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# Improvement in Diabetic Care

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# Improvement in Diabetic Care

Richard Smith

June 2014

Village Primary Care

Working under Dr. Jim Carroll

# Problem Identification

- Over the years, steps have been taken to ‘streamline’ the process when it comes to diabetic management in the Village Primary Care (VPC) practice.
- As more and more outcomes are monitored, it is important to both identify the shortcomings of the practice as far as diabetic management, and attempt to implement processes to ensure better outcomes.
- VPC is doing well in many areas (LDL/BP/BMI), but is lacking in monitoring and implementing certain areas of diabetic management
  - Recommending and tracking eye exams
  - HbA1c
  - Micro albumin
  - **Foot exams**



# How Village Primary Care is doing...

- Of diabetics seen in the past six months...(based on a sample from one of our VPC's providers)
  - 100% of diabetic patients seen had their blood pressure monitored
    - 57% had a systolic pressure <130 mmHg
  - 80% had their LDL cholesterol measured within the last year
    - 69% of those measured had an LDL <100mg/dL
  - 67% of the diabetics seen had a hemoglobin A1c measured in the last year
    - 21% of those that were measured were >9%
  - **25% were tested for micro albuminuria in the past year**
  - **22% had a foot exam at the last appointment**
    - None of which included a monofilament examination

**According to the data, less than 1 percent had an eye exam in the last year\*\*\***

This is more of a processing issue. When patients see an eye doctor, it must be manually entered on the flow sheet in order for it to be tracked. Patients may be attending their appointments, but if the eye doctor does not send a notice, or it is not promptly entered, then there is no record of it taking place.

# Health Costs

- National average of prevalence of type 2 diabetes has increased from 8.3% in 2010 of the US adult population to 9.3% in 2012
- Approximately 400 of the approximately 4500 of the Village Primary Care patient census has diabetes on their problem list, which is about on par with the national average
- Diabetes is a growing problem, with an estimated cost of over \$245 billion per year nationally
- The majority of this cost is due to hospitalizations, so an ever increasing amount of effort is being put on preventative care and better management in order to curb expenditures



# Health costs continued...

- The complications due to poor control and management are serious and well researched. Uncontrolled diabetes can lead to many problems including:
  - Higher rates of heart attacks
  - Higher rates of CVD
  - The number one cause of new blindness in patients under 65 years old
  - Stroke
  - Kidney Disease
  - Vascular problems and nerve problems
- Controlling diabetes could lead to decreased negative outcomes, as well as an overall decrease in hospitalizations.
- It is important to Village Primary care, because diabetes has been chosen as one of the diseases on which the practice will be monitored. This will in part be based on outcomes. Future funding will directly be influenced by the way the practice manages as well as tracks the disease.

# Connections

- *Name Withheld*-HFVPC office manager.
  - Met on several occasions face to face to discuss the process and implementation of possible changes to the process and implementation of better diabetes control.
- *Name Withheld*—ongoing meetings
  - She has been overseeing the implementation of many in house monitoring of various aspects of diabetic care. She will ultimately be responsible for the reminder letters of not only diabetic care, but other preventative measures.
- Staff meeting on August 1<sup>st</sup> -
  - I was able to present the data and the recommendations for how to proceed with implementation of better diabetic care. I was able to receive feedback from the providers, nursing staff, and office staff in order to best streamline the processes that are involved in attaining our goals. It is clear that certain aspects of streamlining the process will be easily implemented. We all agreed we need to do a better job of doing foot exams, and in the past week we have already seen improvements. We spoke at length about other processes. The providers contributed their thoughts as to what would and would not work.



# What we can do: Foot Exams

- Easiest improvement could be streamlining our foot exam practice.
  - Should take place during all diabetic check ups.
  - Previously, a monofilament has been placed in each room, and a sign has been posted to 'please take off shoes'.
  - Monofilaments should be out on the counter for diabetic exams, both for easy access, and as a reminder for the provider to use during the exam.
  - When rooming patients, after vitals have been taken, **patient needs to be directly asked to take off his/her shoes.** This can be done while he/she wait for examiner to come in.
  - It will be up to the provider to document this so that it is recorded in the flowsheet.



# Eye exams & Micro albumin

- Eye exam problem:
  - OK job of referring them (based anecdotally on patient interactions and reading the charts), but difficulty in tracking them.
  - On a 6 month schedule a census is generated of all patients who have not had an eye exam in the past year, and those patients are both flagged to be reminded during next visit, and mailed a card.
  - This is being done now, but not on regular interval. With the new EMR a lot of this can now be automated.
  - Someone should be responsible for individually entering the data every 6 months from completed visits to the eye doctor.
- Micro albumin
  - Simply ask for a urine to test for micro albumin once a year.
  - This is a fast and cheap test that can be collected with a urine specimen.
  - Need to ensure at each examination if this has been done in the past year in order to ensure good kidney function.
- In the coming months someone will be assigned to enter reminders for lab tests/eye exams in all of the charts.
  - During the group meeting, the possibility of assigning someone the task of entering reminders into the EMR for all of the diabetics for HbA1c/MA/eye exams, but it is a much larger discussion as to who/when to do this. It would be a lot of work up front (for the 400+ diabetics) but would hopefully streamline the process for the future.

# Results

- Foot exams will be done on a routine basis at all diabetic checkups. Most patients come in on a quarterly basis for his or her check ups.
  - Anecdotally, exams have been done much more frequently since our staff meeting. Patients are being asked to take their shoes off, and the microfilaments in the room are being used. There does not seem to be any issues with increased exam time/patient refusal etc.
- Will check in with staff after 1 week of doing this to see how it is going.
  - Are we remembering to ask all patients to remove shoes?
  - Is the monofilament ready and available?
  - Are patients compliant?
  - Are we actually performing thorough exams?
- After six months will take another census of all diabetic patients to see results of our care
- The staff seems on board with all of the changes and is willing to streamline the processes in order to achieve better diabetic care for the practice.



# Evaluation and Limitations

- Talking with the staff, it seems as though that some of the recommendations will go through with no problem, while others may be more difficult to implement. **The staff all seem to agree that simply asking to remove shoes seems like an accomplishable goal that will hopefully quickly improve outcomes.**
- The entering of data for eye exams is still problematic. It has been 'assigned' to one of the staff members, but it is still questionable if this will actually work/be a good use of time. Many of the eye doctors in the area still do not have an EMR, and are still faxing/mailing reports so it is, for the time being, difficult for it to automatically populate into the EMR
- Reminder can be sent out and patients can be informed that lab tests are overdue, but that does not necessarily mean that they will still happen. There are a plethora of reasons as to why someone may not be able to get to a doctor's office for lab work or eye examinations.
- There is still not enough crosstalk between the EMR sections to have BOTH a reminder letter sent and a 'flag' placed in a patient's chart. These flags need to be entered manually at this time.
- Often times patients are managed through outside practices for their disorders (endocrinology). There is not 100% cross talk among practices regarding monitoring of various labs and tests, resulting in 'lost' data at the HFVPC practice.



# Limitations continued...

- Problem lists need to be 100% up to date and accurate. Some of these patients may have had a high blood sugar at one point, and have been fairly well controlled and simply are not aware that they need to be followed with eye exams etc.
- A lot of these recommendations may be overwhelming, and only time will tell if going through and sending letters in mass will be cumbersome or not.

# Recommendations for the future...

- There needs to be more automation of data entry.
  - When a lab result comes back to the office from an outside institution, it needs to be entered automatically. This will come as more and more outside sources use EMR technology and there is increasing cross talk among the programs.
- Problem lists and patient census needs to be monitored closely
  - Keeping an up to date patient list is something that requires time and effort. More measures to streamline the process have to be put in place in order to ensure that accurate data is being collected
- More cross talk within the EMR
  - Right now, patients who are overdue for tests/reminders and are sent letters, are not automatically 'flagged', not allowing the provider to easily see what is overdue.



# Recommendations continued...

- Other chronic diseases need to be addressed
  - Diabetes is only one healthcare issue that is being addressed by looking at this data. Heart disease, smoking status, BMI, are just a few factors that could be addressed and monitored and assessed in the future.
- The same procedure of reminders and flags can be suggested for other preventative tests
  - Mammograms/colonoscopy/pap smears etc. This is being done now, but again, data could be collected to see the effectiveness of the process in place.



# Resources

- *National Diabetes Statistics Report, 2014* (released June 10, 2014)
  - <http://www.diabetes.org/diabetes-basics/statistics/>
- New York Department of Health Diabetes Statistics
  - [https://www.health.ny.gov/statistics/diseases/conditions/diabetes/docs/2012-08\\_diabetes\\_mgmt\\_and\\_care.pdf](https://www.health.ny.gov/statistics/diseases/conditions/diabetes/docs/2012-08_diabetes_mgmt_and_care.pdf)
- National Diabetes Statistics Report, 2014
  - <http://www.cdc.gov//diabetes/pubs/statsreport14.htm>
- 2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults Report From the Panel Members Appointed to the Eighth Joint National Committee (JNC 8)
  - <http://jama.jamanetwork.com/article.aspx?articleid=1791497>