

# Transitions in Translation

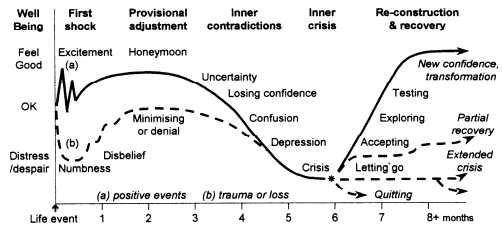
KT-ICEBERG Team Meeting  
May 1<sup>st</sup>, 2007

Shawn Bugden, B.Sc. (Hons), BSc.Pharm, MSc.

Regional Health Authority of Central Manitoba Inc.  
PrISM-Prescription Information Service of Manitoba  
CancerCare Manitoba



## Transitions



## Outline

- Canadian Academic Detailing Collaboration – KT ICEBERG Connections
- Case Example – Statin Therapy
- CADTH – PPI tools
- Last in Translation – Institutional Barriers in Academic Detailing



## Canadian Academic Detailing Collaboration (CADC)

- British Columbia
  - BC Community Drug Utilization Program
- Saskatchewan
  - RxFiles Academic Detailing Program
- Alberta
  - Academic Detailing – Calgary Health Region
- Manitoba
  - Prescription Information Services of Manitoba
- Nova Scotia
  - Dalhousie Academic Detailing Services
- Drug Policy Futures
  - University of Victoria School of Health Information Science



## Academic Detailing Plus

- Education of Health Professionals
- Academic Detailing Training
- Guideline Influence
- Educational Tools and Resources
- Conferences and Workshops
- Outcome Evaluation
- Technology in Academic Detailing



## CADC – Statin Interventions

Table 2: LDL-C Reduction and Tablet Splitting Cost Savings

LDL-C	Fluvastatin(mg)		Pravastatin(mg)		Lovastatin(mg)		Simvastatin(mg)		Atorvastatin(mg)		Rosuvastatin(mg)			
	20	40	10	20	40	80	5	10	20	40	80	10	20	40
20-25%	31	42	48	31	37	44	55	36	70	137	22	40	49	49
26-30%	N/A	N/A	N/A	11	14	N/A	N/A	0	N/A	N/A	0	14	23	23
31-35%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	0	14	23	23
36-40%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	0	14	23	23
41-45%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	0	14	23	23
46-50%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	0	14	23	23
51-55%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	0	14	23	23
Cost/mo*	31	42	48	31	37	44	55	36	70	137	22	40	49	49
Savings/mo	N/A	N/A	N/A	11	14	N/A	N/A	0	N/A	N/A	0	14	23	23

\*Lovastatin 80mg generated by two lovastatin 40mg tablets  
\*Cost/mo in CAN dollars, assume disp. fee of \$5, prescriptions filled quarterly, all prices based on Manitoba Pharmacare Reimbursement Price.  
†Not Applicable, dosage form can not be split or it is the largest dosage form available.



## Canadian Cardiovascular Society - Position Statement

- Previous criticism
- AGREE
- Don't AGREE
- Consider recommendation that low and moderate risk patients lower their LDL-C by at least 40%.

McPherson, R., et al. Canadian Cardiovascular Society position statement – Recommendations for the diagnosis and treatment of dyslipidemia and prevention of cardiovascular disease. *Can J Cardiol* 2006;22(11):913-927.



## Canadian Cardiovascular Society - Position Statement

Table 1: LDL-C Cholesterol Reduction of Primary Prevention Studies

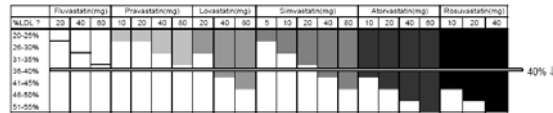
Study	Agent and Dose	% LDL-C Reduction in Treatment Group
WOSCOP (9)	Pravastatin 40mg	26%
AFCAPS/TexCAPS (10)	Lovastatin 20-40mg	24%
PROSPER* (11)	Pravastatin 40mg	27%
ALLHAT-LLT (12)	Pravastatin 40mg	28%
ASCOT-LLA (13)	Atrovastatin 10mg	33%
ALERT (14)	Fluvastatin 40mg	32%
CARDS** (15)	Atorvastatin 10mg	40%

\*56% of the patients in the PROSPER trial had no history of cardiovascular events.  
\*\* CARDS contained only patients with diabetes



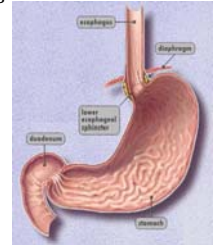
## Canadian Cardiovascular Society - Position Statement

Figure 1: Average LDL-C reductions of HMG-CoA Reductase Inhibitors (16)



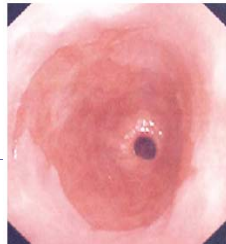
## Proton Pump Inhibitors

- The Canadian Agency for Drugs and Technology in Health (CADTH) / Canadian Optimal Medication Prescribing & Utilization Service (COMPUS)
- PPIs – first major COMPUS project
- CADTH. Evidence for PPI use in gastroesophageal reflux disease, dyspepsia and peptic ulcer disease: scientific report. *Optimal Therapy Report - COMPUS 2007;1(2)*.



## Proton Pump Inhibitors

- Canadian Agency for Drugs and Technologies in Health. Interventions for appropriate prescribing of proton pump inhibitors: a literature review. *Optimal Therapy Report - COMPUS 2007;1(4)*.
- Selection of Interventions Meeting – Academic Detailing Tools
- Development of AD tools based on scientific document



## Alternate Prescription Pad

Patient: \_\_\_\_\_

More than 1/4 of Canadians have symptoms caused by the acid in their stomach. Symptoms can include heartburn, indigestion, bloating and a feeling of fullness.

Whether or not you have been prescribed a medication, there are things you can do that may help reduce your symptoms.

Avoid foods that worsen your symptoms, such as:

- coffee
- alcohol
- chocolate
- overly spicy or high-fat meals
- acidic foods
- carbonated beverages

Do not lie down for 2 to 3 hours after eating

Do not wear tight-fitting clothing

Stop or reduce the amount you smoke

Elevate the head of your bed using blocks or books

Eat smaller meals and chew food well

Lose weight if appropriate

For full project information: [www.cadth.ca](http://www.cadth.ca)

If your symptoms are mild or only occur once in a while, you may not need to take regular prescription medication. You can treat your symptoms whenever they occur using medications available **without a prescription** at your local pharmacy. There are two types of products you can use:

**Products That Neutralize Acid**  
Liquid or tablets (eg. Gaviscon®, Maalox®, Tums®)  
> Works fast (5 to 15 minutes), lasts for 1 to 2 hours  
> Pennies per dose, especially using store brand antacids

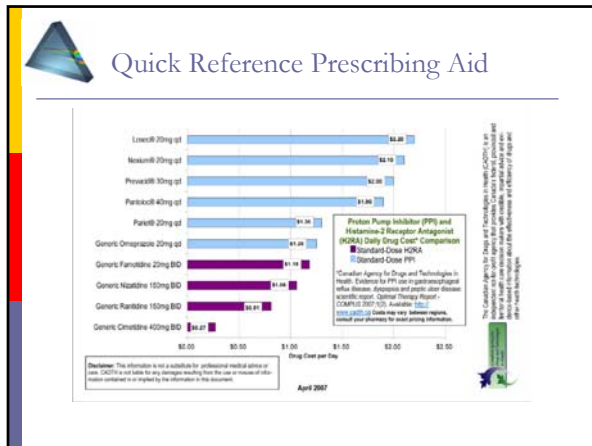
**Products That Stop Acid Production**  
Zantac®, Pepcid® or generic ranitidine or famotidine  
> Takes ~ 1 hour for effect, lasts for up to 12 hours  
> Can cost as little as 25 cents per dose

Consult with your **Pharmacist** for the best option for you

If your symptoms don't go away within 2 weeks, or if they get worse: **Contact Your Doctor**

Doctor Signature: \_\_\_\_\_

Pharmacist Signature: \_\_\_\_\_



## Quick Reference Prescribing Aid

### Three Questions to Ask When Considering a PPI

- Which PPI should I choose?**  
On initial therapy there are no clinically important differences among equivalently-dosed PPIs in the treatment of most acid-related GI conditions.
- At what dose should I start?**  
Studies comparing standard doses of PPI to high doses have not shown superiority of starting with the higher dose. Standard-dose therapy should be the initial therapy for all patients.
- What won't a PPI treat?**  
Current evidence suggests PPIs are not efficacious in improving asthma, laryngeal symptoms or chronic cough that may be associated with GERD.

For full project information, visit the CADTH web site: [www.cadth.ca](http://www.cadth.ca)

Drug	Approximate Monthly Cost
Standard-Dose H2RA	
Cimetidine 400 mg BID	\$15.56
Ranitidine 150 mg BID	\$32.68
Nizatidine 150 mg BID	\$37.68
Famotidine 20 mg BID	\$41.64
Low-Dose PPIs	
Pantoloc 20 mg qd	\$26.20
Prevacid 30 mg qd	\$56.60
Lowecid 10 mg qd	\$57.00
Prevacid 15 mg qd	\$64.00
Standard-Dose PPI	
Generic Omeprazole 20 mg qd	\$43.00
Pantoloc 20 mg qd	\$44.40
Prevacid 40 mg qd	\$61.00
Prevacid 30 mg qd	\$64.00
Nexium 20 mg qd	\$66.80
Lowecid 20 mg qd	\$69.60
Nexium 40 mg qd	\$66.80
Generic Omeprazole 40 mg qd	\$76.00
Pantoloc 40 mg BID	\$80.80
Prevacid 40 mg BID	\$114.40
Prevacid 30 mg BID	\$120.00
Lowecid 40 mg qd	\$131.20

Disclaimer: This information is not a substitute for professional medical advice. In some CADTHs a label change resulting from the current release of information contained in or supplied by the information in this document.

\*Monthly PPIs based on 30-day supply price. Shipping fee of \$0.20 shown only by region.

## COMPUS Academic Detailing Newsletter

### COMPUS Optimal Therapy Newsletter: Proton Pump Inhibitors

Canadian Agency for Drugs and Technologies in Health

#### Three Questions to Ask When Starting a Proton Pump Inhibitor (PPI)

- Which PPI Should I Choose?**  
You've decided to prescribe a PPI for your patient. You want what is best for your patient – both clinically and economically. You want the best clinical outcome possible but you don't want your patient or the health-care system to pay more for that outcome than is necessary. With all of that in mind, which PPI should you choose?  
**Evidence-based message:** There are no clinically important differences among equivalently-dosed PPIs in the treatment of most acid-related GI conditions.
- At What Dose Should I Start?**
- What Won't a PPI Treat?**

The Canadian Agency for Drugs and Technologies in Health recognizes the importance of these questions to physicians and the COMPUS Expert Review Panel has...

new acid production requires regeneration of proton pumps?  
Evidence-based message: For gastroesophageal reflux disease (GERD), including both endoscopy-negative reflux disease (ENRD) and esophagitis, no clinically important differences were found among standard doses of PPIs. The robust evidence supporting this conclusion includes six good-quality systematic reviews. In these reviews, the majority of comparisons of PPIs for GERD showed no significant differences in short-term (four to eight weeks) and long-term (six to one year) studies.

data is limited to a single good quality systematic review that included indirect comparisons of PPIs. These indirect comparisons suggest similar healing rates for the PPIs that have been studied (esomeprazole and lansoprazole).  
Limitations of the Evidence: The evidence suggests that there are no clinically important differences among the standard PPIs in the treatment of most acid-related GI conditions. This important message should not be clouded by isolated studies or comparisons between non-equivalent doses. However, the evidence is limited by the fact that direct comparisons

## Evidence Statements & Key Messages

G5.1 "There are no clinically important differences among standard doses of PPIs (omeprazole 20mg, lansoprazole 30mg, pantoprazole 40mg, rabeprazole 20mg, esomeprazole 20mg) in the treatment of GERD, ENRD, esophagitis"

## Lost in Translation – Apples to Apple Sauce

### "Apple to Apple" Price Comparison of Standard Once Daily Dose PPIs

Generic Omeprazole 20mg \$1.25/day	Pantoloc Rabeprazole 20mg \$1.30/day	Pantoloc Pantoprazole 40mg \$1.90/day
Prevacid Lansoprazole 30mg \$2.00/day	Nexium Esomeprazole 20mg \$2.10/day	Lowecid Omeprazole 20mg \$2.20/day

Price Comparison of Standard Once Daily-Dose PPIs

Generic Omeprazole 20 mg	Pantoloc Rabeprazole 20 mg	Pantoloc Pantoprazole 40 mg	Prevacid Lansoprazole 30 mg	Nexium Esomeprazole 20 mg	Lowecid Omeprazole 20 mg
\$1.25/day	\$1.30/day	\$1.90/day	\$2.00/day	\$2.10/day	\$2.20/day

## Adding Context The Concept of Upskilling

- Upskilling – the preparation done by academic detailers to prepare themselves for interventions in field
- Not possible to talk about PPIs in isolation
- Upskilling a process – but guiding document prepared – will be posted for comment
  - PPI drug interactions
  - Adverse effects – Clostridium difficile, Pneumonia, Fracture Risk, Nephritis
  - H. pylori testing
  - Diagnosis and treatment algorithms for GERD, Dyspepsia and Peptic Ulcer Disease

## Questions ?

---



[sbugden@rha-central.mb.ca](mailto:sbugden@rha-central.mb.ca)