July 1, 2009

Dr. «First_Name» «Last_Name»
«Address_1»
«Address_2»
«City», «Province» «POSTAL_CODE»

Dear Dr. «Last_Name»

How Do You Prescribe Statins? Your Personal Prescribing Data

You may recall receiving a package of materials on statin prescribing from a program called EQIP (Education for Quality Improvement in Patient Care) in April 2009. EQIP is a partnership initiative of the British Columbia Medical Association, the Ministry of Health Services and the University of BC. As indicated in the initial materials, this second package contains your confidential portrait with information about your prescribing of statins from 2003 to 2007.

This information is provided for your knowledge only. It is completely confidential and is not being used to audit your practice. The focus of all of EQIP's initiatives is on educating physicians and improving health outcomes for patients.

We have heard from physicians that they want information about their prescribing practices in relation to scientific evidence and in relation to their peers' prescribing. The enclosed portrait provides this information as it relates to your prescription of statins for primary and secondary prevention. Please note that a restricted practice, a practice with very few patients, or one incorrectly identified by MSP as a general practice may produce atypical prescribing data. If you feel your portrait is incorrect you may wish to notify the study sponsors.

Accompanying your portrait is information on the research arm of EQIP, a statin price speedometer, and an evidence update on a recently-published trial. Also enclosed is a faxable registration form with a number of options. If you are interested in any of the options, please complete and fax back the form. You may also use this form to decline future materials from EQIP.

Sincerely,

David Blair, B.S.P., M.D., M.H.A.
Clinical Lead, EQIP

Please fax this form to EQIP at 1-866-406-0303

Please correct if necessary. We need your **main practice** address and numbers.

Print Corrections Below

Name:	Dr. «First_Name» «Last_Name»	_____
Address:	«Address_1»	_____
	«Address_2»	_____
	«City», «PROV»	_____
Postal Code:	«POSTAL_CODE»	_____
Telephone #:	«Phone»	_____
Fax #:	«Fax»	_____

The information collected on this form will be used only to determine participation in the EQIP statin initiative. All personal information is collected under the authority of the B.C. Continuing Care Act and will be collected, used, disclosed and provided security in accordance with the B.C. Freedom of Information and Protection of Privacy Act. If you have any questions about the collection of this information, please contact an EQIP representative at the telephone numbers provided.

Check as many boxes as apply

Yes, I would like:

☐ To receive a FREE home blood pressure monitoring patient aid and an evidence update

☐ To enter in a draw for one of 50 FREE digital home blood pressure monitors (value $90)

I will consider:

☐ A paid 15-minute interview, at my convenience, concerning my opinions about prescribing portraits, home blood pressure monitoring and future EQIP initiatives
(If you check this box we may telephone your office with an invitation for an interview)

Option to decline:

☐ I do NOT wish to receive any future communications from EQIP
(Future materials will address different topics)

Reason for declining: _____

Sign here: X_____ **Date**: _____

The overall impact of EQIP will be evaluated using anonymous aggregate data. The research components of EQIP include the above mentioned interview and a more detailed statistical analysis using de-identified data.

Contact:

- Dr. Malcolm Maclure, Director, EQIP Implementation Team, and Professor, School of Health Information Science, University of Victoria, (250) 405-1940.

FACULTY OF MEDICINE
eHealth Strategy Office

HEALTH INFORMATION SCIENCE

Participant Information on Research Aspects of
Education for Quality Improvement in Patient Care (EQIP)

UBC and UVic ethics: Sub study B-Prescribing Feedback to British Columbia General Practitioners

EQIP Principal Investigators: Dr. Kendall Ho, Director, University of BC eHealth Strategy Office, contact number: (604) 875-4111 ext 69153, e-mail: kendall.ho@ubc.ca, and Dr. Malcolm Maclure, University of Victoria School of Health Information Science, contact number: (250) 405-1940, e-mail: mmaclure@uvic.ca.

Sponsor: This research is co-sponsored by the BC Ministry of Health Services and the British Columbia Medical Association. This research is paid for by the BC Ministry of Health Services through a contribution agreement with UBC's eHealth Strategy Office and carried out at the University of Victoria under Dr. Maclure's supervision.

Purpose: The purpose of the study is to evaluate the impact of educational materials which take the form of private practice prescribing feedback. You have been invited to take part in this research study because you are a general practitioner or family physician currently practicing in British Columbia.

Study Procedures: BC general practitioners/family physicians have been randomized by toss of a coin into early and delayed intervention groups. The groups are defined by postal code. The investigators will analyze aggregate data for trends in the early versus the delayed group with no reference to individual prescribers' personal data.

You have received a copy of your personal prescribing portrait. Your personal prescribing portrait is for your own use only. Your prescribing data has been protected during every aspect of personal prescribing portrait production (as illustrated on the enclosed envelope). If you register, you will be entered in a draw for one of 50 home blood pressure monitors and have the opportunity to participate in a paid interview regarding the prescribing portrait.

Potential Risks and Benefits: There should be no risks to participating in EQIP. The information you receive in the personal prescribing portrait is similar to information you might find through conducting an office chart audit and that you might normally discuss with your peers. This information is for educational purposes only and is not in any way a form of external practice audit. The potential benefit of the research to you is an opportunity to receive detailed information about your statin prescribing without having to engage in an office chart audit. EQIP will contribute to the state of knowledge with a better understanding of the impact of providing educational materials and opportunities for self audit to general practitioners and family physicians.

Confidentiality: Throughout production and delivery, your personal prescribing portrait was identified only by code number. Files related to continued participation in the study are maintained confidentially in password protected computers in Dr. Maclure's University of Victoria office. No participant will be identified by name in any reports of the completed study.

Contact: If you have any questions or desire further information with respect to this study, you may contact Dr. Maclure or one of his associates at (250) 405-1940.

If you have any concerns about your treatment or rights as a research subject, you may contact the UBC Office of Research Services, Research Subject Information Line: (604) 822-8598 or, if long distance or your preference, by e-mail: RSIL@ors.ubc.ca or the University of Victoria, Human Research Ethics Office (250) 472-4545 or, if long distance or your preference, by e-mail: ethics@uvic.ca

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time without either explanation or consequence.

How Your Rx portrait will be kept confidential

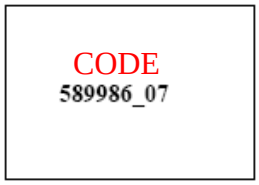
Data Team only sees Physician prescribing data… Never sees Physician Names/Addresses

Mailing Team only sees Physician Names/Addresses… Never sees Physician prescribing data

1. **Anonymous Data** from PharmaNet, MSP and Hospitals are used to make

2. **…Anonymous Portraits** identified only by code numbers …

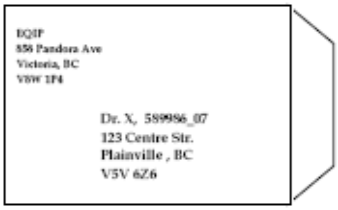
3. **…**which are sealed in **Anonymous Portrait-Envelopes** labelled with code numbers



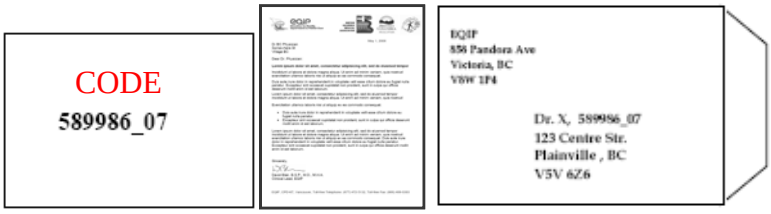
A. **Name and Address Data** are used to address…

B. **Letter**

C. …which is inserted in **Addressed Envelopes**



Finally the **coded sealed Portrait-Envelope** is inserted with letter into **Addressed Envelope** and mailed to physician's office.



How do you prescribe statins?

Vignette 1

SECONDARY PREVENTION†:

Adam Wright is 45 and has recovered from a heart attack. He is non-diabetic‡ with normal blood pressure, and has no family history of heart disease. Despite his normal LDL and HDL, his physician prescribed a statin.

What would *YOU* have done?

Vignette 2

PRIMARY PREVENTION†:

Sarah Jones is concerned about her high cholesterol. She is a 55 year old, non-smoker, non-diabetic‡ with normal blood pressure. Although she has high LDL and low HDL, her doctor declined to give her a statin because low-risk women don't benefit from a statin, regardless of their cholesterol levels.

What would *YOU* have done?

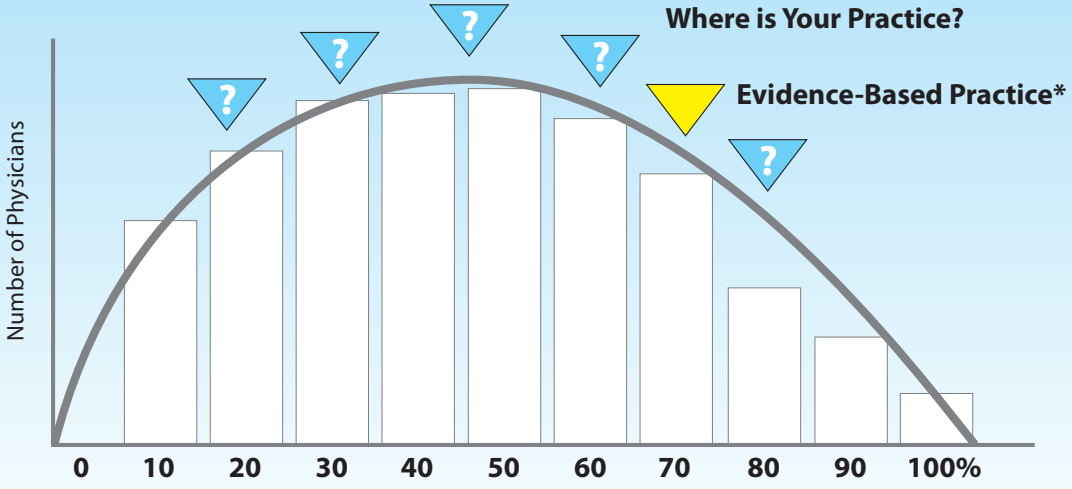
Vignette 3

PRIMARY PREVENTION†:

David Smith is a 76 year old, non-diabetic‡ with uncomplicated, treated hypertension. Despite high LDL and low HDL, his physician did not prescribe a statin because evidence does not support statin use for primary prevention in the elderly.

What would *YOU* have done?

STATIN PRESCRIBING FOR SECONDARY PREVENTION IN BC



Percentage of Secondary Prevention Patients (Non-Institutionalized) Receiving a Statin in BC

*20–30% of patients will not tolerate statins

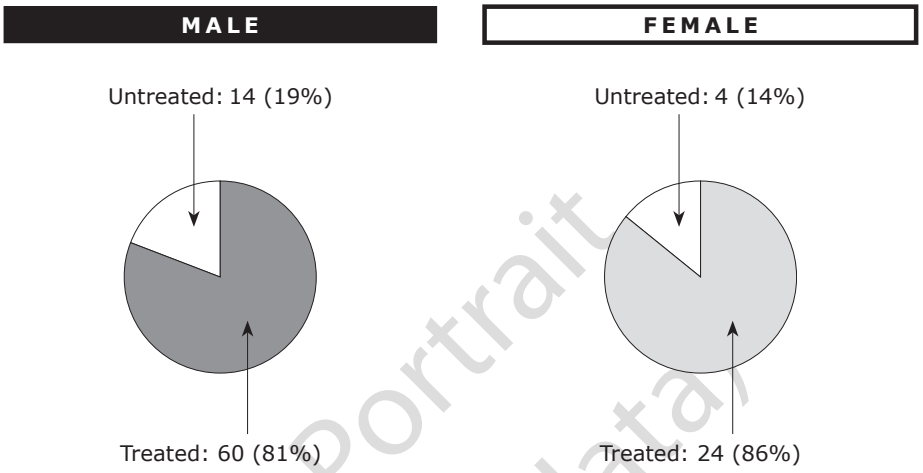
† See definitions of Primary and Secondary Prevention on page 2. ‡ See GPAC diabetes guidelines found at www.bcguidelines.ca

Your Statin Patients[a] 2003–2007

Your Secondary Prevention[b] Patients by Sex[c]

Secondary Prevention treatment involves treating patients who have had a previous cardiovascular event.

In patients who have had an event (MI, stroke, or ischemic heart disease), prescribe a statin[1].



Your Primary Prevention[d] Statin Patients by Age and Sex

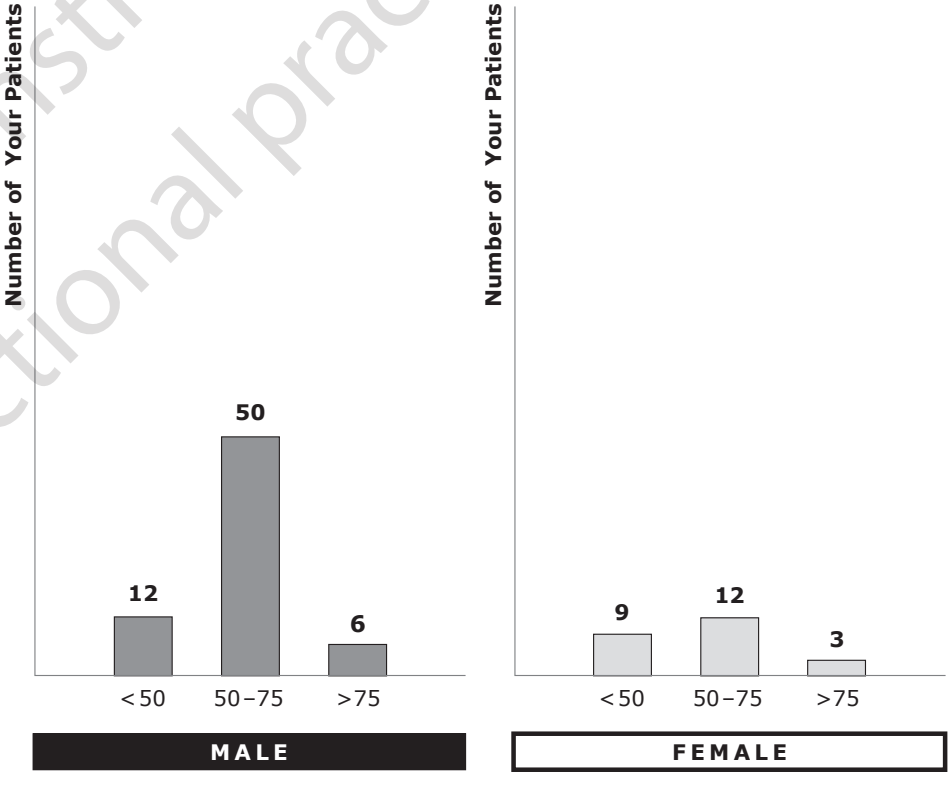
Primary Prevention treatment involves treating patients who have not had a previous cardiovascular event.

How much are you prescribing to women and the elderly?

In the elderly, evidence does not support statin use for primary prevention[2].

In men less than 75 years old, evidence supports the cost effectiveness of statin use for primary prevention only if their absolute risk is high (e.g. Framingham risk score is greater than 20%).

In women, there is evidence statins are not effective for the primary prevention of coronary heart disease events as there are zero lives saved from statin treatment over five years[3].



a Includes only patients for whom you are the Majority Source of Care physician *and* were the physician who initiated the patient's statin treatment.
b Denominator includes non-institutionalized patients for whom administrative data indicate a previous cardiovascular event (MI, stroke, or ischemic heart disease).
c "Untreated" includes patients who were not prescribed a statin at any point from 2003 to 2007.
d Denominator includes non-institutionalized patients for whom administrative data do not indicate a previous cardiovascular event (MI, stroke, or ischemic heart disease).

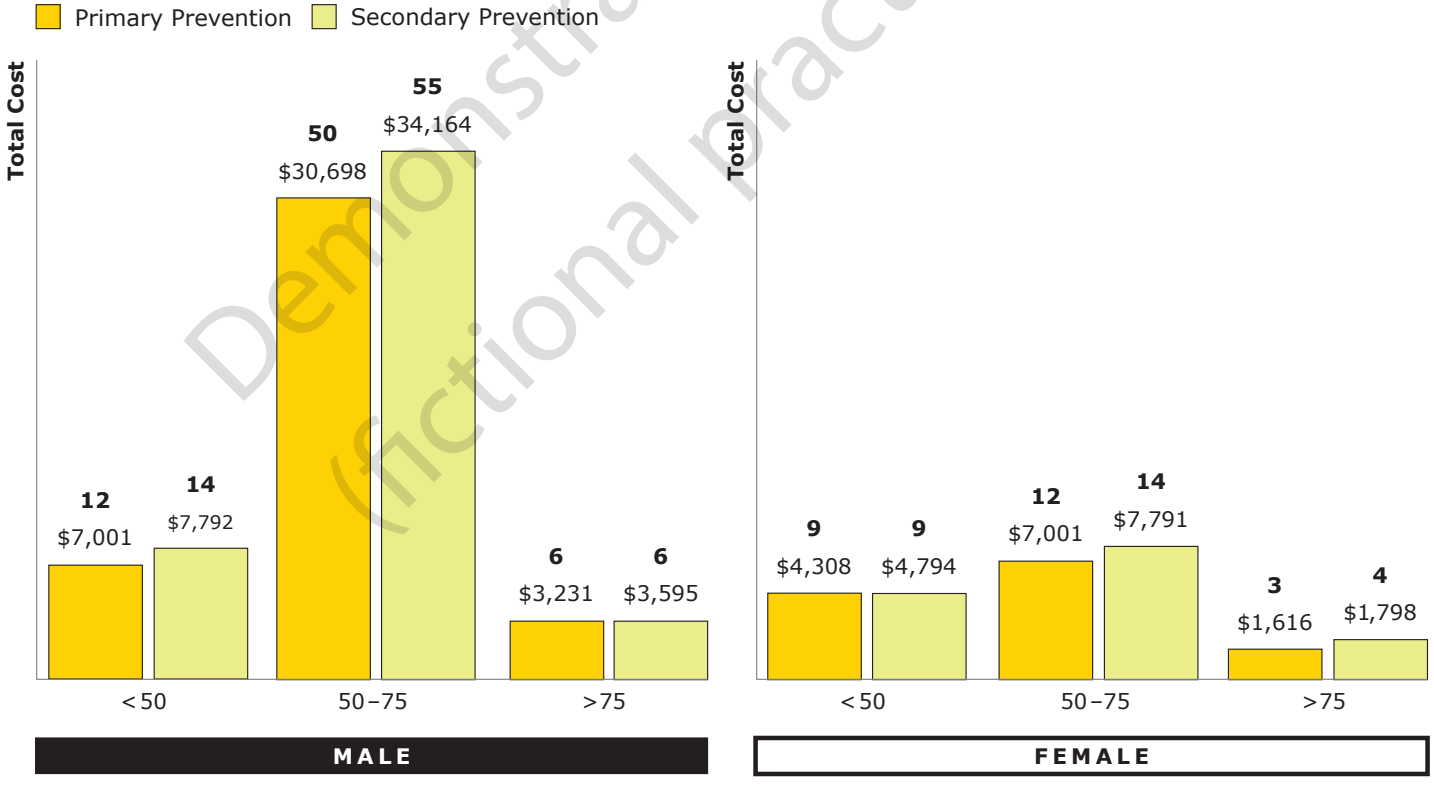
The Cost of Your Statin Prescribing 2003–2007[e]

Your Statin Prescription Costs for Secondary and Primary Prevention

Secondary Prevention		
Statin[f]	Total # of Your Patients[g]	Total Cost of Your Prescriptions
pravastatin (Pravachol®)	9	$3,942
lovastatin (Mevacor®)	3	$1,281
fluvastatin (Lescol®)	0	$0
rosuvastatin (Crestor®)	9	$4,536
simvastatin (Zocor®)	23	$12,510
atorvastatin (Lipitor®)	58	$38,025
Totals	**93**	**$95,033**
Primary Prevention		
Statin	Total # of Your Patients[g]	Total Cost of Your Prescriptions
Totals	**104**	**$38,354**

There are no randomized head-to-head trials showing superiority of any one statin for prevention of major cardiovascular events and mortality.

Your Statin Prescription Costs by Patient Age and Sex



Patient Age and Sex for Primary and Secondary Prevention

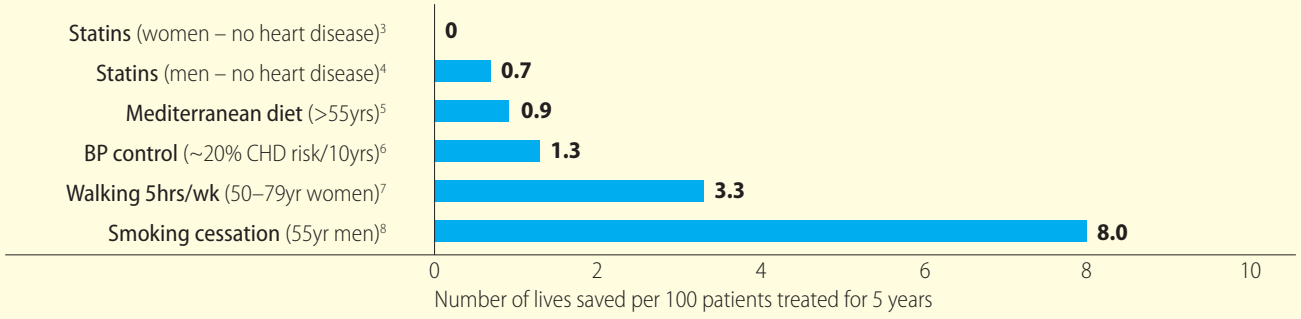
e Costs are indexed to 2007 prices. Dispensing fees are not included. See *Statin Price Speedometer* for comparative cost information.
f Fluvastatin, rosuvastatin and atorvastatin are only available as brand products.
g Patients who are prescribed a statin both prior to and following an event are counted as both Secondary Prevention Patients and Primary Prevention Patients. Patients who are prescribed more than one type of statin are counted more than once.

Why are so many low-risk patients getting statins?

Is it because we are treating the numbers, not the patient?

Evidence supports treating total risk (the patient) and not just the lipid levels (the numbers).

BENEFITS OF LIFESTYLE MODIFICATION COMPARED TO PHARMACOLOGIC MANAGEMENT FOR PRIMARY PREVENTION[3–8] —FROM GPAC LIPID GUIDELINES



Therefore, if you use the evidence-based approach:

1. As part of secondary prevention, you would prescribe a statin for most patients who have already had a cardiovascular event and encourage them to continue treatment regardless of their cholesterol level (Vignette 1).
2. You would not prescribe statins to women for primary prevention (Vignette 2).
3. You would not prescribe statins for primary prevention in the elderly (Vignette 3).

References:

1. The Heart Protection Study: MRC/BHF Heart Protection Study of cholesterol lowering with simvastatin in 20 536 high-risk individuals: a randomised placebo-controlled trial. Lancet 2002 360: 7-22
2. Shepherd J, Blauw GJ, Murphy MB, et al. Pravastatin in elderly individuals at risk of vascular disease (PROSPER): A randomised controlled trial. Lancet 2002; 360 (9346): 1623–1630.
3. Walsh JME, Pignone M. Drug Treatment of Hyperlipidemia in Women. JAMA 2004;291(18):2243-2252, and see GPAC lipid guidelines found at www.bcguidelines.ca
4. Studer M, Briel M, Leimenstoll B, et al. Effect of Different Antilipidemic Agents and Diets on Mortality: A Systematic Review. Arch Intern Med 2005;165(7):725-730.
5. Trichopoulou A, Costacou T, Bamia C, et al. Adherence to a Mediterranean Diet and Survival in a Greek Population. N Engl J Med 2003;348(26):2599-2608.
6. Psaty BM, Lumley T, Furberg CD, et al. Health Outcomes Associated With Various Antihypertensive Therapies Used as First-Line Agents: A Network Meta-analysis. JAMA 2003;289(19):2534.
7. Manson JE, Greenland P, LaCroix AZ, et al. Walking Compared with Vigorous Exercise for the Prevention of Cardiovascular Events in Women. N Engl J Med 2002;347(10):716-725.
8. Doll R, Peto R, Boreham J, et al. Mortality in relation to smoking: 50 years' observations on male British doctors. J Epidemiol Community Health 2004;58(11):930.

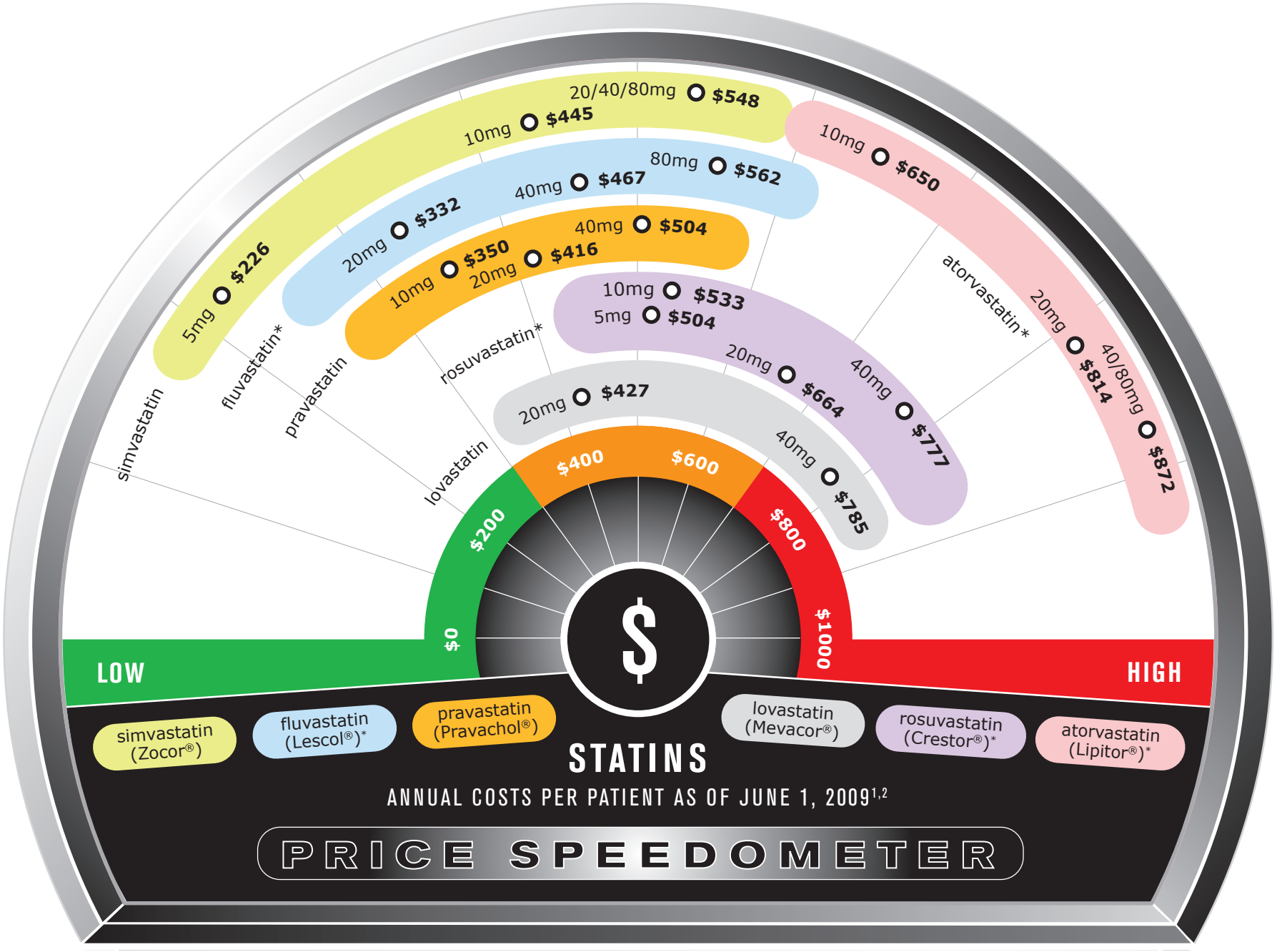
FACULTY OF MEDICINE eHealth Strategy Office

BRITISH COLUMBIA MEDICAL ASSOCIATION

BRITISH COLUMBIA The Best Place on Earth

eQiP Education for Quality Improvement in Patient Care

090301



*These medications are available only as brands (see reverse side for details)

Statin Drug Costs [1,2]

NAME	DOSE	*PHARMANET DRUG MASTER* PRICE PER TABLET[1]	
		BRAND	GENERIC
atorvastatin		**Lipitor®**	**No Generic**
	10 mg	$1.78	—
	20 mg	$2.23	—
	40 mg	$2.39	—
	80 mg	$2.39	—
fluvastatin		**Lescol®**	**No Generic**
	20 mg	$0.91	—
	40 mg	$1.28	—
	80 mg	$1.54	—
lovastatin		**Mevacor®**	**Generic**[3]
	20 mg	$2.11	$1.17
	40 mg	$3.85	$2.15
pravastatin		**Pravachol®**	**Generic**[3]
	10 mg	$0.96	$1.02
	20 mg	$1.14	$1.20
	40 mg	$1.38	$1.45
rosuvastatin		**Crestor®**	**No Generic**
	5 mg	$1.38	—
	10 mg	$1.46	—
	20 mg	$1.82	—
	40 mg	$2.13	—
simvastatin		**Zocor®**	**Generic**[3]
	5 mg	$1.09	$0.62
	10 mg	$2.17	$1.22
	20 mg	$2.68	$1.53
	40 mg	$2.68	$1.50
	80 mg	$2.68	$1.50

Notes:

1. Costs are based on the PharmaNet Drug Master found at http://www.health.gov.bc.ca/pharmacare/outgoing current as of June 1, 2009. Annual costs were calculated by multiplying the least expensive per-tablet cost available for each chemical by 365 days.
2. Dispensing fees are not included and may vary considerably.
3. Where there is more than one product available an average has been used.

July 1, 2009

Questions to ask in the wake of the JUPITER trial

The JUPITER trial was a trial of statins as primary prevention therapy for individuals with elevated C-reactive protein levels.

The EQIP Working Group discussed the trial and concluded that on its own, this report does not provide sufficient evidence to alter the messages in the EQIP statin portrait concerning the use of statins for primary prevention in women, low-risk men and the elderly.

Members of the Working Group pointed to a number of unanswered questions:

- Is measuring C-reactive protein (CRP) a useful tool for estimating cardiovascular risk?
- Was the reduction in risk because rosuvastatin lowered CRP, or lipids, or both or neither?
- If the number needed to treat (NNT) for 2 years in the trial (with a very select sample of patients) was approximately 100 patients to prevent one MI or stroke, what would be the NNT in the general population in British Columbia?
- Would diet and lifestyle modifications result in a similar reduction in cardiovascular events?
- Should we focus less on LDL targets and more on treating patients with a fixed statin dose based on the global cardiovascular risk assessment of the individual patient?
- What are the long-term risks and benefits of statin therapy in these individuals? (Unknown because the trial was stopped early.)

The Cardiovascular Working Group of BC's Guidelines and Protocols Advisory Committee (GPAC) is currently performing an in-depth review of the JUPITER trial in relation to existing evidence. Consult the GPAC website at http://www.bcguidelines.ca in the upcoming months for further information on this trial.

Sincerely,

Malcolm Maclure, ScD
Director of Implementation, EQIP
Professor, School of Health Information Science, UVic
BC Chair in Patient Safety, UBC