**DIABETES - IMPROVED SERVICE EFFICIENCY IMPROVES RACIAL DISPARITY**

Abel Irena MD MSc, Kushal Patel MD, David B Thompson MD, Abiy Gesese MD, Gregory J. Schleis, MD, Richard J Battiola, MD

Internal Medicine Residency Program – Aurora Health Care - Milwaukee, Wisconsin

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**Overall Goal/Abstract**

**GOAL:** Improving the health outcomes of patients with diabetes mellitus

**PURPOSE:** Improving racial disparity in diabetes outcome indicators among diabetic patients being treated at Aurora Sinai Internal Medicine Ambulatory Clinic.

**Abstract**

NI-V Project Focus: Diabetes Monitoring

- Disparities seen in diabetes management with poor outcomes in Black/African American patients as compared to white race
- Two of the four diabetic indicators showed racial disparity:
  - Glycohemoglobin (A1C) check at least 2/year
  - Blood pressure control to goal (<140/90) in Diabetics
- Known strategies to reduce racial disparities in diabetes include:
  - Community engagement, patient empowerment
  - Increasing access, improving care coordination
  - Improving quality of care
- Data collected through staff interview, group discussion, review of workflow identified key barriers: on-time A1C ordering; patient’s staying for lab work; timely availability of lab results; resident/staff workload

**Materials/Methods**

- Clinical patient disparities in Diabetes for Internal Medicine residency clinic identified using REAL-G categories (race, ethnicity, age, language preferred - gender) from EPIC analyses
- Provider, staff and patient perceptions were obtained
- Optimal interventions identified and prioritized for DM targeted REAL-G disparity, via literature, clinic’s health care team perceptions cognizant of available resources
- A1C testing machine purchased, streamlined clinic workflow for point of care/day of patient appointment access
- Resident, faculty, staff orientation / training
- Resident and Faculty Clinic champions / each day of workweek
- Numerous PDSA cycles were conducted with the leadership of the clinic staff to improve the workflow related to point of care/day of A1C access

**Results**

- % of Diabetic Patients with 2/yr A1C Checks by African American/Black and White/Caucasian for Pre (2015) and Intervention (2016) in IM Residency Clinic

<table>
<thead>
<tr>
<th>Year</th>
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<td>2015</td>
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IM Clinic showed overall increase in DM measures from 2015 to 2016
- A1C 2/yr = 9% increase
- BP <140/90 = 2% increase

**Barriers Encountered/Limitations**

- Resident/faculty schedules conflicts and duty hours limit opportunities for team meetings
- Unable to impact some socioeconomic factors surrounding care outside of clinic as below:
  - Lack of resource to improve lifestyle and dietary habits
  - Lack of ability to provide financial support for medications
  - Inability to influence social/cultural norms surrounding diabetic care

**Lessons Learned (Discussion)**

- Improve diabetes care for all patients by improving access to point of care/same day A1C testing with streamlined work flow
- Seek to increase team’s access data in format that supports analysis clinic/system level to more agilely answer emerging questions
- Team based approach essential
  - Continuous project engagement difficult as clinical obligations shift
  - Active involvement, ownership of the clinic staff/leaders
  - Formalize and publicize team’s time needs (e.g., protected/block time)

**Conclusions**

- Racial disparities exist in clinic setting where African American are the predominant customers
- May be associated with overall service quality
- Can be improved by implementing interventions that improve service for all patients
- Sustaining project is increased through active involvement of clinic staff/leaders at project inception

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**Bibliography**

**REFERENCES:**


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