IDENTIFYING DISPARITIES IN COLORECTAL CANCER SCREENING RATES IN MILWAUKEE-BASED ACADEMIC AND NON-ACADEMIC CLINICS

Jasmine Wiley, MD1; Jonathan Blaza, MD1; Wilhelm Lehmann, MD2; Deborah Simpson, PhD2; Jeffrey Stearns, MD3; SL Pischke, BS1; T Greiten1

1Family Medicine, Aurora University of Wisconsin Medical Group; 2Business Intelligence Aurora Healthcare; 3Center for Quality Improvement, Aurora Healthcare

PROBLEM
• Colorectal cancer (CRC) screening is a national health care priority and a care gap per AHC’s Community Health Needs Assessment (CHNA)
• CRC screening is an Aurora Health Care (AHC) Quality Metric
• Our family medicine residency clinic, Family Care Practice, serves urban underserved populations and are currently not at goal for the CRC screening (Figure 1)

BACKGROUND
• The Institute for Healthcare Improvement’s Triple Aim focuses on improving the patient’s experience of care, improving population health and reducing the per capita cost of health care
• Health care systems and providers continuously seek to improve the quality of care based through data analytics:
  o Percentage of their patients achieving quality of care standards for various indicators (e.g., immunizations, tobacco cessation, asthma, cancer screening)
  o As healthcare moves towards value based reimbursements, deepening our understanding of patient population characteristics within each of these conditions is vital to continuous quality improvement.
• Studies have identified disparities in CRC screening with screening less prevalent among patients who are: Uninsured and/or lower socioeconomic status8 o African American/Black and Asian9,10 o Non-English speaking Hispanic patients10
• There have been no reported age related disparities in CRC screening o Evidence of local and regional variations in CRC screening rates

OBJECTIVE
To determine if there are REAL (race, ethnicity, age, preferred language) and gender disparities in care to patients 50 and older who are eligible for colorectal cancer (CRC) screening in two family medicine residency clinics and our associated service market

METHODS – IHI IMPROVEMENT MODEL
• A team of residents/faculty framed our approach using the IHI Model for Improvement C
• Providers at family medicine clinics (FCC and FPC) identified barriers to CRC screening using a fishbone approach to engage them in the improvement process
  o Fish “bones” included REAL Categories: Race, Ethnicity, Age, Preferred Language Gaps and Gender

METHODS: POPULATION DATA
• A retrospective analysis of all eligible patients for CRC screening at 2 Milwaukee based family medicine residency teaching clinics (FCC and FPC) and nonacademic clinics in greater Milwaukee (NACMKE) during a 12 month period (December 2014 – November 2015) was undertaken in collaboration with health care system quality improvement specialists
• Percentage of patients achieving CRC screening metric was reported by REAL and gender
• Consistent with IHI Model for Improvement we sought to identify sub-populations to target for improvement therefore:
  o Categories with an N < 25 were omitted
  o Criterion for disparity within a category was identified as > 10%

RESULTS – PROVIDER FISHBONE
• Collected provider perceived barriers at “All Clinic” staff meetings at FCC and FPC to generate fishbone (Figure 2)
• Barriers were associated with all REAL categories and also associated with social determinants of health and patient motivation/burnout

RESULTS – POPULATION DATA
• CRC screening population records were sampled for eligible patients ≥ age 50 for NAC-MKE (n = 59,745), FCC (n=846), and FPC (n=1458)
• The largest CRC screening disparity was associated with age with screening gaps ranging from 13-15% between populations aged > 65 vs age 50-54 (Figure 3)
  o NACMKE = 13% (Range:79% – 66%)
  o FCC = 13% (Range 81% 68%)
  o FPC =15% (80% – 65%)
• CRC Screening Rate disparities by race, ethnicity, and gender were <10%

CONCLUSIONS
• The African American/Black race per the Centers for Disease Control & Prevention has the highest CRC death making early CRC screening of an imperative
• While the Wisconsin Collaborative for Healthcare Quality ranks Aurora Health Care as 8th out of 20 systems in Wisconsin (77.6% Q3 2014Q2 2015) local data analysis identified age as the largest disparity gap
• Analyzing local population data REAL/Gender provides key insights to support initiatives to reduce health disparity gaps and further our progress toward achieving the Triple Aim for health care

REFERENCES

Figure 1: Milwaukee locations of non-Aurora Family Medicine Residency Clinics, Aurora Family Care Practice at Aurora St. Gotard

Figure 2: Provider generated fishbone diagram of perceived barriers to CRC screening in our FCC and FPC residency clinics.

Figure 3: Age related CRC Screening disparities by clinic sites: November 2014-December 2015