Aurora Health Care

From the SelectedWorks of Will Lehmann, MD

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Is Patient Age Associated with Increased Control of Hypertension and Diabetes in Primary Care?

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Available at: https://works.bepress.com/will-lehmann/53/

IS PATIENT AGE ASSOCIATED WITH INCREASED CONTROL OF HTN AND DM IN PRIMARY CARE? Will Lehmann, MD, Catherine De Grandville, MD, Bonnie Bobot, MD Deborah Simpson, PhD & AIAMC NI-VII Family Medicine Residents & Faculty @ Aurora Health Care Legacy Milwaukee // AdvocateAuroraHealth

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

References Include:

- Baker, DW, Liss DT. Understanding current racial/ethnic disparities in colorectal cancer screening in the United States: the contribution of socioeconomic status and access to care. American Journal of Preventative Medicine 2014; 46(3):228-36. Beyer KM, Malecki KM, Hoorman KA, Szabo A, Nattinger AB. Perceived neighborhood quality and cancer screening
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- recommendation for colon cancer screening. American Journal of Gastroenterology 2015; 110(10):1388-94 D. Wang TJ, Vasan RS. Epidemiology of uncontrolled hypertension in the United States. Circulation. 2005 Sep 13;112(11):1651-
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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

FM	Age			Gen	der	Race			
Clinic	18-49	50-64	65+	Female	Male	Asian	African Amer	White/ Hispanic	White/Non- Hispanic
FCC	36%	23%	16%	24%	29%		26%	30%	30%
FPC	39%	32%	26%	33%	30%	30%	37%	30%	31%

% 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

FM		Age			Gender			Race			
Clinic	18-49	50-64	65+	Female	Male	Asian	African Amer	White/ Hispanic	White/Non- Hispanic		
FCC	37%	21%	18%	25%	27%		27%	22%	18%		
FPC	30%	21%	18%	22%	22%	21%	34%	22%	16%		

COMMON FINDINGS:^{D-F}

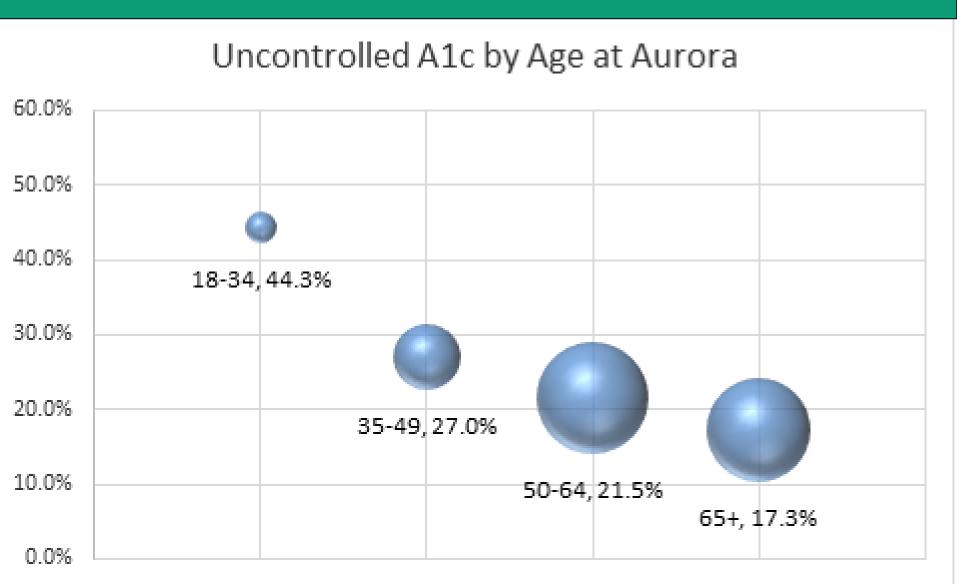
% OF PATIENTS W UNCONTROLLED A1C BY AGE, RACE, & GENDER^E

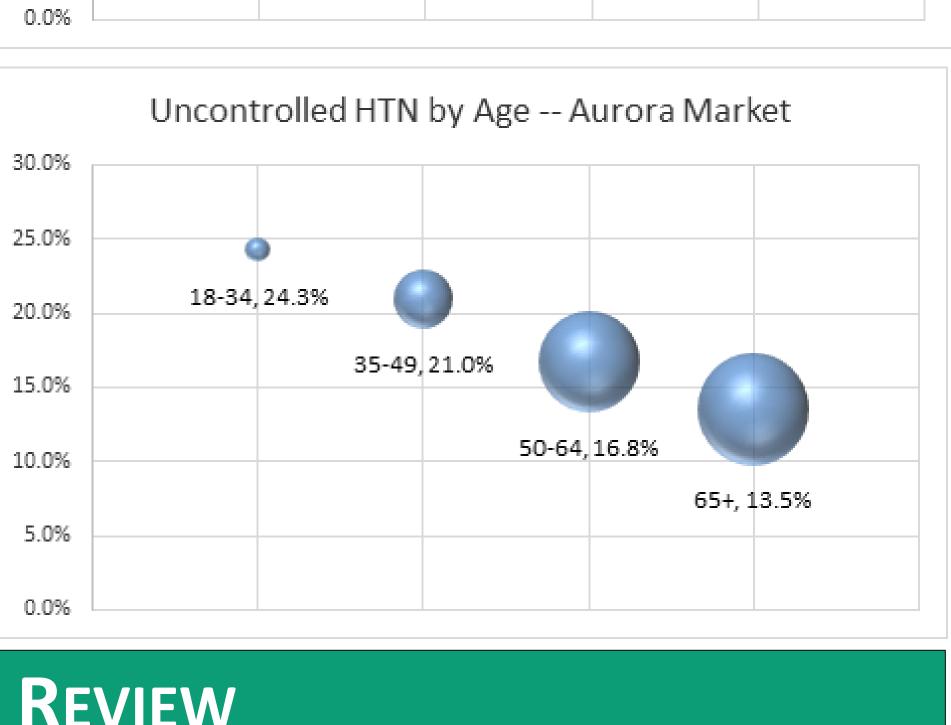
- significantly greater AMGB compared to whites

% OF PATIENTS W UNCONTROLLED HTN BY AGE, RACE, & GENDER^F

WHAT WE ARE LEARNING

- specific populations for targeted interventions





RESULTS STEP #2: FOCUSED LIT REVIEW

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 multivariant analysis reveals other factor contributing to the findings patients (geographic region, frequency of medical care – but not insurance) and physician^D

Younger compared (18-50) to older patients (50+) had significantly greater AMGB (average monthly glycemic burden A1C >7.5) AMGB was not significantly different in African American vs white patients EXCEPT in older African American patients who had

NHANES 2011–16 - Age 20-44 with highest prevalence (45%) and decreasing between 45-65+ (17% to 19%)

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