



Health Quality Innovation Network

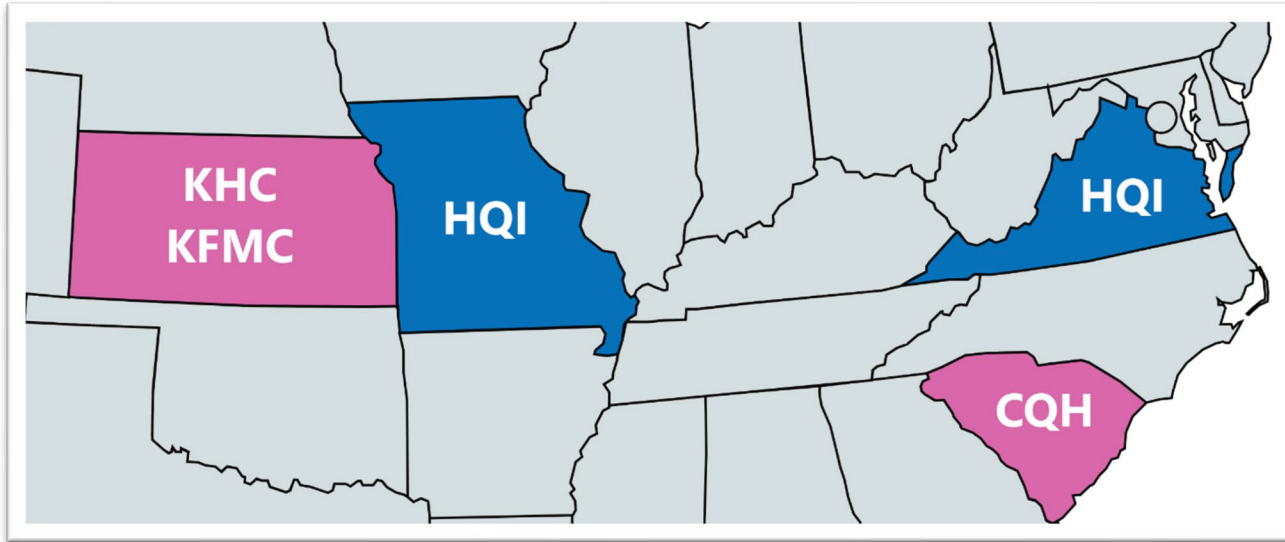


Health Quality Innovation Network

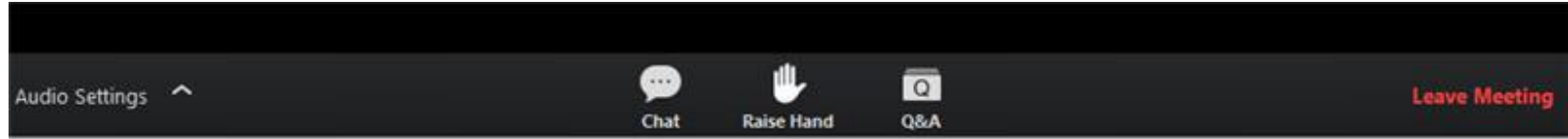
Addressing Disparities: The Impact of Chronic Conditions on Frequent Emergency Department Visits

January 24, 2024

Health Quality Innovation Network



Logistics – Zoom Webinar



To ask a question, click on the **Q&A** icon.

Raise your hand if you want to verbally ask a question.

Resources from today's session will be posted in **Chat**.

You may adjust your audio by clicking **Audio Settings**.

You have been automatically muted with video turned off.

Objectives

- 1 Review how disparities impact high ED utilization
- 2 Examine the impact of disparities on those with chronic condition and their relationship to high ED utilization.
- 3 Share how chronic conditions are addressed in the community to prevent unnecessary ED utilization.

Today's Speakers

Carla K. Thomas, MS, CTRS, CPHQ
Director/Consulting Manager, Health Quality Innovators

Temi Olafunmiloye, BS
Manager of Health Equity, Health Quality Innovators

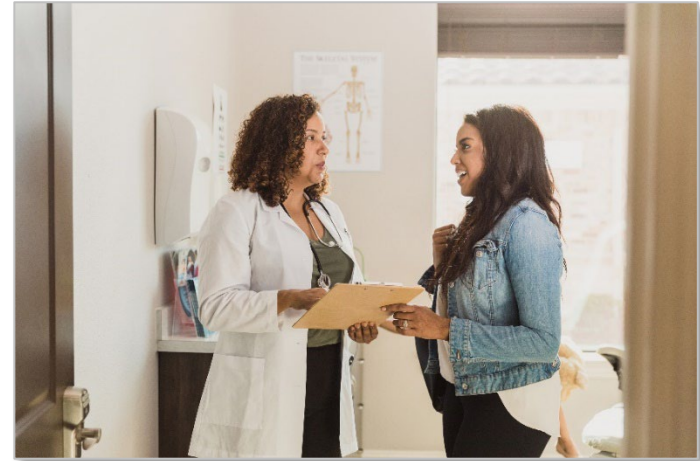
Margaret Kadree, MD
Clinical Specialist, Virginia Department of Health (VDH)

Why are we addressing chronic conditions?



Most Common Drivers of Frequent ED Visits

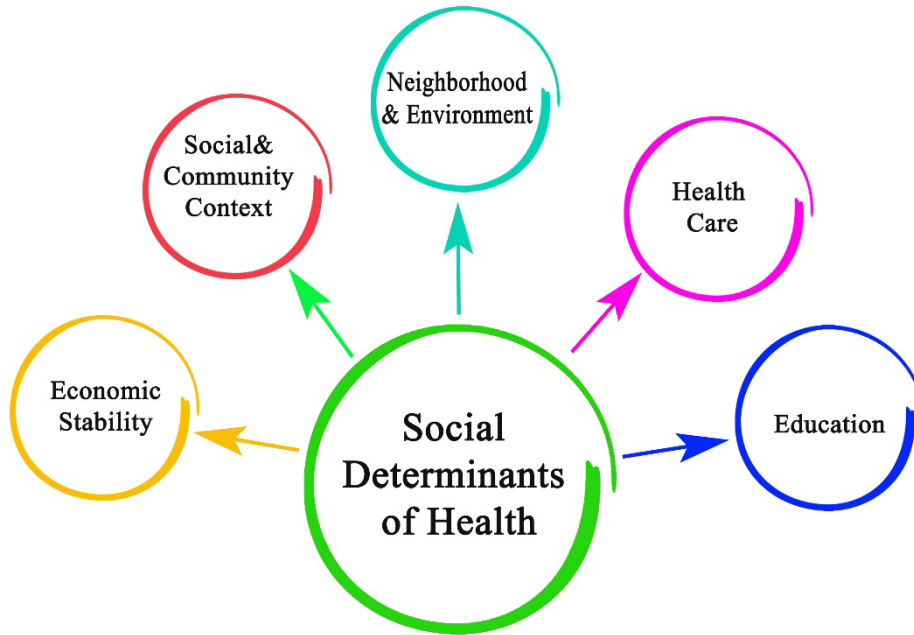
- Poor discharge/transition process
- Unmet needs
- Medication mismanagement
- Unmanaged chronic conditions



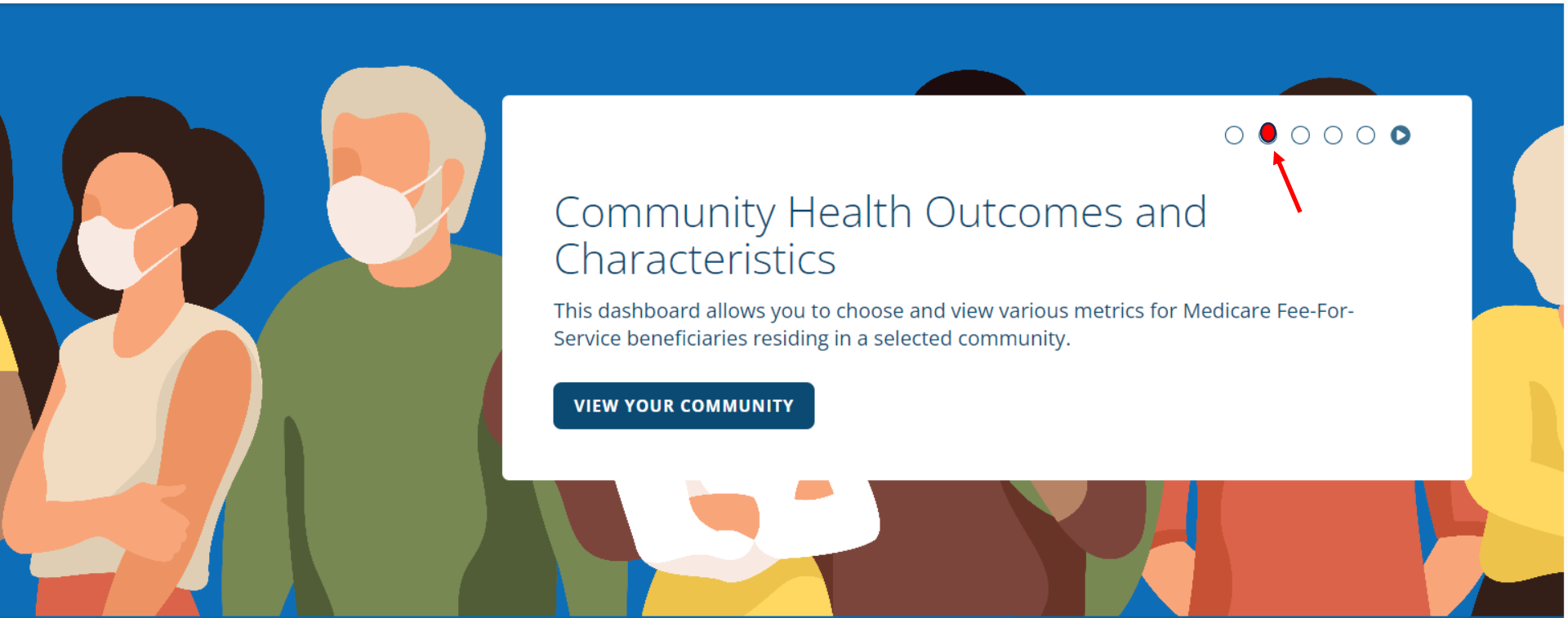
Addressing Disparities Webinar

Almost 70% of the participants identified unmanaged chronic conditions as the primary driver of high ED visits in their organization.

Review



Factors linked to social needs are associated with higher ED utilization rates for patients



○ ● ○ ○ ○ ▶

Community Health Outcomes and Characteristics

This dashboard allows you to choose and view various metrics for Medicare Fee-For-Service beneficiaries residing in a selected community.

VIEW YOUR COMMUNITY

HQIN COMMUNITIES FOCUS:

Top Hospital Utilization Diagnoses

Select State:

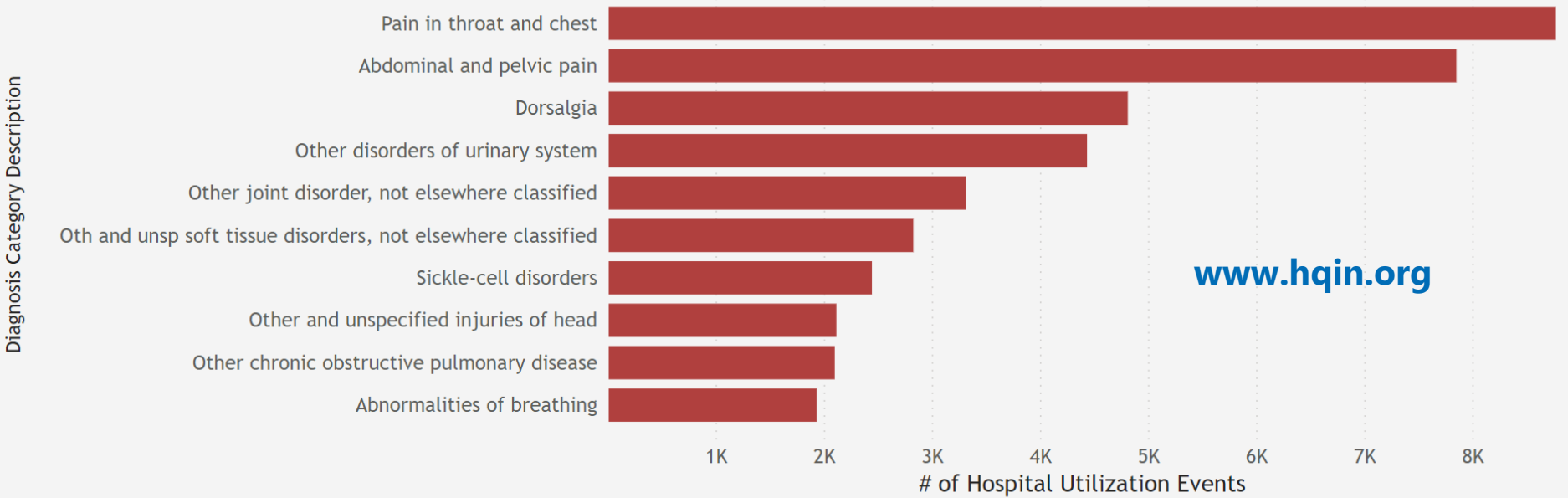
Community:

Select Measure:

Period Ending:
June 2023

of Hospital Utilization Events by Diagnosis Category Description

Hover over bar to see value.



www.hqin.org

NOTE: All care transitions hospital utilization metrics exclude any events with a principal diagnosis of COVID-19, per CMS requirements for the Quality Improvement work. Diagnoses without a bar have been suppressed due to low volume (<10)

HQIN COMMUNITIES FOCUS:

Top Secondary Diagnoses for 4 Common ED Primary Diagnoses

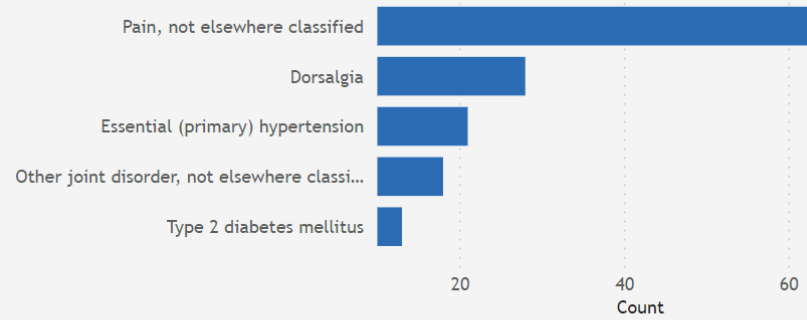
Select Community, State or Service Area:

Hampton Roads (HR) ▼

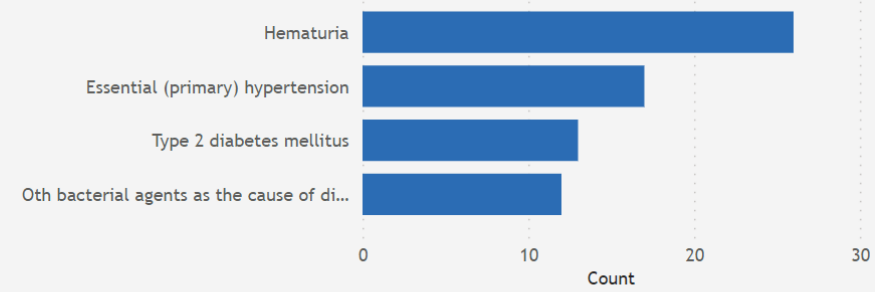
Period Ending: June 2023

Hover over bar to see value.

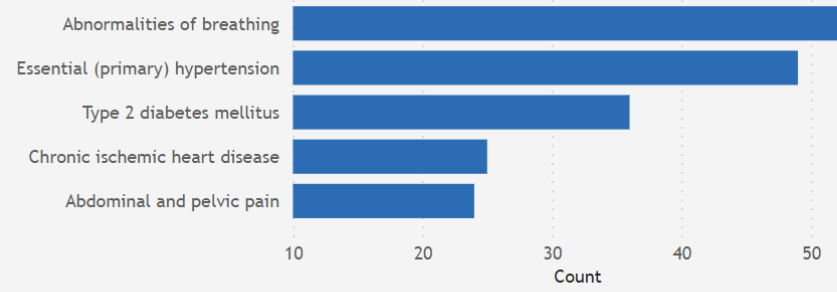
Count by Secondary Diagnosis (Primary: M54-Dorsalgia)



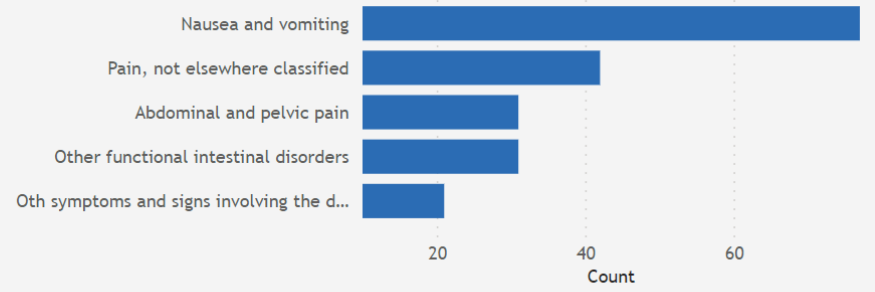
Count by Secondary Diagnosis (Primary: N39-Other disorders of urinary system)



Count by Secondary Diagnosis (Primary: R07-Pain in throat and chest)



Count by Secondary Diagnosis (Primary: R10-Abdominal and pelvic pain)



NOTE: ONLY diagnoses with counts 10 or greater will be displayed, others have been suppressed due to low volume (<10)

Disparities in ED Utilization

Chronic Conditions

- Hypertension and diabetes are among the top diagnoses associated with multiple ED visits
- Higher comorbidity is associated with increased ED utilization
- Racial and ethnic minorities commonly have multiple co-morbidities



Polling Question

Based on your experience with patient ED visits, what chronic condition are you seeing the most?

- a. Diabetes
- b. Hypertension
- c. Chronic Kidney Disease
- d. COPD
- e. Asthma
- f. Something Else



Addressing Disparities



Temi Olafunmiloye, BS

Manager, Health Equity

Chronic Conditions & ED Utilization

- In 2017, chronic conditions accounted for 60% of annual ED visits among adults
 - 25% with one chronic condition
 - 17% with two chronic conditions
 - 18 % by adults with three or more
- Contributes to over \$8.3M in spending; many visits potentially preventable



Chronic Conditions & ED Utilization

- Medicaid patients made up 32% of visits by adults with one chronic condition
 - 27% were patients with Medicare
 - 11% were no insurance
- Medicare was most observed source of payment by adults with two or more chronic conditions



Source: Santo, L., Ashman, J. J., & Xu, J. (2022). *Emergency department visits by adults with chronic conditions associated with severe COVID-19 illness: United States, 2017–2019*. <https://doi.org/10.15620/cdc:119434>

Disparities in Chronic Conditions

- Prevalence of chronic conditions and multimorbidity are more common among Black people
- Percentage of people with diabetes is higher among Hispanic (15.5%) and non-Hispanic Black (17.4%) adults
- Chronic condition develop earlier in life among Black individuals



Source: Caraballo, C., Herrin, J., Mahajan, S., Massey, D., Lu, Y., Ndumele, C. D., Dye, E. E., & Krumholz, H. M. (2022). Temporal trends in racial and ethnic disparities in multimorbidity prevalence in the United States, 1999-2018. *The American Journal of Medicine*, 135(9), 1083-1092.e14. <https://doi.org/10.1016/j.amjmed.2022.04.010>

Most Common Chronic Conditions

- **Heart disease:** more likely to visit the ED due to chest pain, shortness of breath, and heart attack
 - In 2020-2021, the annual ED visit rate by adults with diabetes was 72.2 visits per 1000 adults
- **Asthma:** experiencing exacerbated asthma
- **Diabetes:** increases risk of developing hypoglycemia, hyperglycemia, and diabetic ketoacidosis

Most Common Chronic Conditions

- **Chronic obstructive pulmonary disease (COPD):** more likely to experience exacerbations such as pneumonia and respiratory failure
- **Mental health conditions:** depression, anxiety, and substance use disorders contribute to psychiatric emergencies
- Others include cancer, kidney disease, and stroke

Factors Affecting ED Utilization for Chronic Conditions

- Lack of access to primary care and care coordination
- Lack of self-management of chronic condition
- Health literacy
- Stigma against conditions
- Mental health
- Social drivers of health (SDOH)



Challenges

Primary Care

- Patients of color are less likely to have a primary care physician
- Primary care interventions provide the opportunity to support proactive rather than reactive care for chronic conditions
- A primary care intervention study for multi-visit patients decreased annual visit rates from 5.43 to 3.21



Source: Tsai, M., Xirasagar, S., Carroll, S., Bryan, C. S., Gallagher, P. J., Davis, K., & Jauch, E. C. (2018). Reducing High-Users' visits to the Emergency Department by a primary care intervention for the uninsured: a retrospective study. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 55, 004695801876391. <https://doi.org/10.1177/0046958018763917>

Challenges

Barriers to Self-Management

- Lack of educational support
- Lack of access to primary care physician
- Socioeconomic status
- Age
- Cultural beliefs



Challenges

Health Literacy

- Provides patients the ability to:
 - Comprehend complex vocabulary
 - Share personal information with health care providers
 - Make decisions about healthy lifestyle habits
 - Navigate a complex health care system
- Low health literacy leads to:
 - Limited knowledge of medical condition
 - Poor ability to manage medications and self-care
 - Non-adherence to treatment plans



The Impact of Stigma

- Participants who internalized stigma and experienced stigma from healthcare workers anticipate greater stigma from healthcare workers
- Participants who anticipated greater stigma from healthcare workers accessed healthcare less and experienced a decreased quality of life
- Stigma may cause patients to believe that they do not deserve care or that care may not work for them

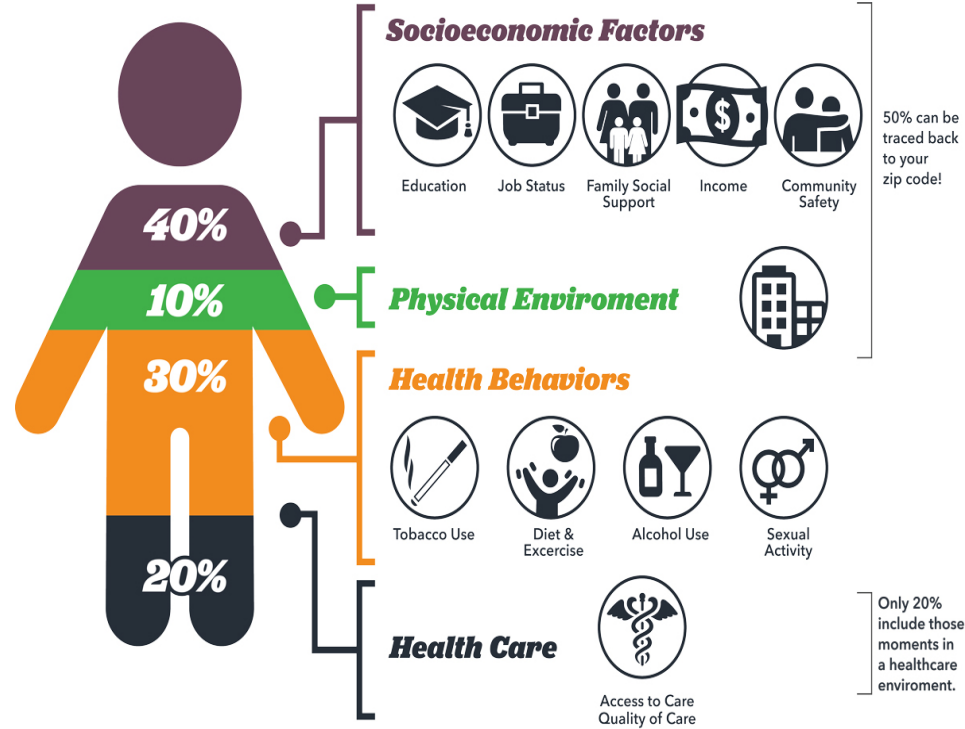
Challenges

Mental Health

- Risk for depression is higher among those with chronic illnesses
 - People with diabetes are 2-3 time more likely to develop depression
- 30% of patients who visit a hospital ED have at least one behavioral health diagnosis
- Increased severity of the initial behavioral health diagnosis leads to increased frequency of ED visits

Challenges

Social Drivers of Health



Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

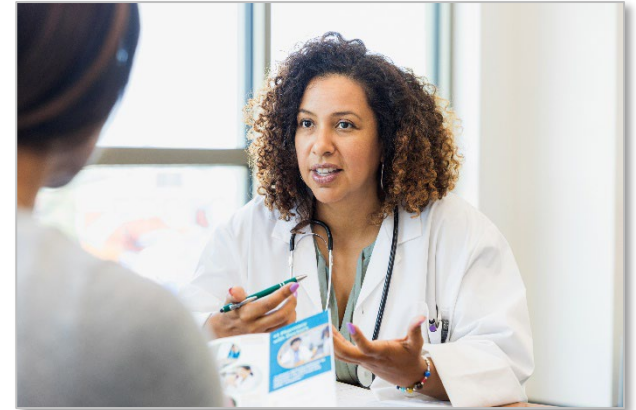
What is working to address chronic conditions?



Interventions

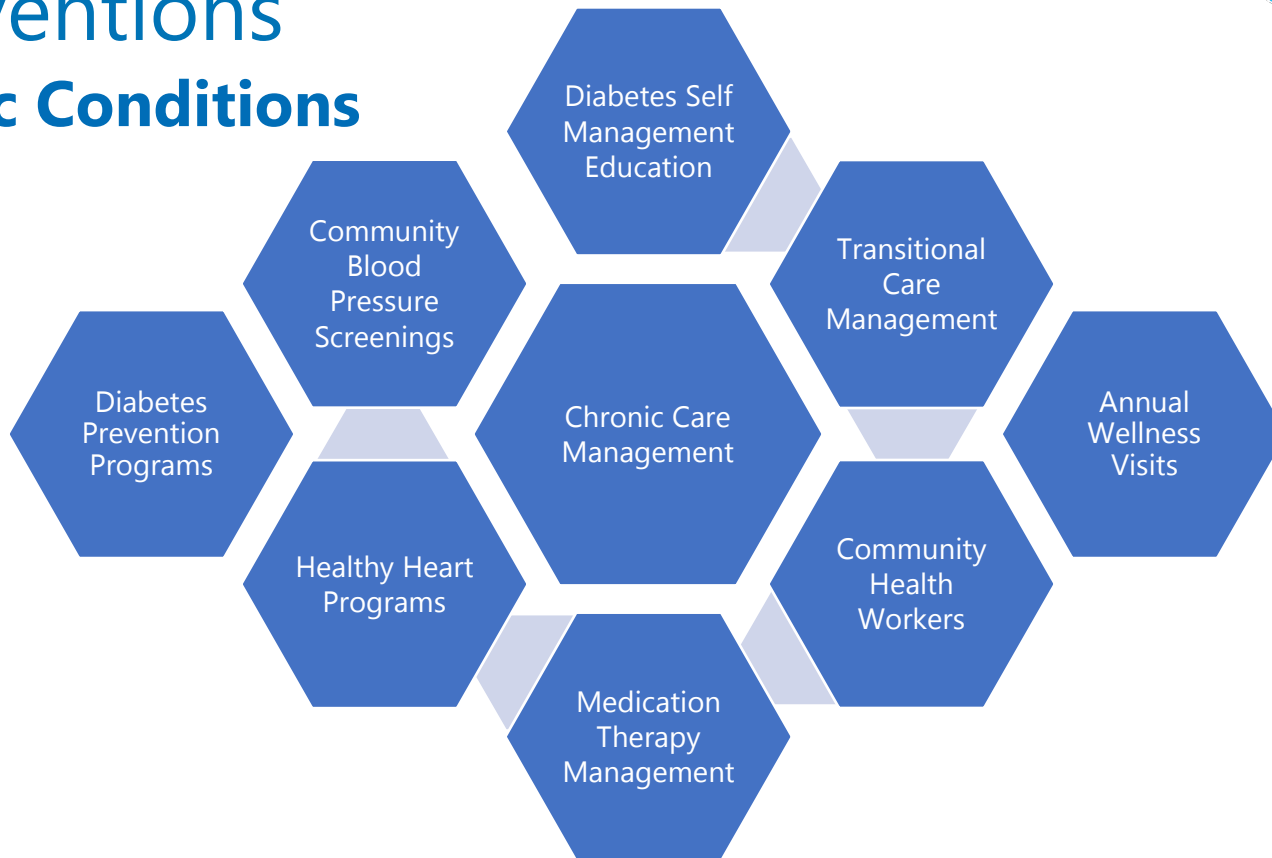
Address Chronic Conditions

- Take a holistic view of the patient's health
- Ensure appropriate referral to specialty care
 - Chronic care management programs
 - Condition-specific self-management education programs
 - Prevention programs
- Implement policies that foster the use of multi-disciplinary disease management teams



Interventions

Chronic Conditions



Disparities in ED Utilization

Building Interventions

- Develop preventative efforts that range from pre-ED visits to post-discharge
- Systems should aim to assess risk and address those factors during the visit
- Focus on:
 - Systemically addressing social drivers
 - Cultural competency
 - Building community partnerships



*What are you doing to
successfully assist patients with
chronic conditions?*

*Are your interventions
impacting these patients' ED
visits?*



Guest Speaker




Margaret Kadree, MD

Clinical Specialist

Virginia Department of Health

margaret.kadree@vdh.virginia.gov



**ADDRESSING DISPARITIES:
The Impact of Chronic Conditions on the Frequency of
Emergency Department Visits
January 24, 2024**

How Can Chronic Care Management Models Help

Prepared by:

**MARGARET KADREE, MD
CLINICAL SPECIALIST, VDH**



DISPARITIES IN HEALTHCARE

Multifactorial in origin

- Social status
- Economic status
- Race
- Culture
- Gender
- Sexual preference
- Geographic location[rural, redlining etc]
- Education [quality and level]
-to name a few

DISPARITIES IN HEALTHCARE

- These factors are then used to “categorize” people into social hierarchies that significantly impact their ability to navigate the world successfully and obtain their “fair share”
- **Attempts to establish health equity has to come from – not just the healthcare arena – but governmental bodies; private and public institutions, the general workplace and each one of us.**
- The job is massive – but if we effectively join forces – CHANGE WILL OCCUR
- Each one of us is not *too* small to effect change .If when we see a behavior pattern that contributes to inequity, we take corrective action – that can have a domino effect!
- **COLLABORATION-COLLABORATION-COLLABORATION.....**
- In my small sphere, **CHRONIC CARE MANAGEMENT** is my contribution...



CHRONIC CARE MANAGEMENT

- ▶ A CHRONIC CONDITION is one which is not readily curable and so requires long term care
- ▶ This situation is exacerbated by the fact that a chronic disease may predispose to additional chronic diseases e.g. hypertension can predispose to heart disease
- ▶ The more chronic conditions you have – the greater the stress on the body to remain healthy
- ▶ Chronic diseases can also make one more susceptible to “acute” diseases such as respiratory infections, urinary tract infections, gastrointestinal diseases et cetera
- ▶ The medications used to treat chronic diseases can in themselves cause adverse drug reactions especially with polypharmacy
- ▶ The principles of Chronic Care Management have been around for >26 years and basically incorporate non-face-to-face services that enhance the total care of the patient – in addition to the traditional office visit

CHRONIC CARE MANAGEMENT

- On recognition of the utility of CCM in improving health outcomes – in 2014 Medicare formerly incorporated CCM as a reimbursable service in patients who had 2 or more qualifying chronic conditions
- Work is being done to encourage other health plans to incorporate these services in their repertoire
- A modification of CCM was introduced in 2020 by Medicare - - namely PRINCIPAL CARE MANAGEMENT [PCM] - this is for patients with ONE chronic disease that requires intensive care – the CPT codes are different to CCM
- CCM is **labor intensive** because per CMS it requires:
 - supporting patients in achieving health outcome goals
 - 24/7 patient access to care and health information
 - preventive care
 - patient and caregiver engagement
 - prompt using/sharing of patient health information
- This led to the Virginia Dept of Health developing a new practical CCM Model



Virginia Department of Health's Interdisciplinary CCM Team Model

Team: **Provider, Nurse, Pharmacist and Community Health Worker [CHW]**

The **Provider** oversees all activities of the team but *does not have to personally carry out all the services for the patient [a change from standard CCM]; bills*

The **CHW** does outreach to patients who are eligible for CCM, educates them about CCM, invites them to participate and signs them up if they agree

CHW does what is called a Social Determinants of Health [SDOH] assessment which attempts to identify such needs as food, home, transportation issues, violence, mental health issues; apprises team of positive findings, prompts referrals or can initiate referrals to community-based-resources; does follow ups on referrals; is able to follow up with patient on status of their health etc

Pharmacist does comprehensive medication reviews, checks for potential adverse drug reactions, educates patient on their meds

Nurse develops the care plan with input from team; discusses and f/u with patient



POPULATION SERVED BY CCM

90% of the >4 trillion dollars spent on health care in the US is spent on **chronic diseases** including mental health

So, who needs CCM? **Any member of the US population who has a chronic disease**

Typically, we think of CCM for people >65 – in reality anyone ≥ 0 should have access to CCM when needed



POPULATION SERVED BY CCM

Looking through the disparities' lens:

- It is appropriate to start by implementing programs in areas of high incidence and prevalence of the leading chronic diseases [cardiovascular including hypertension, diabetes]
- We can no longer work in silos – all facilities that provide healthcare need to communicate effectively and share information and resources
- All payors of healthcare need to work with the providers on financing programs that show clear evidence of improving health outcomes
- Federal and state legislators need to be educated by the healthcare communities on what is needed to improve health outcomes, so that these areas can be funded adequately



POPULATION SERVED BY CCM

- ▶ When a patient hits the ED and is identified as having co-existing chronic conditions – it should be possible to have a designated CHW to follow up on whether that patient is already receiving CCM care. There should be a community network of CHWs to facilitate monitoring of CCM patients' outcomes - with pertinent follow up with providers

- ▶ With the work on system interoperability – hopefully, in the near future this will mean that different EMRs will be able to share this type of patient data readily



GOOD NEWS

- VIRGINIA DEPARTMENT OF HEALTH [VDH] THROUGH ITS 2 MOST RECENTLY FUNDED CDC GRANTS NAMELY:
 - VDH NATIONAL CARDIOVASCULAR GRANT**
 - INNOVATIVE CARDIOVASCULAR GRANT**
- will be introducing CCM to areas of Virginia with a high incidence and prevalence of cardiovascular disease [includes hypertension] and diabetes
- VDH will be deliberately including community leaders [who really understand and care for their communities] in collaboratives to help us help their communities more effectively.
 - The learning collaboratives will also have representation from the healthcare communities – so that as a group we can bring meaningful improvements in healthcare to Virginians



Polling Question

Based on the information you learned today how will you take action to address disparities for ED patients with chronic conditions?

Please select all that apply.

- a. Share this information with colleagues
- b. Review chronic condition data of ED patients
- c. Collect additional disparities data
- d. Implement CCM
- e. Review a shared resource
- f. Reach out to community, state leaders



Resources

- [ASPIRE Readmissions Review Tool](#)
- [Improving the Emergency Department Discharge Process](#)
- [Improving Behavioral Health Care in the Emergency Department](#)
- [Chronic Care Management Toolkit](#)
- [Transitional Care Management Toolkit](#)
- [Annual Wellness Visit \(AWV\) Toolkit | HQIN](#)
- [The Blue Bag Initiative / Successful Comprehensive Medication Reviews Example](#)
- [MARQUIS Best Possible Medication History Quick Tips](#)
- [Medication Therapy Management - Medication Reconciliation Model](#)
- [Health Equity Learning Module Series](#)
- [Quick Start Guide: Screening for Social Determinants of Health](#)
- [CMS Guide to Reducing Disparities in Readmissions](#)
- [Diabetes Self Management Education Programs / Diabetes Prevention Programs](#)

References

1. Caraballo, C., Herrin, J., Mahajan, S., Massey, D., Lu, Y., Ndumele, C. D., Drye, E. E., & Krumholz, H. M. (2022). Temporal trends in racial and ethnic disparities in multimorbidity prevalence in the United States, 1999-2018. *The American Journal of Medicine*, 135(9), 1083-1092.e14. <https://doi.org/10.1016/j.amjmed.2022.04.010>
2. Earnshaw, V. A., & Quinn, D. M. (2011). The Impact of Stigma in Healthcare on People Living with Chronic Illnesses. *Journal of Health Psychology*, 17(2), 157-168. <https://doi.org/10.1177/1359105311414952>
3. Kent, J. (2019, February 18). Chronic conditions account for \$8.3B in avoidable ED visits. *HealthITAnalytics*. <https://www.healthitanalytics.com/news/chronic-conditions-account-for-8.3b-in-avoidable-ed-visits>
4. Santo, L., Ashman, J. J., & Xu, J. (2022). *Emergency department visits by adults with chronic conditions associated with severe COVID-19 illness: United States, 2017-2019*. <https://doi.org/10.15620/cdc:119434>
5. Santo, L., Schappert, S. M., & Ashman, J. J. (2023). *Emergency department visit rates by adults with diabetes: United States, 2020-2021*. <https://doi.org/10.15620/cdc:134505>
6. Tsai, M., Xirasagar, S., Carroll, S., Bryan, C. S., Gallagher, P. J., Davis, K., & Jauch, E. C. (2018). Reducing High-Users' visits to the Emergency Department by a primary care intervention for the uninsured: a retrospective study. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 55, 004695801876391. <https://doi.org/10.1177/0046958018763917>
7. The intersection of mental health and chronic disease. (2022, November 23). *Johns Hopkins Bloomberg School of Public Health*. <https://publichealth.jhu.edu/2021/the-intersection-of-mental-health-and-chronic-disease>



CONNECT WITH US

Call 877.731.4746 or visit www.hqin.org



@HQINetwork

Health Quality Innovation Network

Carla Thomas

Director/Consulting Manager

804.289.5318

cthomas@hqi.solutions

Temi Olafunmiloye

Manager, Health Equity

804.287.0298

tolafunmiloye@hqi.solutions