Improving the learning needs survey by using four approaches

James A Allan, MBBS, FRACGP, GradDipFM, is a PHCRED Fellow, Department of General Practice, University of Adelaide, South Australia. james.allen@adelaide.edu.au

Di Schaefer, RN, BNsg, MEd, is National Rural Faculty and Education Co-ordinator, The Royal Australian College of General Practitioners, South Australia.

Nigel Stocks, MBBS, MD, FRACGP, FAFPHM, is Senior Lecturer, Department of General Practice, University of Adelaide, South Australia.

BACKGROUND
Learning needs analyses are often undertaken to plan continuing education programs. They usually use questionnaires that have shortcomings regarding validity, relevance, breadth and detail. We tested a questionnaire using four questioning strategies to approximately 1762 general practitioners.
METHOD
Our questionnaire listing 104 topics asked open ended questions and specific information about desired topics. It was distributed by The Royal Australian College of General Practitioners and divisions of general practice in South Australia and the Northern Territory.
RESULTS
The survey yielded 578 responses (33%). The different survey strategies highlighted different areas of learning need. Overall, the highest ranked topics were dermatology, complementary medicine, psychiatry, and business and practice management. Participating divisions were generally satisfied with the feedback.
DISCUSSION
Despite a poor response rate, the survey provided interesting information, and a set of broad learning topics.

Learning needs analysis is important for designing continuing medical education (CME) to optimise clinical relevance, personal relevance and reinforcement of learning.[1,2] A systematic review has shown that change in physician behaviour is greatest where education addresses deficiencies or barriers to change.[3] A learning needs measurement is not necessary.[2] The nature of the education dictates the form of assessment. Thus, CME providers undertake different needs assessments to registrars within The Royal Australian College of General Practitioners (RACGP) training program.[2]

There is marked diversity in sources of information including structured interviews, focus groups, questionnaires, clinical audits, and community consultation. For example, one needs analysis surveyed local health authorities, patients, medical specialists, and general practitioners provided audit data (prescribing habits, referral patterns, patient demographics and BEACH survey results).[4] Yet this exercise failed to generate recommendations for a regional CME program.

Although divisions sometimes prefer simple questionnaires, these may be too narrow when novel or unexpected learning opportunities may be missed, (eg. neglecting to ask about complementary medicine).[2] But they may also be too broad when, for example, identifying ophthalmology as a topic does not direct the CME to GPs' ophthalmological learning needs.

Social needs can be classified into four categories: felt need (what people say they need), expressed need (what needs people are prepared to act on), normative need (what needs the experts have identified), and comparative need (how one group may differ from another).[5] Planners of medical education in Australia and the United Kingdom have used this classification in relation to CME learning need assessment.[2,6] The implication is that needs should be assessed by different strategies rather than just any one.

Method

In 2001 we met with staff from divisions of general practice in South Australia and the Northern Territory to plan a state/territory wide learning needs survey. We designed a survey with open and closed questions that looked at patient needs and improvements in the clinical behaviour of doctors. Closed questions addressed a list of 104 education topics created from previous surveys, the RACGP domains of general practice, and topics suggested during pilot testing. Respondents could tick choices from this list and choose their three most preferred topics with reasons for the preference. The

questionnaires were distributed and collected by the participating divisions. We collated the data and prepared reports for the divisions.

Results

From about 1762 GPs belonging to the 13 participating divisions, 578 responses were received (response rate 33%). The response rate varied considerably between divisions (from 18% up to 97%). Male respondents comprised 58% of those surveyed. The age profile was less than 35 years (14%), 36–45 years (37%), 46–55 years (33%), 56–65 years (13%), and more than 65 years (3%). Twenty-nine percent of GPs worked outside the metropolitan area.

We ranked the 104 topics by four differing criteria: frequency a topic was chosen, the priority it was given, priority ranking (derived from the priority score given, first choice = 6 points, second choice = 5 points, third choice = 4 points), and from analysis of two open style questions: 'which patients are not having their needs met?', and 'how would you like to improve your practice?' (*Table 1*). The answers were coded according to key words and themes. Themes were grouped in order to compare responses to the 104 nominated topics. (An additional 16 topics were created by unmatched themes).

Each strategy highlighted a different range of topics. The most frequently requested topic was dermatology. The topic with the highest priority score was complementary medicine. The topic relating to practitioner desired change was business and practice management. The topic of highest perceived patient need was psychiatry. There was no topic that was not selected. Likewise every topic had at least one doctor nominate it as a priority.

We synthesised the four approaches into one overall ranking (*Table 2*). Some GPs nominated wanting to learn about 'the difficult patient' (*Table 3*). Divisions generally indicated satisfaction with the survey. Criticism related to the delay in receiving the report (8 weeks). Divisions with a low response rate found the data less useful.

Discussion

This was possibly the largest learning needs survey ever mounted in Australia. Unfortunately it was hampered by poor response rates. Although self assessment surveys fall entirely within the category of 'felt need' in Bradshaw's classification,[5] we attempted a broader approach with the four approaches which gave such different rankings to the topics. The long list of topics may have daunted the GPs. However, it may have

Table 1. Ranking of topics by four different approaches

Ranked by frequency of nomination	n	Ranked by individual ranking (preference)	score	n
1 Dermatology	321	1 Complementary medicine	237	46
2 Chronic pain	284	2 Emergency medicine	235	47
3 Emergency medicine	280	3 Psychotherapy, CBT	220	41
4 Back pain	275	4 Dermatology	180	36
5 Anxiety disorders	253	5 Chronic pain	154	30
'How would you like to improve your practice?'	**n**	**'Which patients are not having their needs met?'**		**n**
1 Business/practice management	102	1 Psychiatry		220
2 Psychiatry	57	2 Aged care		68
3 Health screening	55	3 Adolescent/youth		48
4 Counselling skills	46	4 Poor		47
5 Time management	34	5 Men's health		39

n=number of GPs identifying the nominated topic

Table 2. Overall ranking of the four approaches

		Ranking derived from				
Overall ranking	**Topic**	**Topics selected**	**Topics preferred**	**Desired change**	**Unmet need**	**Sum***
1	Psychiatry	33	70	2	1	464
2	Dermatology	1	4	17	56	369
3	Emergency medicine	3	2	18	21	343
4	Chronic pain	2	5	47	16	321
5	Aged care	14	34	9	2	316
6	Back pain	4	8	44	45	303
7	Counselling skills	11	19	4	53	293
8	Diabetes	8	6	7	18	288
9	Musculoskeletal medicine	6	13	12	81	283
11	Computers/IT	10	11	6	50	275
10	Adolescent/youth	25	30	22	3	275
12	Anxiety disorders	5	32	41	43	269
14	Complementary medicine	19	1	26	31	264
13	Men's health	23	50	24	5	264
15	Business/practice management	56	39	1	47	260

* number of GPs identifying the nominated topic from each of the four approaches

encouraged them to consider choices they may not have considered.

We believe the several approaches to identifying learning needs is a strength, although it results in a complicated menu from which CME providers can select. Simplifying this into one overall rank may be an oversimplification. And of course there is a difference between individual and pooled learning needs data, eg. the single GP who chose disabilities as a priority might have been served by individual CME locally, even though this was not a priority for the remainder of the GPs.

The self reporting nature of the survey is a limitation. More comprehensive approaches would give a better understanding, but is expensive and complicated. The notion of the 'difficult patient' is difficult to unpack. Patients may be perceived as difficult because of complex clinical problems or challenging behaviour, of which the latter predominated for these GPs.

Our results were similar to other published learning needs surveys,[8–10] although we found complementary medicine ranked high.

Implications of this study for general practice

- Systematic reviews show the effectiveness of CME is greatest where it addresses perceived deficiencies.
- Of the many means of assessing need, self completion surveys are simple to execute and immediately relevant. However, they do not assess all aspects of the learner's need.
- We used several approaches including:
  - selection from a list
  - prioritising from that list
  - open questions addressing, changes to practice, perceived patient need.
- Each approach gave different answers.

Conflict of interest: none declared.

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Table 3. Aspects of the 'difficult patient' nominated by GPs who identified this as a priority topic

Psychiatric illness	'Acute mania'
Counselling strategies	'Counselling/dealing with them/interview skills'
	'Turning the relationship around to an understanding'
	'Hints on management'
Self preservation	'How to cope/how to deal with them'
Legal implications	'Management and legally what we can do'
Defusing difficult behaviour	'Strategies for controlling my feelings and defusing the patient'
	'Strategies for defusing and calming alarming situations/patients'
Avoiding dependency	'How to avoid them/how to manage/stop dependence'
Assisting staff	'Staff training courses'
Case presentations	'Examples of how others deal with it'

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Correspondence
Email: afp@racgp.org.au