	**Age Group, Yr**					**Age Group, Yr**				
	20-39	40-49	50-59	60-69	70-79	20-39	40-49	50-59	60-69	70-79
<4.14	0	0	0	0	0	0	0	0	0	0
4.14-5.19	4	3	2	1	0	4	3	2	1	1
5.20-6.19	7	5	3	1	0	8	6	4	2	1
6.20-7.20	9	6	4	2	1	11	8	5	3	2
≥7.21	11	8	5	3	1	13	10	7	4	2
Smoker										
Yes	8	5	3	1	1	9	7	4	2	1
No	0	0	0	0	0	0	0	0	0	0
HDL-C level, mmol/L										
≥1.55	-1					-1				
1.30-1.54	0					0				
1.04-1.29	1					1				
<1.04	2					2				
Systolic BP mmHg	**Untreated**		**Treated**			**Untreated**		**Treated**		
<120	0		0			0		0		
120-129	0		1			1		3		
130-139	1		2			2		4		
140-159	1		2			3		5		
≥160	2		3			4		6		
Risk Category	**Total Risk Points**		**10-yr Risk %**			**Total Risk Points**		**10-yr Risk %**		
Low Risk	<0		<1			<9		<1		
	0-4		1			9-12		1		
	5-6		2			13-14		2		
	7		3			15		3		
	8		4			16		4		
	9		5			17		5		
	10		6			18		6		
	11		8			19		8		
	12		10							
Moderate Risk						20		11		
	13		12			21		14		
	14		16			22		17		
High Risk	15		20			23		22		
	16		25			24		27		
	≥17		≥30			≥25		≥30		
	TOTAL RISK POINTS ____		10-yr Risk % ____			TOTAL RISK POINTS ____		10-yr Risk % ____		

For complete guideline: http://www.cmaj.ca/cgi/reprint/169/9/921

Toward Optimized Practice
www.topalbertadoctors.org

Figure 1. The Framingham Risk Calculator from Alberta served as the basis for our two representative questions to doctors.

Our two benchmarking questions for the risk calculator were:

1 What is the 10-year risk percentage for a 51-year old male smoker with a cholesterol level of 4.73, an HDL-C level of 1.17 and a treated systolic BP of 138?

2 Which risk category is this person in?

		QUESTION 1 (ALBERTA)				QUESTION 2 (ALBERTA)			
		Found place in package	Time to answer (secs)	Found data	Correct answer	Found place in package	Time to answer (secs)	Found data	Correct answer
Saskatoon Participants	1	1	66	1	0	1	0	1	1
	2	1	46	1	0	1	0	1	1
	3	1	76	1	1	1	10	1	1
	4	1	23	1	0	1	0	1	0
	5	1	65	1	1	1	10	1	1
	6	1	78	1	1	1	5	1	1
Calgary Participants	7	1	24	1	0	1	5	1	1
	8	1	33	1	1	1	5	1	1
	9	1	45	1	1	1	5	1	1
	10	1	31	1	0	1	10	1	0
	11	1	30	1	1	1	0	1	1
	12	1	37	1	0	1	0	1	0
	13	1	23	1	0	1	5	1	0
	14	1	36	1	1	1	0	1	1
	15	1	45	1	1	1	5	1	1
	16	1	42	1	0	1	5	1	0
	17	1	46	1	1	1	0	1	1
	18	0	74	0	0	0	0	0	0
TOTALS		17	820	17	9	17	65	17	12
AVERAGE (secs)			45				4		

Table 1. Benchmarking summary for Alberta material. Since we had done a previous benchmarking study of the two-sided laminated sheet for COPD, we chose the **Framingham risk calculator.**

For the Risk Calculator, we observed the time taken to provide an answer to the calculation question, which was on average relatively quick, on the order of 45 seconds (Table 1). Almost all the participants were able to use the calculator, which was no surprise. However, what was surprising is that half of them (9/18) got the wrong answer for the first question, and one-third (6/18) got the wrong answer for the second question. This result suggests that from an information design perspective the calculator could be improved by applying a number of principles, including closer grouping of related items and visual cues for differentiating sections.

Another relevant observation was that the sequence of the information we provided in the question did not exactly match the sequence of the information on the calculator, which caused several doctors to misstep. However, it is reasonable that the sequence of collection might not always match the sequence of the calculator, especially for cases where the information is arising in the course of the conversation. It may therefore also be useful to consider design methods of reducing the implied sequence.

4.2 SASKATCHEWAN'S RXFILES

For this task, we chose an excerpt from Saskatchewan's dyslipidemia update sheets. Our questions were:

1. According to the ASCOT-LLA Trials of Atorvastatin in Primary Prevention, how many patients need to be treated to benefit one patient who would otherwise expect to experience a secondary outcome of fatal or non-fatal stroke?

2. How many cases of rhabdomyolysis have been reported in Canada?

		QUESTION 1 (SASKATCHEWAN)				QUESTION 2 (SASKATCHEWAN)			
		Found place in package	Time to answer (secs)	Found data	Correct answer	Found place in package	Time to answer (secs)	Found data	Correct answer
Saskatoon Participants	1	1	40	1	1	0	45	0	0
	2	1	23	1	1	0	12	0	0
	3	1	72	1	1	1	5	1	1
	4	1	131	1	1	1	120+	1	1
	5	1	41	1	1	1	5	1	1
	6	1	30	1	1	0	47	0	0
Calgary Participants	7	0	26	0	0	0	42	0	0
	8	0	50	0	0	0	51	0	0
	9	1	69	1	1	0	97	0	0
	10	1	51	1	1	1	65	1	1
	11	1	25	1	1	1	50	1	1
	12	1	25	1	1	0	40	0	0
	13	0	55	0	0	0	33	0	0
	14	1	57	1	1	1	130	1	1
	15	1	29	1	1	1	10	0	0
	16	0	74	0	0	0	22	0	0
	17	1	38	1	1	0	15	0	0
	18	1	67	1	1	0	63	0	0
TOTALS		**14**	**903**	**14**	**14**	**7**	**732**	**6**	**6**
AVERAGE (secs)			**50**				**41**		

Table 2. Benchmarking summary for Saskatchewan material. We used an updated table for dyslipidemia from RxFiles.

Our pre-understanding of the RxFiles was that the material is complex, but the doctors who are part of the Academic Detailing program in Saskatchewan have learned to use them. The benchmarking results support this interpretation to a certain extent. Of the 6 Saskatchewan doctors we interviewed, all 6 correctly answered the first question; 3 of the 6 correctly answered the second (Table 2). Overall, 14 of 18 doctors correctly answered the first question, and 6 of 18 the second.

It was also clear that it took some time to find the right information, although some of the participants were very persistent. A number of factors seemed to play into this, including personality, time of day, and motivation to succeed in the task.

The benchmarking results suggest that there is room for improvement of the RxFiles from an information design perspective, which should help make the information easier to access and also reduce somewhat the necessity for training.

Since many of the doctors in both provinces spoke highly of the RxFiles, specifically because they contain so much detailed information in a concise format, there would appear to be justification for working to improve their design.

4.3 BC'S THE REVIEW NEWSLETTER

These two questions are based on the newsletter entitled "Statin Update", pages 1 and 2. The answers are embedded in the prose.

1 Can you name a drug some doctors are combining with statins that still requires further testing?

2 What are the surrogate markers that are sometimes used instead of clinical endpoints for determining appropriate doses of statins?

		QUESTION 1 (B.C.)				QUESTION 2 (B.C.)			
		Found place in package	Time to answer (secs)	Found data	Correct answer	Found place in package	Time to answer (secs)	Found data	Correct answer
Saskatoon Participants	1	1	50	1	1	1	93	1	0
	2	1	23	1	1	1	75	0	0
	3	1	80	1	1	0	44	0	0
	4	0	197	0	0	1	120	0	0
	5	1	40	0	0	1	40	1	0
	6	0	13	0	0	1	38	1	1
Calgary Participants	7	0	30	0	0	0	40	0	0
	8	1	81	1	1	0	25	0	0
	9	1	45	1	1	1	90	1	0
	10	1	10	1	1	1	60	1	0
	11	1	10	1	1	1	25	1	0
	12	0	60	0	0	0	65	0	0
	13	0	60	0	0	0	120	0	0
	14	0	122	0	0	1	75	1	1
	15	1	184	1	1	1	123	0	0
	16	1	60	0	0	1	27	0	0
	17	0	75	0	0	0	35	0	1
	18	0	123	0	0	0	22	0	0
TOTALS		10	1263	8	8	11	1117	7	3
AVERAGE (secs)			70				62		

Table 3. Benchmarking summary for materials from British Columbia. We used items from the newsletter.

Locating information in the newsletter was relatively time-consuming, which is not unreasonable because it is primarily designed for continuous reading (Table 3). For similar reasons, results for finding information and answering correctly were both low. Only about half the participants were able to find the relevant information, and for the second question only three participants were able to provide the correct answer. Several of the participants commented that the newsletter format would be useful for taking home to read, but was not well suited to the task of quickly finding information.

4.4 NOVA SCOTIA'S DOCUMENT

The answers to these two questions involve information from the detailing summary and also from two tables at different locations in the document.

1 For *primary* prevention in the elderly, how strong is the evidence for benefit of statins in preventing major cardiac events?

2 For *primary* prevention in people with diabetes, is the number needed to treat to prevent major cardiac events higher or lower than for *secondary* prevention in men?

		QUESTION 1 (NS)				QUESTION 2 (NS)			
		Found place in package	Time to answer (secs)	Found data	Correct answer	Found place in package	Time to answer (secs)	Found data	Correct answer
Saskatoon Participants	1	1	75	0	0	1	40	1	1
	2	1	60	1	1	1	63	1	1
	3	1	22	1	1	1	74	1	1
	4	1	92	1	0	1	10	1	1
	5	1	12	1	1	1	23	1	1
	6	1	41	1	1	1	63	1	1
Calgary Participants	7	1	30	1	0	1	30	1	1
	8	1	35	1	0	0	15	1	1
	9	1	15	1	1	1	34	1	1
	10	1	75	0	0	1	49	1	1
	11	1	15	1	1	1	19	1	1
	12	1	5	1	1	0	66	0	0
	13	1	20	1	1	1	36	1	1
	14	1	25	1	1	1	10	1	1
	15	1	50	1	1	1	30	1	1
	16	1	44	1	1	1	46	1	1
	17	1	40	1	1	1	40	1	1
	18	0	28	0	0	0	196	0	0
TOTALS		17	684	15	12	15	844	16	16
AVERAGE (secs)			38				47		

Table 4. benchmarking summary for Nova Scotia material.

The answers to the benchmarking questions for Nova Scotia occurred both in the summary sheet and the full document. Several participants were unable to interpret the summary sheet and ended up locating the information in the full document (Table 4). The problem with the summary sheet appeared to be in the legend, which is in a format that parallels the table beneath. The effect is of two tables, rather than one table with a legend. A secondary difficulty was that the color coding rather than the text holds the information, so that it wasn't possible to interpret the summary table without understanding the color coding from the legend.

4.5 GENERAL QUESTIONS

The following items summarize the responses of the 19 participating doctors to our 8 general questions about the academic detailing materials.

1 Which of these documents have you seen?

There were few surprises from this question. The SK doctors had previously seen the SK materials; the AB doctors had seen the AB materials. One AB doctor had seen the NS materials; another knew the RxFiles. Three AB doctors recognized the risk calculator.

2 What would be your general comments about the materials in each set?

For this question, participants scanned quickly through the four files of detailing documents—one each for AB, SK, NS, and BC. The files contained not only the materials that were selected for the benchmarking tests, but all 12 items that had been provided in digital form on dyslipidemia for the project. Not every participant commented on every file.

Saskatchewan

Comments on the SK materials covered a wide range, from "excellent" and "comprehensive" to "impossible to go through." One remarked that it "shoots everything else out of the water," another that it "initially looked too busy but I have gotten used to it," and a third "all I want to do is be told what to do; I have pressures of time." Participants singled out for praise the information not readily available elsewhere, including data on drug interactions, comparative pricing, and the emphasis on NNT. In terms of the structure of the information, some participants mentioned the value of the color coding, the summary, the stratification of the information, and the wealth of references. Negative comments referred to the small

type size and sheer volume of information. One AB participant mentioned the need to study: "I would have to look at it for a couple of days before using it."

Alberta

Participants were unanimous in praising the design of the materials from AB. Comments ranged from "good format" and "hits the highlights" to "easy to read and follow." Suggestions for improvement included the need for more information, less emphasis on monitoring side effects, adding instructions for testing, and a mechanism for stratifying patients.

Nova Scotia

Comments varied widely on the materials from Nova Scotia, although in general they suggested a certain lack of enthusiasm. This may have been a factor of the unfamiliarity of the participants from AB and SK with the materials. For the summary, participants used words such as "nice" and "good." For the full document, one said it "looks pretty thorough" and appears to be a "major detailing effort." However, others said they would probably never read it, that it was "way too thick," and "too involved," and that the "size is scary." One participant said they would probably "chuck" it, and another "am I going to read all of this?"

British Columbia

Many of the responses to the BC materials were individually equivocal. Participants used phrases such as "quite good," but "would need to digest," and "maybe would read," or "not sure about this." A few were clearly positive: "nice in a sense to get a wider perspective on the issues." Others were more clearly negative: "never read," "likely not to be read" and "not appealing." One participant suggested that it "doesn't look like it has all the info needed." Part of the difficulty was in the possible use of the materials for reference, for which the narrative format didn't appear to be well suited.

3 Can you describe how you use the ones you receive?

Nearly half the participants mentioned using the materials for reference purposes (Table 5). The same number used them while with a patient. Three participants spoke of having it as reading material, although one specifically said they wouldn't take the material home for reading. Perhaps surprisingly, given that the interviews were part of a study of academic detailing, four of the participants explicitly said they never use the material.

Number of mentions	Form of use
8	Reference
7	With a patient
4	Haven't used it
3	Reading material
2	Specific management of a drug
2	After a patient
1	Price comparisons
1	Drug interactions
1	Doses
1	Don't go home and read

Table 5. How participants reported using the academic detailing materials they receive.

4 Where do you keep your copy?

The majority of doctors interviewed kept the materials ready to hand, usually at the desk in the office, although they might also be on a shelf or in the bookcase. A couple of participants carried them in a briefcase or bag. Two others either didn't know where the materials were kept or didn't retain them.

5 In what other forms or mediums do you have or receive this kind of information?

The primary alternative to print appears to be currently the PDA, although two participants explicitly mentioned they didn't use one. PDAs were used for drug interactions, ePocrates (http://www.mdtool.com/software.html), RxFiles, Lexi-drugs (www.lexi.com/web/news.jsp?id=100065), Canadian Guidelines, Risk Calculator (Table 6). There were nearly equal numbers of positive (7) and negative (5) comments about email. Four participants mentioned using the internet or online sources such as the BMJ. Seven mentioned journals but didn't specify that they were online.

Number of mentions	Medium
13	PDA or palm pilot
7	Journals
7	Email
5	Not email
3	Internet
2	No palm
2	Drug lunches/reps
2	Courses
2	Conferences
2	Community opinion leaders
2	CME
1	Small groups
1	RxFiles (AB participant)
1	Plenary sessions
1	Nothing electronic
1	Hospital library
1	Conversations with specialists
1	College of physicians
1	BMJ online

Table 6. Alternative channels of health information mentioned by participating doctors.

6 On a scale from one to five—five being the best—how would you rate each way of receiving information? and

7 Does your rating depend on the kind of information received (i.e. would one way be better for some things but not so good for others)? If so, please give an example.

The most popular channel of communication was print, followed by PDA. Individual respondents also gave high scores to RxFiles (4/5), contact with specialists (5/5) and role models (5/5) (Table 7). Some participants mentioned that ratings of the PDA were based in part on the assumption that the information being accessed would fit on the small screen.

Channel	Number of respondents	Average score out of 5
Print	13	**4.5**
PDA	9	**3.5**
Email	5	**2.4**
Internet	2	**3.0**

Table 7. Ratings of alternative channels and number of doctors who mentioned them.

8 What information do you feel could be added?

While many of the participants could think of nothing they would like to see added, there were some suggestions. These included compliance issues where some alternative (e.g. fewer pills per day) might be possible, additional chart inserts, more on diet, and information on drug interactions (for which several participants praised RxFiles). One participant suggested a flow chart that could include risk factors.

CONCLUSIONS AND FUTURE RESEARCH

This preliminary project served to introduce the members of the Canadian Academic Detailing Collaborative to the method of performance-based redesign. It also suggested that there were specific areas where improvement was possible and that these could be verified by testing. Some of the survey results, as opposed to the benchmarking results, were inconsistent and could form the basis of further study; however, they were included primarily to determine whether there might be a consensus among participants on various issues relating to preferences such as communication media, and therefore served their purpose in showing that such a consensus did not exist. Our next logical step would be to extend the involvement of the information designers in the process of developing the academic detailing materials, benchmarking a larger list of tasks rather than the very constrained sample reported here, and using the results to inform an iterative redesign.

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