

# Eye Examination

## Satisfying a Quality Care Measure in Diabetes

Meera Shekar, BSN-DNP

### DIABETIC RETINOPATHY

Diabetic retinopathy (DR) is the leading cause of loss of vision (Mann, 2018)

### BACKGROUND

Poor vision impacts the quality of life due to impaired mobility, effects mental health and cognition, weakens employment and educational achievements (Hendrick, Gibson & Kulshreshtha, 2015).

### QUALITY CARE MEASURE

The National Committee for Quality Assurance (NCQA) recommended an annual eye examination as a required Quality Care Measure (QCM) in patients with diabetes mellitus (DM) [Centers for Disease Control, 2017) Visual changes such as diabetic retinopathy (DR) can occur when the glycosylated hemoglobin (HbA1c) exceeds 7.0% [American Diabetes Association (ADA), 2018)].

### PURPOSE

AIM: To meet the Quality Care Measure (QCM) criteria in DM management (ADA, 2018)

Outcome Measures:

-A documented annual eye examination for every patient with DM.

-Level of HbA1c levels in each patient with DM.

### PICOT

In a private family practice, among adults aged 18-90 years with DM:

- 1) what was the range of HbA1c level from June 1, 2017-March 31, 2018?
- 2) what was the rate of documented eye examinations from June 1, 2017-March 31, 2018?
- 3) what was the difference in the HbA1c values between the ages, races, genders in the available data?
- 4) what was the difference in the rate of completed eye exams between the ages, races and genders in the available data?

### METHODS

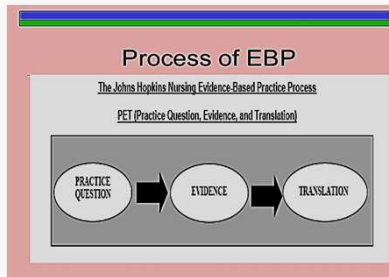
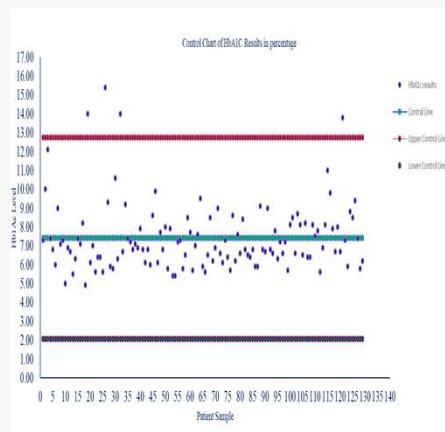
Retrospective Data Period June 01, 2017 - March 31, 2018

Patients with a diagnosis of diabetes (HbA1c over 6.5%)

Demographics-age, gender, race, date of HbA1c, results HbA1c levels

Documentation of eye examination (yes/no)

Date of eye examination completed

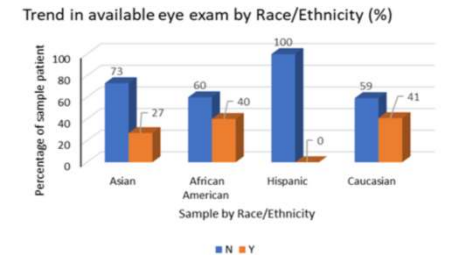


### RESULTS

Descriptive and inferential statistics used for results

N=129 male (n=93) female (n=36)

- 100% adherence in documentation of HbA1c results
- overall HbA1c mean of 7.41%
- HbA1c < 7.0% (51%, n=66)
- HbA1c > 7.0% (49%, n=63)
- Only 30% (n=39) patients had documented eye examination



### DISCUSSION

HbA1c Results revealed

Rate of completed HbA1c N=129 mean HbA1c 7.41%

Rate of completed Eye examination n=39

Why is there a delay in getting examination done?

1. Missing documentation?
2. Patients not getting examination done?
3. Do new tactics have to be used in obtaining results?

### IMPLICATIONS

Need reduction in HbA1c values for 49% of patients (desired value < 7.0%)

No established flow sheet

- for HbA1c
- for eye exam completion

### CONCLUSIONS

Chart reviews are helpful for QI programs in obtaining the HbA1c levels and eye examination results. Improving practice methods for documentation will give a better insight of adherence to recommendations made by the physician. Education to lower HbA1c at each visit will be beneficial. Ultimate goal is to provide better patient outcomes.

### Acknowledgements

DNP Committee Chair: Laura Kuensting, DNP, APRN, PCNS-BC CPNP-PC-CPEN  
DNP Committee Member: Carla Beckerle, DNP, APRN, ANP-BC  
DNP Committee Member: Natalie Murphy, PhD, APRN, FNP-BC

References: Available upon request  
Contact msqf4@mail.umsf.edu