

# Sharing the Care: Alternate Pharmacist Involvement in Diabetes Management

Catherine Bednarowski, BScPhm, RPh, CDE  
Clinical Pharmacist  
Hamilton Family Health Team

Mary Nelson, BScPhm, RPh  
Clinical Pharmacist  
Burlington Family Health Team

# Shared Medical Appointments

Catherine Bednarowski, BScPhm, RPh, CDE  
Clinical Pharmacist, Hamilton FHT  
[catherine.bednarowski@hamiltonfht.ca](mailto:catherine.bednarowski@hamiltonfht.ca)

# Learning Objectives

- Provide description of Shared Medical Appointments ( SMAs) and it's impact on DM care
- Share our clinic experience and the value of the initiative
- Overview required resources to implement SMAs



# Hamilton FHT- Harvard Square Clinic

- 5 MDs
- Patients rostered – 8500
- With diabetes – 608 (7.2%)
- Attending SMA – 66(10.9%)
- NP – 2 FTE
- RN – 2 FTE
- Mental health – 2 FTE
- Dietician – 1 FTE
- Pharmacist – 0.5 FTE



# What is a Shared Medical Appointment?

A 90-minute appointment held simultaneously with 8-10 patients with chronic diseases or similar medical conditions in an interactive visit



# What is the Evidence ?

- Improved HbA<sub>1c</sub> <sup>(3,4)</sup>
- Improved systolic BP <sup>(3)</sup>
- Reduced ER visit <sup>(2)</sup>
- Greater concordance with DM guidelines<sup>(2)</sup>

2. A. M. Davis et al., The Potential of Group Visits in Diabetes Care. Volume 26, Number 2, 2005, *Clinical Diabetes* 58-62
3. D. Edelman et al., Shared Medical Appointments with Diabetes Mellitus. A Systematic Review, *Journal of Internal Medicine, Society of General Internal Medicine* 2014
4. L. Housden MD, Effectiveness of group medical visits for Improving DM care. *CMAJ* September 17, 2013 185(13)

# Patient Benefits

- Increased patient satisfaction (1,6)
- Improved access to care (1,6)
- Shared problem solving (1)
- Answers to questions they might not have thought to ask (1)
- Promote positive interactions between patients(1)
- Improved DM knowledge and quality of life(5)

1. Edward B. Noffsinger, Running Group Visits in Your Practice; *Springer Science + Business Media, LLC* 2009

5. Trento M. et al., A 5 year randomized controlled study of learning, problem-solving ability, and QOL modification in people with DM2 managed by group care. *Diabetes Spectrum* 27, 2004

6. Heyworth et al., Influence of Shared Medical Appointments on patients Satisfaction: A Retrospective 3-Year Study. *Ann Fam Med* 2014; 324-330

# Patient Testimonials

“You find out that you're not the only one that has these types of problems.”

“You get some new ideas from other people.”

“ More information is shared compared to one-on one appointments”

“Like to see how others are doing”

“Atmosphere is very relaxed yet informative”

# Health Care Provider Benefits

- Increased provider satisfaction <sup>(1)</sup>
- More informative and relaxed pace of care<sup>(1)</sup>
- Interactive approach to patient care in a multi-disciplinary setting <sup>(1)</sup>
- Increased patient access without increasing physician hours <sup>(6)</sup>

1. Edward B. Noffsinger, Running Group Visits in Your Practice; *Springer Science + Business Media, LLC* 2009  
7. Bronson DL, Maxwell RA, SMAs: Increasing patient access without increasing physician hours. *Cleve Clin Journal of Medicine* 2004; 71

# Provider testimonials

“Team members not only help patients but also learn from one another.”

“More efficient way of providing diabetes care.”

“New way to deliver care, more fun.”

“ True example of interprofessional team collaboration.”



# Preparation

## 1 WEEK BEFORE:

- Reminder calls
- SMA planning meeting

## DAY BEFORE:

- Review patient information
- Prepare chart, print out lab requisition, lab result
- Assemble any patient materials



# SMA Day

- Measurements, immunization
- Welcome/introduction
- Discuss patient questions/ short presentation
- Review lab results
- Set SMART goals
- Refill medications
- Debrief
- Document



# Roles

- **MD/NP** - group facilitation, immunization, addressing non DM related issues, medication refill
- **CDE** - lead group discussions, review/ prepare charts, vitals, foot check, immunizations, documentation
- **Admin** – reminder calls, room preparation/clean up, scheduling, billing



# Billing



## Chronic Disease Shared Appointments

- Pre-scheduled
- Chronic disease management
- 2 or more patients with same diagnosis
- DM, CHF, Asthma, COPD, Hypercholesterolemia, Fibromyalgia
- Physician must be in constant personal attendance
- Clinical assessment
- Same day documentation
- K144 - 6 to 12 patients, 11.05/unit ( 1unit=30min)

# How to Recruit Patients ?

- Identify patient interest
- Personal invitation, letters, flyers
- Offer to book an appointment – “just try once”
- Educate office staff
- Re-offer yearly



# Things to Consider Before You Start

- Planning committee
- Invitation
- Frequency
- Time
- # of patients
- Location, size of room
- Team – MD, NP, group facilitators (CDE), admin staff
- Dry runs

# What is the SMA Impact on Patients, Clinicians and Health Teams?

- Empower patients
- Open forum with peers
- Patients learning from patients
- Providers continually learn from patients and each other
- Fun, efficient and supportive way to deliver care

# What is the Value in the Initiative?

- Improved access
- Improved patient and provider satisfaction
- Opportunity for multidisciplinary approach
- An additional healthcare choice

# What Resources are Required?

- Need leadership/Physician champion, Certified diabetes educator, admin support
- Planning committee
- Location, room to accommodate 10-13 people
- 3-6 months to implement
- Expenses – scale, BP machine, monofilament, laptop, printer, photocopier, board/flip chart, markers, folders, pens, refreshment and snacks ( optional)



# References

1. Edward B. Noffsinger, *Running Group Visits in Your Practice*; Springer Science + Business Media, LLC 2009
2. Andrew M. Davis, MD, MPH; Devin R. Sawyer, MD; Lisa M. Vinci, MD. The Potential of Group Visits in Diabetes Care. Volume 26, Number 2, 2005, *Clinical Diabetes* 58-62
3. David Edelman, MD; Jennifer M. Gierisch, PhD, MPH; Jennifer R. McDuffie, PhD; Eugene Oddone, MD; John W. Williams, Jr., MD, MHS. Shared Medical Appointments with Diabetes Mellitus. A Systematic Review, *Journal of Internal Medicine, Society of General Internal Medicine* 2014

## References (cont'd)

4. Housden MD, Effectiveness of group medical visits for Improving DM care. *CMAJ* September 17, 2013 185(13)
5. Terry Ridge, DNP, ANP-BC, BC-ADM; Shared Medical Appointments in Diabetes Care: A Literature Review; *Diabetes Spectrum* Volume 25, Number 2, 2012
6. Heyworth et al., Influence of Shared Medical Appointments on patients Satisfaction: A Retrospective 3-Year Study; . *Ann Fam Med* 2014; 324-330
7. Bronson DL, Maxwell RA, SMAs: Increasing patient access without increasing physician hours. *Cleve Clin Journal of Medicine* 2004; 71

# Patient Work Sheet and Drug Therapy Recommendations

Mary Nelson, BScPhm, RPh  
Clinical Pharmacist  
Burlington Family Health Team

# Learning Objectives

- Share current pharmacist involvement in diabetes care at Burlington Family Health
- Consider ideas to increase impact of pharmacist involvement while reducing pharmacist time so they can be involved in other patient care initiatives



# Burlington Family Health Team

- 5 practices
- One diabetes clinic day/month (Tuesday)
- Patients rostered - 9098
- With diabetes – 520 (5.7%)
- NP – 1 FTE
- OT – 1 FTE
- Mental health – 1.4 FTE
- Dietician (CDE) – 0.5 FTE
- Pharmacist – 0.5 FTE

# Prior to Diabetes Clinic

## Admin Clerk

- Fax to pharmacy requesting patient MedsCheck or medication record

## Pharmacist

- Updates medication list in patient file
- Prepares patient flow sheet – 4 copies
  - current and previous blood work
  - diabetes/cholesterol/BP related meds
  - recommended changes
- Lab requisition for 3 month follow-up
- Patient results and comments sheet

# Day of Diabetes Clinic

## Pre-clinic huddle

- Nurse, dietician, medical resident, physician

## Nurse

- Diabetes flow sheet
- BP
- Foot check

## Dietician/CDE

- Brief discussion with patient
- May refer for F/U one-on-one more detailed appointment

# Day of Diabetes Clinic (cont'd)

Medical resident and/or physician

- Review diabetes management to date
- Discuss recommendations on flow sheet
- Specific details outlined on patient comment sheet
- Lab requisition modified as necessary
- Patient instructed to F/U with physician, pharmacist or dietician as needed
- May request pharmacist to F/U on specific issue

# One-on-One Pharmacist Involvement

## MD referrals

- newly diagnosed patient
- extremely elevated A<sub>1c</sub> and FBS
- patients with adherence issues
- insulin starts

## Individual patients

- samples
- phone call F/U
- verbal scripts to pharmacy

# Patient Work Sheet

Age	Current A1c		Previous A1c		Current FBS		Previous FBS		Current eGFR		Previous eGFR	
78	6.3%	Jul 11/17	6.3%	May 23/17	5.6	Jul 11/17	8.2	Jan 19/17	37	Jul 11/17	36	May 23/17
80	7.2%	Jul 14/17	6.9%	Mar 13/15	9.5	Jul 14/17	9.7	Apr 22/17	33	Jul 14/17	37	Apr 22/17
53	7.8%	Jul 18/17	8.3%	Sep 19/16	15.8	Jul 18/17	9.4	Sep 19/16	95	Jul 18/17	88	Sep 19/16
86	8.1%	Jul 11/17	8.2%	Apr 28/16	9.0	Jul 11/17	9.2	Apr 28/16	25	Jul 11/17	30	Nov 17/16
81			8.9%	Feb 3/17			12.0	Feb 3/17			39	Feb 22/17
	Current LDL		Previous LDL		Current HDL		Current Triglycerides		Current ACR		Previous ACR	
CL			2.67	Jan 19/17	1.06	Jan 19/17	1.50	Jan 19/17				
MH			1.84	Apr 22/17	1.00	Apr 22/17	3.06	Apr 22/17			9.7	Mar 13/15
TW	2.8	Jul 18/17	2.71	Mar 9/16	1.07	Jul 18/17	1.02	Jul 18/17	N/A	Jul 18/17	0.4	Sep 19/16
EM	1.4	Jul 11/17	1.71	May 13/15	1.10	Jul 11/17	2.89	Jul 11/17	7.3	Jul 11/17	11.5	Nov 17/16
GF			2.63	Feb 3/17	2.37	Feb 3/17	1.35	Feb 3/17			9.1	Feb 3/17
CL	Jentaduetto 2.5/500 BID, Quinapril 20, Crestor 10 - increase dose or add Ezetrol?											
MH	Jentaduetto 2.5/500 BID, Ramipril 2.5, Lipitor 40, ECASA 81; sees Drs. Nisker and Pandeya											
TW	Lantus 38 - increase dose? Humalog TID with meals, Enalapril 2x20, Lipitor 40 - increase dose or add Ezetrol; c-peptide and BS just after eating to determine if type 1 or 2											
EM	Ramipiril 10, Liptor 10; Trajenta or basal insulin? B12 90											
GF	Janumet 50/1000 BID - switch to Jentaduetto, Crestor 5 - increase dose or add Ezetrol; ACE/ARB? Basal insulin?											

# Patient Results and Comments

*Burlington*  
Family Health Team

**Patient:**

**Date:**

**Current A1c:**

**Date:**

**Target < 7.0%**

**Current LDL:**

**Date:**

**Target < 2.0**

**Current BP:**

**Date:**

**Target < 130/80**

**Current FBS:**

**Current GFR:**

**Current ACR:**

**Changes recommended today:**

---

---

---

---

**Please make appointment for:**

- Dr. Field Diabetes Clinic in 3 or 6 months**
- Follow up with Dr. Field in \_\_\_\_\_**
- Follow up with dietician in 3 or \_\_\_\_ months**
- Follow up with pharmacist in 3 or \_\_\_\_ months**
- Follow up with \_\_\_\_\_ in \_\_\_\_\_**

# Diabetes Stats (Aug/16-Jul/17)

	Individual Patients	On-on-One	Diabetes Clinic	Phone Call F/U
Borden	53	18	57	32
Davis	18	11	11	15
Field	69	25	78	112
Grzeslo	73	33	91	74
Ludlow	45	10	67	47
Total patients	258 (49.6%)			
Total interventions		97 (14.2%)	304 (44.6%)	280 (41.1%)
Average time/intervention		60 min	20 min	10 min
Total time		97 hrs (39.6%)	101 hrs (41.3%)	46.7 hrs (19.1%)

# SADMANS

When you are ill, particularly if you become dehydrated due to vomiting or diarrhea, some medicines could cause your kidney function to worsen or result in side effects.

If you become sick and are unable to drink enough fluid to keep hydrated, you should **STOP** the following medications:

<b>S</b>	Sulfonylureas	- gliclazide, glimepiride, glyburide
<b>A</b>	ACE Inhibitors	- benzapril, captopril, cilazapril, enalapril, fosinopril, lisinopril, perindopril, quinapril, ramipril,trandolapril
<b>D</b>	Diuretics	- chlorthalidone, ethacrynic acid, furosemide, hydrochlorothizide, indapamide, metolazone, spironolactone
<b>M</b>	Metformin	
<b>A</b>	Angiotensin Receptor Blockers	- candesartan, eprosartan, irbesartan, losartan, telmisartan, valsartan
<b>N</b>	Non-Steroidal Anti-inflammatory	- ASA, celecoxib, diclofenac, diflunisal, etodolac, floctafenine, flurbiprofen, ibuprofen, indomethacin, ketoprofen, ketorolac, mefenamic acid, meloxicam, nabumetone, naproxen, piroxicam, sulindac, tenoxicam, tiaprofenic acid
<b>S</b>	SGLT-2 Inhibitors	- canagliflozin, dapagliflozin, empagliflozin

Insulin should not be stopped, but you may need to reduce the dose, so talk with your doctor or pharmacist. Also don't forget to restart these medications once you are over your illness.

# Patient Diabetes Pamphlet

---

## DIAGNOSED WITH DIABETES?

---

*Are You At Target?*

**A1c < 7.0%**

**BP < 130/80**

**Cholesterol (LDL) < 2.0**



---

**Targets may vary for select patients**

Discuss your management options  
with your Pharmacist or Physician

# Current Issues

- Not all patients included in diabetes registry
- Many patients not seen > 1 year
- No current blood work
- Diabetes clinics filled with current patients returning every 3 months, many of whom are well controlled
- Utilization of IHPs
  - NP
  - RN
  - dietician who is CDE
  - pharmacist

## Potential Next Steps

- Identify all rostered patients diagnosed with diabetes or prediabetes
  - get blood work done and patient seen
- Have NP/RN or NP/CDE focus on patients already seen in diabetes clinic and/or well controlled for ongoing management
  - patient to see physician annually
- Physician diabetes clinics to focus on newly diagnosed, not recently seen, or medically complex patients

## Potential Next Steps (cont'd)

For all NP/RN, NP/CDE and MD Diabetes Clinics

- Admin assistant to initiate patient work sheet
  - current and previous blood work
  - diabetes/cholesterol/BP related meds
- Pharmacist to review patient work sheet and make recommendations
- Admin assistant or RN to prepare lab requisitions for follow up and patient results/comment sheet

# Potential Pharmacist Involvement with Diabetes Program

	Total Patients Rostered	Patients with Diabetes	On-on-One (15%)	Diabetes Clinic (75%)	Phone Call F/U (50%)
Borden	1701	126 (7.4%)	19	95	63
Burse	986	37 (3.8%)	6	28	19
Davis	901	43 (4.7%)	7	33	22
Field	1864	153 (8.2%)	23	115	77
Grzeslo	2312	159 (6.9%)	24	119	80
Ludlow	1227	117 (9.5)	18	88	59
Total patients	8991				
Total interventions			97	478	320
Average time/intervention			60 min	5 min	10 min
Total time			97 hrs	40 hrs	53.3 hrs

# Comparison

Current	One-on-One	Diabetes Clinic	Phone Call F/U	Total
Total interventions	97 (18.6%)	304 (58.5%)	280 (53.8%)	681
Average time/intervention	60 min	20 min	10 min	
Total time	97 hrs	101 hrs	46.7 hrs	244.7

Proposed	One-on-One	Diabetes Clinic	Phone Call F/U	Total
Total interventions	97 (15%)	478 (75%)	320 (50%)	895 (31.4% more)
Average time/intervention	60 min	5 min	10 min	
Total time	97 hrs	40 hrs	53.3 hrs	190.3 (22.2% less)

# Questions?



[catherine.bednarowski@hamiltonfht.ca](mailto:catherine.bednarowski@hamiltonfht.ca)

[mnelson@burlingtonfht.com](mailto:mnelson@burlingtonfht.com)