

What do Hong Kong's family physicians think of clinical guidelines? – A questionnaire survey

Amy KL Chan 陳潔玲, Richard Baker, TP Lam 林大邦, Mary BL Kwong 鄺碧綠, Loretta WY Chan 陳穎欣, Timothy Hong 康天澤

Summary

Objective: To study the current use of and attitude towards clinical guidelines (CGs) among Hong Kong's family physicians, and to explore the attributes that may enhance implementation.

Design: Postal questionnaire survey.

Subjects: A questionnaire was posted to all 1427 members of the Hong Kong College of Family Physicians (HKCFP) in the period from March to July, 2010.

Main outcome measures: Response to a questionnaire on the current usage of and attitude towards CGs, respondents' demographic data.

Results: 617 completed questionnaires were received (response rate 43.2%). Ninety-one percent of respondents had used CGs in patient care and 85% had used them within a month. Sixty-three percent of respondents gave the internet as the first answer to the question of where they found the clinical guidelines. "Contradicting recommendations" was ranked highest as a barrier to guideline use (82%), followed by "CGs not tailored for individual patient's needs" (77%), and "mistrust guidelines sponsored by pharmaceutical

companies" (75%). There was a very high degree of agreement on what constituted a good CG: evidence-based (99%), simple and easy to use (99%), applicable to the local population (99%) and the primary care setting (98%), regularly updated (98%) and with cost effective recommendations (93%). On strategies thought to be useful in promoting the use of CGs, 96% of respondents agreed on effective dissemination, 93% on a central system for adoption of CGs, 90% on involving primary care doctors in drafting CGs and 71% on providing financial incentives.

Conclusion: Most respondents were using and supportive of CGs, and would like to have a central system for guideline adoption and effective dissemination. They wished to be more involved in the development process. They thought a good CG should be evidence-based, simple and easy to use and applicable in the local setting. Family physicians' views about CGs are important and relevant for Hong Kong's guideline development policy.

Keywords: Clinical guidelines, survey, attitudes, family physicians, Hong Kong

Amy KL Chan, MBBS (HK), FRACGP, FHKCFP, MPH (HK)

Family Physician in Private Practice

Richard Baker, OBE, MD, FRCGP

Professor of Quality in Health Care,

Department of Health Sciences, University of Leicester

TP Lam, PhD (Sydney), MD (HK), FRACGP, FHKAM (Fam Med)

Professor,

Department of Family Medicine and Primary Care, The University of Hong Kong

Mary BL Kwong, MBBS (HK), FRCP (Edin), FHKAM (Paediatrics), FHKAM (Fam Med)

Specialist in Paediatrics

Loretta WY Chan, MBBS (HK), FHKAM (Fam Med), FHKCFP, FRACGP

Honorary Clinical Assistant Professor,

Department of Family Medicine and Primary Care, The University of Hong Kong

Timothy TC Hong, MBBS (HK), FHKCFP, FRACGP, Dip Ger Med RCPS (Glasg)

Resident,

Department of Family Medicine and Primary Health Care, United Christian Hospital

Correspondence to: Dr Amy KL Chan, Shop 5, 1/F, ABBA Centre, 223, Aberdeen Main Road, Aberdeen, Hong Kong SAR.

摘要

目的: 研究目前香港家庭醫生對臨床醫學指引的使用情況和對其取態, 以及探討增加使用指引的方法。

設計: 郵遞問卷調查。

對象: 在2010年3月至7月間, 以郵遞方式將問卷寄給所有1427名香港家庭醫學學院成員。

主要測量內容: 回應問卷中關於現時臨床醫學指引的使用情況和對其的看法, 回覆者的人口統計學上資料。

結果: 收回617份問卷(回應率為43.2%)。91%的回應者曾經使用臨床醫學指引, 而85%的回應者在過去一個月也曾用過。63%是從互聯網上首先得到指引。互相矛盾的建議是使用指引時的最大障礙(82%), 其次是指引並非為個別病人而制訂(77%), 以及對

由製藥公司贊助的指引抱懷疑態度（75%）。回應者對理想臨床醫學指引的特性均意見一致：有實証基礎的（99%），簡易使用（99%），適用於本地人仕（99%）和基層醫療（98%）定期更新（98%）和具成本效益（93%）。至於在推行臨床醫學指引時的策略，96%認同需有效地廣為傳播，93%贊同設立中央系統批核指引內容，90%認同需有基層醫生參與臨床醫學指引的草擬，以及71%認同給予財政上的獎勵。

結論：大多數回覆者已經使用和會支持使用臨床醫學指引，他們希望能有一個中央系統批核指引和有效地將它推廣。他們亦希望能夠在發展過程有更多參與。他們認為一個好的臨床醫學指引必須基於實証，簡單和容易使用，以及適用於本地環境。在發展醫學指引政策時，家庭醫生的意見是重要和密切相關的。

主要詞彙：臨床醫學指引，調查，取態，家庭醫生，香港。

HK Pract 2011;33:4-12

Background

Clinical guidelines are “systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances”.¹ Planned implementation of high quality clinical guidelines has been shown to improve the structure, process and outcome of patient care in a defined population, for example, the Netherlands.² However, the effectiveness of clinical guidelines is affected by various issues from guideline attributes to real-life implementation. Surveys involving more than 10,000 clinicians around the world have been conducted to assess their attitude to clinical guidelines.³ Most doctors in the surveys found clinical guidelines to be useful, educational and likely to improve quality of care. Yet, this positive attitude does not automatically translate into practice changes. For example, general practitioners (GPs) in Australia were interviewed to study their use of guidelines in several clinical scenarios (hepatitis B immunization, diabetes mellitus, Chlamydia), and it was concluded that Australian GPs did not embrace clinical guidelines in their daily practice, and “it would take up to ten years for a culture to be created in which guidelines would be used and valued within general practice”.⁴

To improve Hong Kong’s healthcare system, HK\$ 600 million have been earmarked for enhancing primary care for the period 2010-11 to 2012-13.⁵ Out of this

budget, \$226 million will be used for setting up a Primary Care Office and \$194 million for implementing specific tasks such as developing clinical protocols. With the plethora of international clinical guidelines for local adoption, together with an administration for implementation, there appears to be a plausible way forward to improve the quality of patient care. However, the heterogeneous practice settings in Hong Kong make this process more complex. As the majority of front-line clinicians are solo private practitioners, it is often a self-employed doctor’s decision to pick up (or ignore) the clinical guidelines and follow (or dismiss) the recommendations in a fee-for-service setting. For family physicians working in the public sector, the use of guidelines may be facilitated (or impeded) by the administration. Amongst the barriers to implementing clinical guidelines, end-users’ views are one of the most important determinants in bridging the gap between research evidence and patient care. In Hong Kong, no studies have been done to study the attitude of family physicians towards clinical guidelines.

Objectives

We aim to find out the current use of and attitude towards clinical guidelines among Hong Kong’s family physicians, and to explore the attributes that may enhance implementation.

Methods

Five focus groups were conducted to understand the use of clinical guidelines by front-line clinicians. Family physicians were purposefully sampled through a network of committee members from the Hong Kong College of Family Physicians (HKCFP), Hong Kong Doctors Union and Hong Kong Medical Association. Focus group participants included a diverse range of age, gender, type/sector of practice, geographical locations and vocational training/postgraduate qualifications.

A 2-page A4 size questionnaire was constructed with 15 questions as shown in **Appendix A**. The first three questions were on guideline usage, followed by four questions on attitudes according to the themes derived from the focus groups, using a four-point Likert scale. There were two open questions asking for suggestions and comments, followed by questions

to collect demographic data (practice, time / place of graduation, higher qualifications, age/sex).

The questionnaire was posted to all HKCFP members, with a cover letter explaining the background and purpose of the study. A lucky draw and CPD accreditation were used as incentives. Non-respondents were sent a reminder 4 to 8 weeks after the first mailing, and in total 3 mailings were done. Ethical approvals were received from the local Institutional Review Board (IRB). For the purpose of raising awareness, three articles were written for journals freely posted to members of HKCFP and the Hong Kong Academy of Medicine.⁶⁻⁸

Data analysis

Chi-square test was used to compare the characteristics of survey respondents with HKCFP members. Cross-sectional data were analyzed by simple

frequency statistics. Multi-variate regression analysis was used to identify correlation between uptake of clinical guidelines with age, gender, qualifications, type and sector of practice. All quantitative analysis was done using the Statistical Package for Social Science version (SPSS) 17.0.

Results

All HKCFP members (1458) were sent a copy of the questionnaire and three mailings were completed by July 2010. Of the questionnaires sent, 18 were excluded as the recipients were medical students, 13 were returned because of invalid addresses or the doctor had left the practice. There were a total of 617 responses, giving a response rate of 43.2% (617/1427).

Table 1 presents the demographic details of the survey respondents. Comparing among all members of HKCFP, the higher proportions of those who responded

Table 1: Demographics of survey respondents

		Number of Respondents (%)	HKCFP Members (%)	p value
Sex	Male	398 (66)	1035 (71)	0.08
	Female	203 (34)	423 (29)	0.08
Age	<30	65 (11)	116 (8)	0.04*
	31-40	264 (44)	583 (40)	0.23
	41-50	109 (18)	408 (18)	0.95
	51-60	80 (13)	219 (15)	0.27
	>60	84 (14)	219 (15)	0.61
Years after graduation	0-5	45 (7)	-	-
	6-10	176 (29)	-	-
	11-15	111 (18)	-	-
	16-20	64 (11)	-	-
	>20	205 (34)	-	-
Place of primary qualification	Hong Kong	458 (76)	-	-
	Outside HK	144 (24)	-	-
Higher qualifications#	Specialist in FM	141 (23)	233 (16)	<0.0001*
	Fellows in FM	175# (33)	554 (38)	0.05
	Diploma in FM	112# (26)	-	-
	Nil	83 (15)	-	-
	Others	18 (3)	-	-
Sector of current practice	Hospital Authority	216 (36)	-	-
	Department of Health	47 (8)	-	-
	Private Hospital	21 (3)	-	-
	Solo Private Practice	205 (34)	-	-
	Group Private Practice	89 (15)	-	-
	Others (e.g. retired)	24 (4)	-	-

Note: (Numbers may not add up to 100% because of missing data)

% proportion of characteristics of respondents among all members of Hong Kong College of Family Physicians (HKCFP)

#Respondents selected multiple post graduate qualifications in the order of Specialists in Family Medicine, followed by Fellows in Family Medicine, Diploma in Family Medicine and so on.

*Comparison of proportion was performed by chi-square test with statistical significance at $p < 0.05$

to the survey were the younger than 30 years old members, and the specialists in family medicine group.

Out of the 606 valid responses, 551 (91%) respondents claimed to have used clinical guidelines in patient care. Their characteristics are given in **Table 2**, which shows there are differences in guideline usage among different groups. For example, 100% of respondents from the private hospitals reported using guidelines for patient care. A higher proportion of respondents from the Hospital Authority (HA) and the Department of Health (DH) used guidelines as compared to those from the private sector. The older the respondents, the fewer used guidelines, e.g., 97% of respondents younger than 30 years ever used clinical guidelines while only 79% of respondents aged above 60 ever used clinical guidelines.

Table 3 shows the multi-variate regression analysis for correlation between uptake of clinical guidelines and age, type and sector of practice. Doctors who were of older age and engaging in solo private practice were less likely to have ever used guidelines, but the differences were not statistically significant. The only statistically significant factor affecting taking up of clinical guidelines is having higher postgraduate qualifications. As seen in **Table 2**, a greater proportion of respondents who possessed higher qualifications reported using clinical guidelines in patient care (90% for diploma holders, 97% for Fellows of the College, 92% for specialists, as compared to 84% of respondents who did not possess any higher qualifications).

As shown in Chart 1, almost half of the respondents (42%, 231/545) had used a guideline within a week during the survey, and the majority (85%, 463/545) had used one within a month of the survey. Chart 2 shows that 63% of respondents gave the internet as the first answer to the question of where they found the clinical guidelines. This is followed by medical journals (18% as the first source, 43% as the second source). Continuing Medical Education programmes ranked third (39%). Two thirds of respondents selected more than three sources for guideline information.

Table 4 shows the top three answers to the attitude questions in the survey. There was an almost unanimous response to the elements of a good clinical

guideline. Nearly all respondents agreed or strongly agreed that a good guideline should be simple and easy to use (99%), evidence-based (99%), applicable to the local population (99%) and the primary care setting (98%), regularly updated (98%) and with cost effective recommendations (93%). However, about 20% disagreed or strongly disagreed that a clinical guideline would be considered “good” by the fact that it is authorized by a respected Hong Kong authority.

Table 2: Responses to “Do you ever use clinical guidelines in patient care?”

		Number of Respondents	Ever used guidelines	%
Total		606	551	91
Sex	Male	398	352	88
	Female	203	194	96
Age	<30	65	63	97
	31-40	264	252	95
	41-50	109	100	92
	51-60	80	66	83
	>60	84	66	79
Years after graduation	0-5	45	43	96
	6-10	176	171	97
	11-15	111	102	92
	16-20	64	61	95
	>20	205	169	82
Place of primary qualification	Hong Kong	458	422	92
	Outside HK	144	125	87
Higher qualifications#	Specialist in FM	141	130	92
	Fellows in FM	175#	193	97
	Diploma in FM	112 #	140	90
	Nil	83	70	84
Sector of current practice	Hospital Authority	216	212	98
	Department of Health	47	46	98
	Private Hospital	21	21	100
	Solo Private Practice	205	188	92
	Group Private Practice	89	79	89
	Others (e.g. NGO)	24	21	88

Note: (Numbers may not add up because of missing data)

Respondents selected multiple post graduate qualifications in the order of Specialists in Family Medicine, followed by Fellows in Family Medicine, Diploma in Family Medicine and so on.

NGO Non-government organization

Table 3: Factors that could affect the uptake of clinical practice guidelines

	Standardized coefficients	p value
Age	-0.035	0.077
Higher qualifications	0.028	0.007*
Sector and type of practice		
Hospital Authority	0.082	0.180
Department of Health	0.079	0.262
Private Hospital	0.095	0.257
Solo Private Practice	-0.019	0.758
Group Private Practice	0.008	0.902

* $p < 0.05$ is taken as statistically significant.

Among the different strategies to promote the use of guidelines, respondents agreed or strongly agreed most on “effective dissemination” (96%), followed by “establishing a central system for adopting evidence-based clinical guidelines” (93%) and “involving primary care doctors in the drafting process” (90%). However, more than two-thirds of respondents disagreed or strongly disagreed on involving patients in the drafting process. Providing financial incentives as a strategy was agreed or strongly agreed with by 71% and raising public awareness was agreed or strongly agreed with by 67% of respondents.

The majority of respondents agreed or strongly agreed that clinical guidelines could assist clinical decision-making (97%), improve quality of patient-care (94%), justify oneself when being questioned by patients (94%) and defend one’s patient management when being legally challenged (93%). About 30% of respondents disagreed or strongly disagreed that clinical guidelines could improve patient satisfaction.

For barriers, “contradicting recommendations from different clinical guidelines” came first, agreed or strongly agreed with by 82% of respondents. The second most commonly perceived barrier was “guidelines not tailored for individual patient needs”, agreed or strongly agreed with by 77% of respondents. The other perceived barriers are listed in descending order of agreement - “mistrust guidelines sponsored by pharmaceutical companies” (75%), followed by “limitations in my practice setting are not considered” (73%), “clinical guidelines for Caucasians are not applicable in Chinese” (68%) and “recommendations are changing too frequently” (64%).

For the open question “What are your suggestions to promote the use of clinical guidelines in the primary care setting?”, 185 respondents (30%) put down some suggestions. About half of the suggestions were on improving the accessibility of clinical guidelines. To this end, respondents proposed the use of a central website for co-ordination and easy retrieval of updated guidelines. They also welcomed electronic versions of guidelines downloadable to iPhone, desk top and other portable devices. They wished to receive guidelines regularly by mails or e-mails, either in the form of newsletters, booklets, pocket cards, or a designated

section in commonly accessible primary-care journals. They thought access to guidelines in routine daily practice was important, and suggested incorporating recommendations into electronic prescribing processes during consultations.

Some respondents’ suggestions had already been covered in the questionnaire, but elaborations were expressed in the open answers. For example, for incentives, some respondents mentioned a financial subsidy while others suggested non-monetary rewards especially support from the employing organization. Some respondents from the public sector specifically mentioned assigning longer consultation time for guideline recommendations to be implemented.

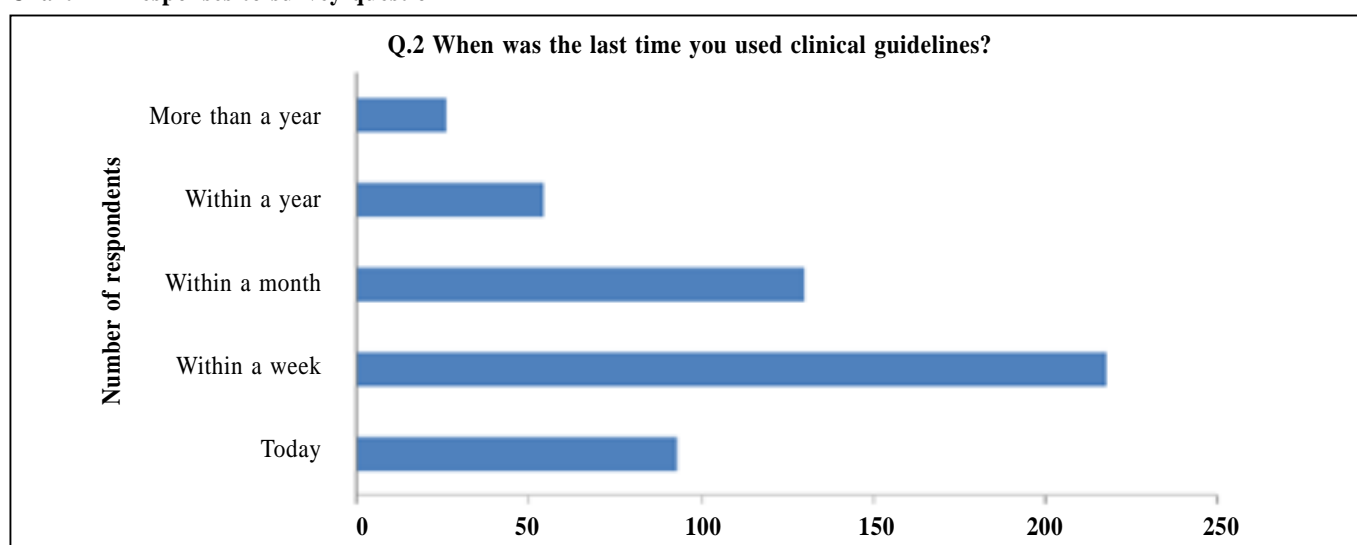
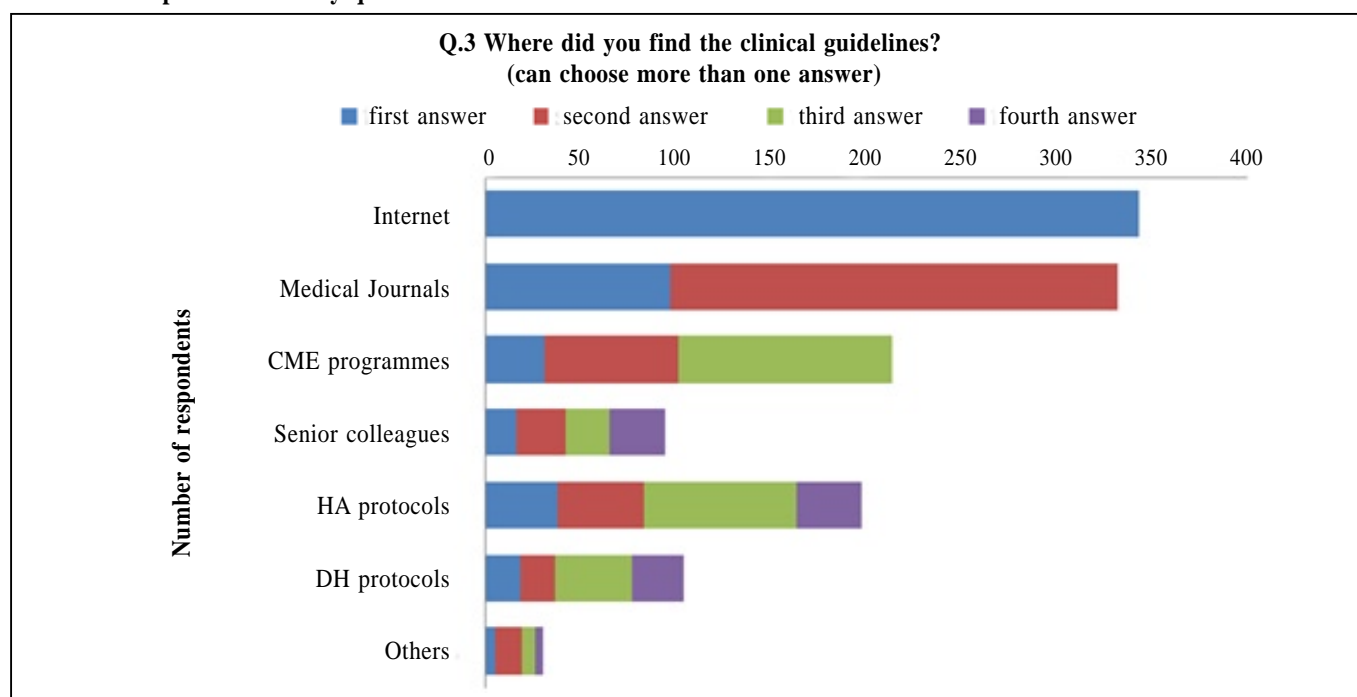
Discussion

The survey showed a positive attitude towards clinical guidelines among members of HKCFP. With a response rate of 43.2%, more than 90% of respondents claimed to use clinical guidelines in patient care, and 85% had used clinical guidelines within a month. The positive attitude was also supported by their agreement on the benefits of guidelines in assisting clinical decision-making and improving patient care. This is in line with Farquahar and colleagues’ systematic review.³ With 63% of respondents indicating the internet as their first choice in looking for guideline information (Chart 2), a web-based dissemination strategy is likely to be feasible and effective for Hong Kong’s family physicians.

A landslide preference is revealed by the survey results on guideline attributes: nearly all respondents opined that guidelines should be evidence-based, simple and easy to use, applicable to the local population and the primary care setting. On the contrary, contradicting and confusing recommendations were the first and foremost deterrents of adherence. The desire for a unified standard setting was reflected in the strong agreement to establish a central system for adopting evidence-based clinical guidelines (93%) with effective dissemination (96%). With a plethora of clinical guidelines available on the internet (for example, the Guidelines International Network now has more than 6,400 clinical practice guidelines online⁹), what

Table 4: Top three answers to the attitude questions (Questions 4 to 7)

	Statement	Agreed by number of respondents (%)	
Elements of a "good" guideline	Simple and easy to use	598	99
	Evidence-based	598	99
	Applicable to the local population	592	99
Strategies to promote guidelines	Effective dissemination	577	96
	Establish a central system	561	93
	Involve primary care doctors in drafting	544	90
Benefits of using guidelines	Assist clinical decision making	570	97
	Improve quality of patient care	586	96
	Justify my patient management	566	94
Barriers in using guidelines	Contradicting recommendations	496	82
	Not tailored to individual patient's needs	460	77
	Mistrust guidelines sponsored by drug companies	454	75

Chart 1 – Responses to survey question 2**Chart 2 – Responses to survey question 3**

respondents want to receive seems to be guidelines that are “endorsed” rather than just any guidelines available from the internet. However, it should also be noted that 20% of respondents disagreed that a clinical practice guideline would be considered “good” by the fact that it is authorized by a respected authority. A possible reason is that respondents prefer a rigorous and transparent appraisal rather than a mere “rubber stamping” by any authorities. Credibility is a fundamental issue, and 75% of survey respondents did not trust guidelines sponsored by pharmaceutical companies.

Guidelines should be flexible to accommodate individual patient needs, and limitations in the local settings must be carefully considered. Involving end-users in the development of guidelines may help achieve these goals. Ninety percent of respondents agreed on involving primary care doctors in the drafting process, though in the open answer in the survey, some respondents mentioned that specialists’ views should be sought as well. Surprisingly, about two-thirds of respondents disagreed on involving patients in the drafting process. This may reflect differences in fundamental beliefs about the purpose of clinical guidelines – to improve the quality of care, or, merely to assist or support the doctors in patient care.

Promoting guidelines with financial incentives, as compared to other strategies, showed less support from respondents (71%) than expected. Hong Kong’s primary care is predominately provided by private practitioners, hence the financial incentives used in other health systems such as the National Health Service in the UK, with the intention to introduce market forces to improve efficiency, may not work the same way in Hong Kong. Not surprisingly, public sector doctors’ incentives to follow guidelines may come from support beyond direct cash dollars, as exemplified by the comments given in the open-ended questions in the survey.

Strengths and limitations

There are no empirical studies that explore Hong Kong’s family physicians’ attitudes towards clinical guidelines. The response rate of 43.2% in the present survey is in line with previous experience;¹⁰ yet the total number of respondents still amounts to less than half of HKCFP members. There are statistically more respondents who are aged less than 30 years and

who are specialists in family medicine. Both groups are more likely to use guidelines in patient care, as shown in the regression analysis. Hence the result may be skewed towards a more positive attitude towards clinical guidelines. The generalizability of the survey results is hence limited and caution should be taken in interpreting the data.

Suggestions on future guideline policy

With the establishment of the Primary Care Office funded by the government,⁵ the organizational support for a central agency for adoption of clinical practice guidelines is coming into place. The centralization of guideline construction and dissemination is being supported by family physicians, as shown in the survey results. To ensure that clinical guidelines are “simple and easy to use”, resources could be invested into designing attractive and user friendly versions, paper or electronic, employing social influence theory and knowledge on marketing.¹¹ Consultation and involvement of front-line clinicians in the drafting process are likely to improve guideline compliance, but steering towards a bottom-up approach in the drafting process requires a political will to nurture leadership among family physicians.⁷ Cultivating leadership in family physicians in the attitude, knowledge and skills in developing guidelines for use in primary care should be a joint mission for the government, professional bodies and the academic community.

Conclusion

Clinical guidelines are an increasingly important tool in promoting effective health care, yet implementation is not always successful. In Hong Kong, no empirical studies have been done to find out the current use of and attitudes towards clinical guidelines among front-line doctors. About half of the members of HKCFP responded to a questionnaire survey which showed that respondents were using and supportive of clinical guidelines, and would like to have a central system for guideline adoption and effective dissemination. They wished to have more support in implementation and be involved in the development process. They thought that a good clinical guideline should be evidence-based, simple and easy to use and applicable in the local setting.

Key messages

1. A questionnaire survey on members of the Hong Kong College of Family Physicians was conducted in 2010 to study the attitude of family physicians towards clinical guidelines.
2. The response rate was 43.2%. Ninety one percent of respondents had used clinical guidelines in patient care, 85% had used them within a month and sixty-three percent indicated the internet as their first choice in locating clinical guidelines.
3. The respondents thought a good clinical guideline should be evidence-based (99%), simple and easy to use (99%) and applicable in the local setting (99%).
4. “Contradicting recommendations” was ranked highest as a barrier to using clinical guidelines (82%), followed by “guidelines not tailored for individual patient’s needs” (77%), and “mistrust guidelines sponsored by pharmaceutical companies” (75%).
5. On strategies thought to be useful in promoting the use of clinical guidelines, 96% of respondents agreed on effective dissemination, 93% on a central system for adoption and 90% on involving family physicians in drafting clinical guidelines.

Acknowledgement

This study was supported by the 2008 Research Fellowship of the Hong Kong College of Family Physicians. ■

References

1. Effective health care. Implementing clinical guidelines. Bulletin 8. Leeds: University of Leeds, 1994.
2. Lugtenburg M, Burgers JS, Westert GP. Effects of evidence-based clinical practice guidelines on quality of care: a systematic review. *Qual Saf Health Care* 2009;18:385-392.
3. Farquhar CM, Kofa EW, Slutsky JR. Clinicians' attitudes to clinical practice guidelines: a systematic review. *Med J Aust* 2002;177(9):502-506.
4. Mazza D, Russell S. Are GPs using clinical practice guidelines? *Aust Fam Phy* 2001;30(8):817-821.
5. Food and Health Bureau, Department of Health, Legislative Council Panel on Health Services Enhancing Primary Care – Establishment of Primary Care Office. LC Paper No. CB(2)1219/09-10(07), March 2010. Available from: <http://www.legco.gov.hk/yr09-10/english/panels/hs/papers/hs0412cb2-1219-7-e.pdf> (accessed 2, July, 2010)
6. Chan AKL, Baker R, Lam TP, *et al.* Strengthening primary care: the role of clinical practice guidelines. *Hong Kong Med J* 2010;16(1):235-236.
7. Baker R, Chan AKL. Editorial: Nurturing leadership in primary care – involving practitioners in guideline development. *HK Pract* 2010;32:1-2.
8. Chan AKL, Baker R, Lam TP, *et al.* What do you think of using clinical practice guidelines in your daily practice? *HK Pract* 2010;32:256-264.
9. The Guidelines International Network <http://www.g-i-n.net/> (accessed March 3, 2011)
10. Chan AKL, Glasziou P, Lam CKL. Attitude and knowledge of evidence-based practice among doctors in Hong Kong: a questionnaire survey. *HK Pract* 2008;30:128-135.
11. Conroy M, Shannon W. Clinical guidelines: their implementation in general practice. *Br J Gen Pract* 1995;45:371-375.

Appendix A - Questionnaire used in the survey

We would like to know your usage of and attitude towards clinical guidelines. Clinical guidelines are "systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances". Please put a ✓ in the boxes provided for the following questions:

1. Do you ever use clinical guidelines in patient care? Yes No (please go to Q4)
 2. When was the last time you used clinical guidelines?
 Today Within a week Within a month Within a year More than a year
 3. Where did you find the clinical guidelines?
(Can choose more than one item)
 Internet Medical journals CME programmes or conferences Senior colleagues
 HA protocols Dept of Health protocols Others (please specify) _____
 4. What do you think are the benefits in using clinical guidelines?
(Please answer ALL items)

	Strongly Disagree	Disagree	Agree	Strongly Agree
a) Improved quality of patient care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Assist clinical decision making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Justify myself when being questioned by patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Defend my patient management when being legally challenged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Improved patient satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 5. Do you think the following discourage you from using clinical guidelines?
(Please answer ALL items)

	Strongly Disagree	Disagree	Agree	Strongly Agree
a) Mistrust guidelines sponsored by pharmaceutical companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Contradicting recommendations from different clinical guidelines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Recommendations are changing too frequently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Limitations in my practice setting are not considered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Clinical guidelines for Caucasians are not applicable in Chinese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Guidelines not tailored for individual patient needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Guidelines increase the chance of legal litigation by patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 6. Do you agree that the following are elements of a "good" clinical guideline?
(Please answer ALL items)

	Strongly Disagree	Disagree	Agree	Strongly Agree
a) Applicable to local population	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Regularly updated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Simple and easy to follow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Evidence-based	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Recommendations are shown to be cost effective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Recommendations are practical in the primary care setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Authorized by a respected Hong Kong authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 7. Do you agree that the following will promote the use of clinical guideline among family doctors in Hong Kong?
(Please answer ALL items)

	Strongly Disagree	Disagree	Agree	Strongly Agree
a) Establish a central system for adopting evidence-based clinical guidelines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Provide financial incentives (such as the government-sponsored influenza Vaccination Subsidy Scheme (IVSS))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Involve family doctors in the drafting process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Involve patients in the drafting process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Promote public awareness of clinical guidelines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Dissemination of clinical guidelines effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 8. What are your suggestions to promote the use of clinical guidelines in the primary care setting? _____
 9. Other comments: _____
- We would like to know:
10. Your current practice:
 Hospital Authority Department of Health Private Hospital Solo Private Practice
 Group Private Practice Others (please specify): _____
 11. Years after your graduation: 0-5 6-10 11-15 16-20 >20
 12. Place of obtaining your primary medical qualification (e.g. MBBS, MBChB, etc): Hong Kong Outside of Hong Kong (please specify): _____
 13. Your higher qualifications: *(Can choose more than one item if applicable)*
 Specialist in family medicine FRACGP/MRCGP (or above) in family medicine Diploma in family medicine
 Other (please specify): _____ Not applicable
 14. Your age: ≤ 30 31-40 41-50 51-60 >60
 15. Your gender: Male Female