INTRODUCTION / BACKGROUND

LOCAL DRIVERS FOR AGE AS HEALTH CARE DISPARITY
- In 2016-2017 our FM residency program participated in AIAMC National Initiative V on Health Care Disparities
- Colorectal cancer (CRC) screen was identified as a clinical care gap in our system and in our FM clinics
- We sought to identify REAL-G disparities (race, ethnicity, age, preferred language, gender) in care to patients ≥50 who are eligible for colorectal cancer (CRC) screening in 2 FM residency clinics
- Studies identified disparities in CRC screening with screening less prevalent among patients: A, B, C
  - By race, language, and lower socioeconomic status
  - Age related disparities in CRC screening rates among eligible patients is limited/not reported in literature
- However in our clinics, age was the critical marker

PROJECT AIM

To determine if patient age is associated increased control of HTN and DM - two other common chronic diseases in FM

METHODS: 2 STEPS

STEP #1: LOCAL DATA
- Obtain and analyze EHR disparity data specific to HTN and DM x Age, Race, Gender, at system and FM Residency Clinics

STEP #2: CONDUCT A FOCUSED LITERATURE REVIEW
- Relationship between age and uncontrolled HTN & DM
- Relative impact of age compared to other REAL-G Categories

RESULTS STEP #1: LOCAL DATA – FM RESIDENCY CLINICS & SYSTEM DATA

% OF PATIENTS W UNCONTROLLED A1C BY AGE, RACE, & GENDER x CLINIC
- **Age (18-49)** accounted for the highest % of uncontrolled A1C patients in FM Residency Clinics – Control increased with Age

<table>
<thead>
<tr>
<th>FM Clinic</th>
<th>Age</th>
<th>Gender</th>
<th>Race</th>
<th>A1C</th>
<th>B1C</th>
<th>White</th>
<th>Hispanic</th>
<th>White/Non-Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCC</td>
<td>18-49</td>
<td>Female</td>
<td>Male</td>
<td>23%</td>
<td>27%</td>
<td>22%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>FPC</td>
<td>18-49</td>
<td>Female</td>
<td>Male</td>
<td>21%</td>
<td>27%</td>
<td>22%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>50-64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>65+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

% OF PATIENTS W UNCONTROLLED HTN BY AGE, RACE, & GENDER x CLINIC
- **Age (18-49)** accounted for the highest % of uncontrolled BP patients in both clinics; Control increased with Age

<table>
<thead>
<tr>
<th>FM Clinic</th>
<th>Age</th>
<th>Gender</th>
<th>Race</th>
<th>Uncontrolled HTN</th>
<th>A1C</th>
<th>B1C</th>
<th>White</th>
<th>Hispanic</th>
<th>White/Non-Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCC</td>
<td>18-49</td>
<td>Female</td>
<td>Male</td>
<td>21%</td>
<td>27%</td>
<td>22%</td>
<td>21%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>FPC</td>
<td>18-49</td>
<td>Female</td>
<td>Male</td>
<td>21%</td>
<td>27%</td>
<td>22%</td>
<td>21%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50-64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>65+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RESULTS STEP #2: FOCUSED LITERATURE REVIEW

COMMON FINDINGS:D-F
- Variability in age categories and the statistical metric used in data analysis makes comparisons difficult
- Overall the data is inconclusive/conflicting in findings (age, race, gender) as multivariate analysis reveals other factor contributing to the findings patients (geographic region, frequency of medical care – but not insurance) and physician

% OF PATIENTS W UNCONTROLLED A1C BY AGE, RACE, & GENDER
- Younger compared (18-50) to older patients (50+) had significantly greater AMGB (average monthly glyceremic burden A1C > 7.5)
- AMGB was not significantly different in African American vs white patients EXCEPT in older African American patients who had significantly greater AMGB compared to whites

% OF PATIENTS W UNCONTROLLED HTN BY AGE, RACE, & GENDER
- NHANES 2011–16 - Age 20-44 with highest prevalence (45%) and decreasing between 45-65+ (17% to 19%)

WHAT WE ARE LEARNING

- System metrics for age parallel FM residency clinics’ results by age – despite clinics serving different blends of REAL-G patients
- Based on system and clinic data – we can target patients age 18-34 to improve HTN/DM control
- Variability in literature relevant to relationship of age with DM/HTN control make it critical to do local data analysis to identify specific populations for targeted interventions

References Include:
- Byers, K & AIAMC National Initiative V on Health Care Disparities
- E. Tucker JL, Zobiri KA, et al. Race in Older but Not Younger Patients Associated With Greater Glycemic Burden in Primary Care Patients Diabetes Educator Volume 44, Number 6, December 2018