

Chart Screening Form

A. Enhancement Objectives

The chart screening form uses objective and measurable indicators of patient health (process or outcomes) to identify patients in need of follow-up with a pharmacist or to identify areas of quality improvement in medication management across the practice. The results can also be used to stimulate discussion about areas for potential improvement in the quality of care at the practice site (but should not be used to draw conclusions regarding the quality of care).

B. Tool or Enhancement Description

The chart screening form is filled in by individuals performing the chart reviews. The form consists of four sections in which the exclusion, vascular-, symptom- and drug-based criteria, diagnoses, demographics and drug information are recorded. The final page of the form lists the generic and trade names of the drugs of interest, and common abbreviations of drug names that are often observed in patient charts. Review one year of data using the day the chart screening is performed as a guide, such that the year preceding the chart screening is audited. Please see the end of this chapter for an example of this tool.

C. Medication Management Improvements

Patients referred to the pharmacist through the use of the chart screening form can receive a comprehensive medication **consultation**. The physician reviews the pharmacist's assessment and may incorporate the pharmacist's recommendations in the patient's medication management. For example, if the form identifies a patient who requires laboratory monitoring to prevent an adverse drug event, the pharmacist would highlight this for the physician who could consider additional monitoring for the patient. If the form identifies a patient with an uncontrolled medical condition (e.g., high cholesterol), the pharmacist may recommend a change in or the addition of a medication.

The criteria listed on the form can serve as a basis for developing and implementing a change in practice **processes**. For example, if a large number of patients are identified who do not have up-to-date laboratory tests,

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the practice site may develop a process to ensure patients who may benefit from routine screening are receiving it at regular intervals. The form can serve as a quality of care **audit** for the practice site to use internally to measure aspects related to drug therapy.

The form can also serve as an **educational** tool for physician trainees regarding medication management criteria for specific medications.

D. Development Process

When the practice site team first begins looking for indicators to identify patients who may benefit from follow-up with a pharmacist or a practice review of medication management quality of care, the first step is consulting literature on previous work. For example, the method reported by McColl et al. (*see References and resources, below*) estimates the impact of an intervention in terms of reduced morbidity and/or mortality in a family practice setting, while considering the likely prevalence of the condition, access to relevant therapies and services, and the projected uptake of the intervention. This framework can be used as a starting point.

The team then develops a list of candidate indicators and assesses each possible indicator against three criteria to ensure they fit within the objectives of the study and/or practice site.

The three criteria used for this example were:

- 1) A focus on drug therapy problems and chronic diseases common in seniors and family medicine;
- 2) Reliance on data elements that should be obtainable from the medical record, and
- 3) Identification of quality gaps that could be remedied within six months.

Determine the level of supporting evidence and the sources for each potential indicator. The levels can include consensus statements by the various societies, randomized controlled trials and observational studies.

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Choose the indicators for the chart screening form with group consensus.

After selecting the indicators, group them into three main categories according to the nature of the actions that would most likely be taken if a potential problem were detected. The three categories can include:

Category 1: Disease detection and monitoring, in which an office visit would be scheduled or a laboratory test would be requested

Category 2: Drug therapy (laboratory) monitoring, in which a laboratory test would be requested

Category 3: Potential underuse, overuse or suboptimal drug use, in which a pharmacist or physician consultation is scheduled

The next step in the process is creating and pilot-testing a draft. Test five to 10 charts. It can take approximately 10 to 15 minutes to review one chart depending on the length of form used and the type of patient chart available (electronic versus paper). Chart screening is generally faster using an electronic medical record (EMR).

The patient's health care number or other identifying information can be kept on a separate page from the rest of the data gathered to help ensure patient confidentiality. Write the same number on the separate page and the form, to allow the chart auditor to track information if questions arise, or to link the information to the patient for referral to the pharmacist once the data are collected.

This process also keeps the data collected de-identified for many of the patients, limiting the availability of confidential data outside the patient's chart.

Two or three versions of the form may be tested before the group is satisfied and the data can be gathered. It can be helpful to do a preliminary analysis of the data gathered from the pilot-testing to ensure the data being collected can be used in the form required.

References and resources

The following references were consulted for the creation of the chart screening form:

Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Canadian Diabetes Association 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. *Can J Diabetes* 2003;27:S1-S152.

Evidence-Based Recommendations Task Force. 2005 Canadian Hypertension Education Program Recommendations. Canadian Hypertension Education Program. Accessed February 18, 2005 at www.hypertension.ca

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Writing Group for the Women's Health Initiative Investigators. Risks and benefits of estrogen plus progestin in healthy postmenopausal women. Principal results from the Women's Health Initiative randomized controlled trial. *JAMA* 2002;288:321-33.

E. Implementation Process

The first steps in the process of implementing a chart screening form into a practice involves determining who the chart auditor(s) will be and training the individual(s).

A chart auditor can be an individual who is part of the practice (e.g., a nurse or other staff member) or an individual who is external and brought into the practice. If the chart auditor is external, have the person sign a confidentiality agreement to maintain patient confidentiality.

Good candidates for chart auditing have experience reading medical records, are comfortable with medical terminology, are detail-oriented and take care in their work. These qualities should ensure that the data collected are done so accurately.

Create a guide for the chart auditor to explain the chart screening form. The chart auditor can keep the guide and refer to it later should questions arise during the screening process.

The chart screening form can be used as a template for a guide. Notes and information can be added beside each area, which describe the data that are needed in more detail. For example, information in the guide would indicate that a hospitalization would include an admission, but not emergency room visits and day surgeries.

The information can also direct the chart auditor to the area within a patient's chart that would likely provide the information that is needed.

The guide notes may also serve as reminders for the chart auditor to move onto the next area in the form. For

example, if the chart auditor checks off that a patient is taking a diuretic, a reminder can direct the chart auditor to determine if it is a potassium-wasting diuretic, and if so, to record the requisite laboratory values.

In addition to creating and supplying a guide, it can be useful to fill in the form with the chart auditor trainee using two or three patient charts. Answer any questions that may arise that are not included in the guide, then add the information to the guide for future reference.

The chart auditor then begins completing two or three chart screening forms without assistance; however, the trainer remains in the room with the chart auditor and watches to ensure the chart auditor looks at all required areas of the patient's chart (e.g., summary, visit notes, specialist notes, laboratory values, etc.) and does so in the correct order (e.g., the summary that lists a patient's diagnosis and medications should be checked first).

If it is deemed necessary, the trainer and chart auditor can again work together completing two or three more patient charts to address issues that arise.

Following this step, the chart auditor completes one patient chart alone and the trainer assesses it. If the trainer feels confident in the chart auditor's ability, the chart auditor can be left to screen charts alone using the guide as a reference.

The data gathered from the chart screening form can be used in two ways:

- 1) Each form can be reviewed and if the patient meets the criteria determined by the practice, then a copy of the form itself or a completed pharmacist consultation referral form can be forwarded to the pharmacist. The pharmacist would then book an appointment and conduct a medication assessment.
- 2) The data can be entered into a data management computer program. The data can then be used to create a summary profile of the practice site for the medication-related indicators from the form. The practice profile summary can be reviewed by each member of the practice and discussed at a team meeting. The practice profile summary can contain

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both statements and graphs depicting the combined results from the data gathered using the form. For example: 12% of women over age 65 are using hormone replacement therapy (HRT); 7% of patients over age 65 have been prescribed more than eight medications; 20% of patients on potassium-wasting diuretics had no K⁺-levels recorded in the chart in the past year.

If the practice uses an EMR system, the indicators on the form can also be programmed as alerts.

F. Overcoming Challenges

Challenges that may be difficult to overcome

Abstracting data from medical records can be time-consuming and labour intensive, particularly if there is information missing and/or the patients' charts are paper-based. If the patients' records are not up-to-date, under- and/or over-reporting of the chosen indicators may occur.

G. Facilitating Factors

If the practice site is fully computerized, the amount of time required to abstract the necessary data is decreased.

H. Evaluation Results

Between May and November 2004, 1808 charts were reviewed from a random sample of patients 65 years of age and older in seven Ontario family practice networks using a structured form. The form included 22 indicators that were chosen based on established validity, high expected potential for improving health or reducing drug-related risk, high expected prevalence, and feasibility for data abstraction. One year of data were examined using the day the chart review was performed as a guide, such that the year preceding the chart review was audited. Of all patient charts reviewed, 36% (n=654; range 24% to 56%) of patients met three or more of the criteria. It was found that 18% (n=319; range 6% to 29%) of patients were using more than eight medications. Also, 10% of patients (n=177; range 5% to 27%) were taking a potassium-wasting diuretic and had either no potassium level recorded, or were found to have low potassium. Five per cent (n=88; range 3% to 17%) of patients had diabetes and an A1C higher than 0.075. In addition, 5% (n=86; range 2% to 7%) of patients had hyperlipidemia, an elevated low-density lipoprotein (LDL) level, and had not been prescribed a lipid-lowering agent.⁹

⁹ Dolovich L, et al. Chart audit of indicators for underutilization of effective drug therapy and drug related risk in primary care. *Can J Pharmacol* 2005;12:e60.

PRACTICE ENHANCEMENT EXAMPLES

Chart Screening Form

Chart Audit for Prevalence of Drug and Disease Indicators

Patient sex: M F
 Patient age: _____ or DOB (yy.mm.dd): _____
 Date of last visit (yy.mm.dd): _____
 Physician name: _____

Chart #: _____
 Site #: _____
 Date: ____ / ____ / ____
 D M Y

Excluded patients

- | | | | |
|---|------------------------------|-----------------------------|-------------------------------------|
| Less than one visit to the family physician in the last 12 months | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| More than 20 visits to the family physician in the last 12 months | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Awaiting placement to a nursing home or long-term care | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Alcoholism | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Palliative care patient | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Family physician only sees as a home visit
(i.e., patient cannot come to the clinic) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Don't Know |

If you chose Yes for any of the above criteria, DO NOT collect any further information on this form.

Considered for referral for medication management consultation:

Patient has to be 65 years of age or over *and* meet either

- 2 criteria in Section 1 *or*
- 1 criterion each in Section 1 and Section 2

Section 1: Vascular and Symptom Based Criteria

1. Elevated blood pressure — one reading >155/95mmHg or 140/90mmHg in diabetics
2. Elevated — HbA1c >0.075 (7.5%)
3. Elevated LDL-C >3.4mmol/L (F) or >2.6mmol/L (M)
- 4a. Diagnosis of hypertension and *no* blood pressure readings in the past 12 months **or**
 - b. Diagnosis of diabetes and *no* HbA1c readings in the last 12 months **or**
 - c. Diagnosis of hyperlipidemia and *no* LDL readings in the past 12 months
5. Diagnosis of osteoarthritis or rheumatoid arthritis
6. Using narcotics (codeine, morphine or other as per list)
7. Diagnosis of hypertension, diagnosis of diabetes and not using an ACE-I
8. Diagnosis of hypertension, elevated blood pressure and using an NSAID
9. Diagnosis of hyperlipidemia, elevated LDL and not using a lipid lowering agent
10. Diagnosis of hypertension, high blood pressure and not using a potassium wasting diuretic

Section 2: Drug-Based Criteria

1. Using an NSAID with *no* BUN/creatinine levels measured in past 12 months or BUN/creat is elevated
2. Using a potassium wasting diuretic with *no* potassium levels measured in the past 12 months or low potassium
3. Using ACE-I and *no* BUN/creatinine levels measured in the past 12 months or BUN/creat is elevated
4. Using ACE-I and *no* potassium levels measured in the past 12 months or elevated potassium
5. Using phenytoin and drug level is elevated
6. Using theophylline and drug level is elevated
7. Using lithium and drug level is elevated
8. Using digoxin and the drug level is elevated
9. Using estrogen/hormone replacement therapy (ERT or HRT)
10. Using more than eight medications

Other

11. More than two hospitalizations in past 12 months

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Screening Form

Review the patient chart for each of the following criteria.
At least two of the boxes should be checked for each criteria.

Chart #: _____

Site #: _____

Date: ___/___/___
 D M Y

Section 1: Vascular and Symptom Based Criteria

1. Record HbA1c readings measured in the past 12 months: (if > 3 in past 12 months, record 3 most recent readings)

Check (✓) if there are no readings in the past 12 months, and proceed to question 2.

Date (DD/MM/YY) Begin with most recent	HbA1c reading	Elevated (check box if >0.075)
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

2. Record blood pressure (BP) readings in the past 12 months: (if > 4 readings in past 12 months, record 4 most recent)

Check (✓) if there are no readings in the past 12 months, and proceed to question 3.

Date (DD/MM/YY) Begin with most recent	Systolic (mmHg)	Diastolic (mmHg)	Elevated (>155/95mmHg or 140/90mmHg in diabetics)
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	

3. Record LDL (cholesterol) readings in the past 12 months and complete the following table:

Check (✓) if there are no readings in the past 12 months, and proceed to question 4.

Date (DD/MM/YY) Begin with most recent	LDL reading	Elevated (female and LDL >3.4 or male and LDL >2.6)
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

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4. Patient has osteoarthritis or rheumatoid arthritis Yes No
-
5. Patient using narcotics (codeine or morphine) Yes No
-

Section 2: Drug-Based Criteria

6. Patient using a NSAID Yes No Don't Know
- (BUN/creatinine measured within 12 months)* Yes No Don't Know
- (Last BUN/creatinine measurement within 12 months is elevated)* Yes No Don't Know
-
7. Patient using a potassium wasting diuretic Yes No Don't Know
- (Potassium measured within 12 months)* Yes No Don't Know
- (Last potassium measurement within 12 months is low)* Yes No Don't Know
-
8. Patient using Phenytoin Yes No Don't Know
- (Drug level is elevated)* Yes No Don't Know
-
9. Patient using Digoxin Yes No Don't Know
- (Drug level is elevated)* Yes No Don't Know
-
10. Patient using Theophylline Yes No Don't Know
- (Drug level is elevated)* Yes No Don't Know
-
11. Patient using ACE-I Yes No Don't Know
- (BUN/creatinine measured within 12 months)* Yes No Don't Know
- (Last BUN/creatinine measurement within 12 months is elevated)* Yes No Don't Know
- (Potassium level measured within 12 months)* Yes No Don't Know
- (Last potassium measurement within 12 months is elevated)* Yes No Don't Know
-
12. Patient using Lithium Yes No Don't Know
- (TSH measured in past 12 months)* Yes No Don't Know
- (Drug level is elevated)* Yes No Don't Know
-
13. On Estrogen Replacement Therapy Yes No Don't Know
-
14. Is the patient taking more than 8 medications? Yes No Don't Know
-

Other

15. Was patient hospitalized more than 2 times in past 12 months? Yes No Don't Know
-

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Additional Information

Diagnoses

Does patient have any of the following conditions? (based on written words in chart):

Diabetes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Hypertension/high blood pressure	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Hyperlipidemia/hypercholesteremia/high cholesterol	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know

If No checked for all 3 conditions do not complete the drug lists below.

Is the patient using any of the following diuretics:

(✓ check only if using drug)

- chlorthalidone (Hygroton™, Novo-thalidone™, Apo-chlorthalidone™)
- furosemide (Lasix™, Novo-semide™, Apo-furosemide™, Furoside™, Uritol™)
- hydrochlorothiazide (Hydrodiuril™, Novo-hydrazide™, Apo-hydro 25 [or 50] Hydrochlorothiazide™)
- hydrochlorothiazide & losartan (Hyzaar™)
- hydrochlorothiazide & spironolactone (Aldactazide-25™ [or 50], Novo-spirozine-25™ [or 50])
- hydrochlorothiazide & triamterene (Apo-triazide™, Novo-triamzide™, Nu-triazide™, Dyazide™)
- indapamide (Lozide™, Gen-indapamide™, Apo-indapamide™)
- metolazone (Zaroxolyn™)
- spironolactone (Aldactone™, Novo-spiroton™)
- triameterene (Dyrenium™)

Using any of the following ARBs:

(✓ check only if using drug)

- candesartan (Atacand™)
- irbesartan (Avapro™)
- losartan (Cozaar™, Hyzaar™)
- telmisartan (Micardis™)
- valsartan (Diovan™)

Using any of the following ACE inhibitors:

(✓ check only if using drug)

- benazepril (Lotensin™)
- captopril (Capoten™, Syn-captopril™, Apo-capto™, Nu-capto™, Novo-captopril™, Gen-captopril™)
- cilazapril (Inhibace™)
- enalapril (Vasotec™)
- fosinopril (Monopril™)
- lisinopril (Prinivil™, Zestril™)
- lisinopril & hydrochlorothiazide (Zestoretic™, Prinzide™)
- perindopril (Coversyl™)
- quinapril (Accupril™)
- ramipril (Altace™)

Using any of the following antilipemic drugs:

(✓ check only if using drug)

- atorvastatin (Lipitor™)
- bezafibrate (Bezalip™)
- cholestyramine resin (Questran™, Novo-cholamine Light™, PMS-cholestyramine™, Syn-cholestyramine™)
- clofibrate (Atromid-S™, Novo-fibrate™)
- colestipol HCL (Colestid™)
- fenofibrate (Lipidil™, Apo-fenofibrate™, Nu-fenofibrate™, Lipidil Micro™)
- fluvastatin (Lescol™)
- gemfibrozil (Lopid™)
- pravastatin (Pravachol™)
- rosuvastatin (Crestor™)
- simvastatin (Zocor™)

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Drug Classes

Cardiovascular drugs include:

- digoxin (Lanoxin™)

Estrogen Replacement Therapy (ERT) products include:

- conjugated estrogens (C.E.S™, Premarin Tablets™), conjugated estrogens & medroxyprogesterone acetate (Premplus™)
- estradiol-17 (Climara™, Estalis™, Estalis-sequi™, Estrace™, Estracomb™, Estraderm™, Estradot™, Estring™, Estrogel™, Oesclim™, Rhoxal-estradiol Derm™, Vagiferm™)
- estradiol benzoate (Climacteron™)
- estradiol valerate (Delestrogen™)

Lithium includes:

- lithium (Carbolith™, Lithane™, Lithizine™)

Narcotics include:

- codeine preparations (codeine, codeine phosphate, Tylenol™ #1 or 2 or 3 or 4, Emtec™, Empracet™, Atasol™, Exdol™, Nnovo-gesic™, AC&C™, 282™, 292™)
- fentanyl (Duragesic™)
- hydromorphone hcl (Dilaudid™, Hydromorphone™)
- meperidine hcl (Demerol™)
- morphine (M.O.S.-Sulfate™, Morphitec™, M-Eslon™, MS Contin™, Oramorph SR™, Morphine Sulphate™, Stalex™, MS-IR™)
- oxycodone (Percocet™, Percodan™, Oxycocet™, Oxycodan™, Endocet™, Endodan™)

NSAIDs include:

- celecoxib (Celebrex™)
- diclofenac sodium (Voltaren™, Novo-diclofenac™, Apo-diclo™, Nu-diclo™, Arthrotec™)
- diflunisal (Dolobid™, Apo-diflunisal™, Novo-diflunisal™)
- fenoprofen (Nalfon™)
- floctafenine (Idarac™)
- flurbiprofen (Froben™, Ansaid™, Apo-flurbiprofen™, Nu-flurbiprofen™, Novo-flurprofen™)
- ibuprofen (Apo-ibuprofen™, Novo-profen™, Motrin™)
- indomethacin (Indocid™, Novo-methacin™, Apo-indomethacin™, Nu-indo™, Indotec™, Novo-methacin™)
- ketoprofen (Rhodis™, Apo-keto™, Orudis™, PMS-ketoprofen™, Novo-keto™)
- meloxicam (Mobicox™)
- naproxen (Naprosyn™, Naxen™, Apo-naproxen™, Novo-naproxen™, Nu-naprox™)
- piroxicam (Feldene™, Apo-piroxicam™, Novo-piroxicam™, Nu-pirox™, Kenral-piroxicam™ [or Rho-, Gen-, PMS])
- rofecoxib (Vioxx™)
- sulindac (Clinoril™, Novo-sundac™, Apo-sulin™, Nu-sulindac™)
- tiaprofenic acid (Albert-tiafen™, Surgam™, Apo-tiaprofenic™, Novo-tiaprofenic™)
- tolmetin (Tolectin™, Novo-tolmetin™)

Potassium Wasting drugs include:

- furosemide (Lasix™, Novo-semide™, Apo-furosemide™, Uritol™)
- hydrochlorothiazide (Hydrodiuril™, Novo-hydraside™, Apo-hydro™)
- indapamide (Lozide™, Gen-indapamide™, Apo-indapamide™)
- metolazone (Zaroxolyn™)


The IMPACT Program

*Pharmacists in Family Practice:
A Resource*

PRACTICE ENHANCEMENT GUIDE

Optimizing Medication Use in Family Practice: Medication-focused Practice Enhancements

Get the most out of your IMPACT Pharmacist



The IMPACT Program
*Pharmacists in Family Practice:
A Resource*

REFER IF YOUR PATIENT:

- Needs help with optimal control of a **chronic condition** (such as diabetes, blood pressure, cholesterol, pain, arthritis)
- Is taking **multiple medications** (to simplify, ensure appropriate dosing times, manage or prevent drug related problems)
- Might be having an **adverse drug event**.
- Has **recently been hospitalized** (for counselling on medication changes)

Most Common Inhaled Bronchodilators

Agent	Short-Acting B ₂ -Agonists		Long-Acting B ₂ -Agonists		Anticholinergics		Combination
	Salbutamol	Terbutaline	Salmeterol	Formoterol	Ipratropium	Tiotropium	Salbutamol/Ipratropium
Brand Name	Ventolin® Generics	Bricanyl®	Serevent®	Oxeze®	Atrovent®	Spiriva®	Combivent®
System	MDI Diskus® Inhalation	Turbuhaler®	MDI Diskus®	Turbuhaler®	MDI Inhalation	HandiHaler®	MDI Inhalation
Colour	Blue	Blue bottom					
Onset	5-15 min	5-15 min					
Duration	4-6 h	4-8 h					
Adult Dose	1-2 pfs TID-QID PRN	1-2 pfs TID-QID PRN					

Table 1: How Medication-focused Practice Enhancements Improve Medication Management

Medication Management Process	Problems in Family Practice	Example of Enhancement Developed
Provide group education regarding medications	Patients need additional information on their condition; physician unable to provide all that is needed	Cholesterol Clinic Day (Chapter 5) — provides information that would benefit the patients and physicians of the practice site, and that is often not
Completing Section 8 forms	Forms are neither available nor easily completed	
Reporting adverse drug reactions (ADR)	Rarely done; voluntary system; forms not readily available or easily	

DIABETES PATIENT CARE FLOWSHEET

Practice Site Letterhead

Name: _____ D.O.B.: _____ Chart # _____ Diagnosis Date: _____ Type of DM: _____

Risk factors: Obesity Fam Hx Smoker CVD BP Lipids Gest DM

Complications/Comorbidities: Retinopathy Nephropathy Neuropathy Foot Disorders Other

Past Medical/Surgical Health: _____

Medications	Date				
Diabetic medications: Oral Insulin					
BP medications: ACEI/ARB Diuretic Beta blocker CA++ channel blocker					

Chart Audit for Prevalence of Drug and Disease Indicators

Patient sex: M F

Patient age: _____ or DOB (yy.mm.dd): _____

Date of last visit (yy.mm.dd): _____

Physician name: _____

Chart #: _____

Site #: _____

Date: ____/____/____
D M Y

Excluded patients

Less than one visit to the family physician in the last 12 months Yes No Don't Know

More than 20 visits to the family physician in the last 12 months Yes No Don't Know

Awaiting placement to a nursing home or long-term care Yes No Don't Know

Alcoholism Yes No Don't Know

Palliative care patient Yes No Don't Know

Family physician only sees as a home visit (i.e., patient cannot come to the clinic) Yes No Don't Know

If you chose Yes for any of the above criteria, DO NOT collect any further information on this form.



The goal of the IMPACT program, as the acronym suggests, is to Integrate family Medicine and Pharmacy to Advance primary Care Therapeutics. A growing body of research supports our belief that having pharmacists working in family practice settings enhances patient care.¹ This guide is the product of more than 10 years of planning and collaboration between investigators, government and community leaders.

ACKNOWLEDGEMENTS AND KEY CONTACTS

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** Jean Jones passed away in March 2005
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The IMPACT team would like to acknowledge all the work and effort placed into each practice enhancement by the pharmacists and their practice sites.

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1. Sellors J et al., A Randomized Controlled Trial of a Pharmacist Consultation Program for Family Physicians and their Elderly Patients. *CMAJ* July 8, 2003;169(1):17-22.