

Spotlight on the Safety Net

A Community Collaboration

Use of Evidence-Based Clinical Practice Guidelines at Matthews Free Medical Clinic

The Matthews Free Medical Clinic (MFMC) serves low-income, uninsured patients in Matthews, North Carolina and the surrounding areas of Mecklenburg and Union counties. When the clinic opened in February 2004, clinicians saw patients only 1 evening per week. Since then, clinic operations have grown to 5 days per week and include onsite provision of not only primary care but also chronic disease management, nutrition education, diabetes group counseling, behavioral health support groups, an afternoon walking club, and nearly a dozen specialties. The clinic relies on volunteer providers as well as its volunteer medical director, Lou Ann McAdams, MD. Over the last several years, MFMC began using evidence-based clinical practice guidelines to improve health outcomes for patients with chronic disease.

The implementation of electronic health records (EHRs) as well as policies and procedures dedicated to quality improvement and peer review has been instrumental in maximizing MFMC's use of clinical guidelines. Prior to implementation of the EHR system in 2014, patients with diabetes and hypertension were managed via an inefficient and often duplicative system of multiple flow sheets, with several providers reviewing records for laboratory results and key data. EHR implementation has streamlined the process by creating an organized and accessible system tailored for daily clinical use as well as measurement of health outcomes. The process is further streamlined by having the medical director and nurse regularly review records and respond appropriately when lab results or vital signs show that glucose levels or blood pressure are not being adequately controlled.

McAdams credits the North Carolina Association of Free Clinics (NCAFC) Annual Outcomes Survey for driving MFMC toward the implementation of evidence-based clinical practice guidelines. The NCAFC is a private, nonprofit organization that provides advocacy, resource

development, grant funding opportunities, and technical support to its member organizations and to the uninsured and underinsured patients they serve. NCAFC free clinics and pharmacies provide medical care, dental care, and prescription medications to patients in both rural and urban locations in 79 counties throughout North Carolina. In 2014, NCAFC had 70 member organizations that together served a total patient population of 87,043, conducted 170,569 face-to-face provider visits, and provided services valued at \$204,011,065. For every \$1 spent, \$6.21 in health care services was provided.

As part of a partnership with the Blue Cross and Blue Shield of North Carolina (BCBSNC) Foundation, NCAFC established an Annual Outcomes Survey that provides grant opportunities for all free clinics that offer chronic care management. Grants are based on the measurement of health outcomes for patients diagnosed with diabetes, hypertension, and/or chronic obstructive pulmonary disease (COPD) by clinics that are utilizing evidence-based clinical practice guidelines as standards of care. The guidelines applied to the survey include the American Diabetes Association's Standards of Medical Care in Diabetes [1], the Joint National Committee's Evidence-Based Guidelines for Management of High Blood Pressure in Adults [2], and the Global Initiative for Chronic Obstructive Lung Disease's Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease [3].

The NCAFC Annual Outcomes Survey encour-

Electronically published September 11, 2015.

Address correspondence to Ms. Cindy Jones, North Carolina Association of Free Clinics, PO Box 25893, Winston-Salem, NC 27114 (cindy@ncfreeclinics.org).

N C Med J. 2015;76(4):269-270. ©2015 by the North Carolina Institute of Medicine and The Duke Endowment. All rights reserved.
0029-2559/2015/76418

ages free clinics like MFMC to place a greater emphasis on the use of evidence-based practice guidelines, and it gives them an opportunity to focus on quality improvement initiatives. During the recent 2015 North Carolina Primary Care Conference, MFMC received 2 awards from NCAFC for its management of patients with diabetes and hypertension. For the 2014 Annual Outcomes Survey, MFMC reported that 92% of its patients with diabetes had glycosylated hemoglobin levels equal to or less than 9%; in comparison, only 71% of patients at North Carolina's federally qualified health centers met this benchmark (from 2013, most current available data) [4].

Lou Hill, MPH, executive director of NCAFC, believes the partnership with the BCBSNC Foundation and the Annual Outcomes Survey have helped dispel long-held myths that the quality of care at free clinics is substandard compared to that provided by traditional health care systems. "Free clinics are an individual community's response to its own health care needs. They are nimble, efficient, and innovative at leveraging public-private partnerships to secure quality, free, and low-cost care for our most vulnerable populations," said Hill. "Matthews Free Medical Clinic is an excellent example of how free clinics are using this volunteer driven, community-based model to deliver exceptional health care equal to the quality of larger, federally subsidized clinics."

McAdams feels the statewide initiative creates greater equity in both quality and access to care. "I have always believed our free clinic patients deserve a level of care equal to that practiced in my or any other private medical clinic. The NCAFC

partnership with the free clinics helps to ensure [this quality of care]—via educational seminars, networking opportunities, and monetary grant incentives." *NCMJ*

Lou Ann McAdams, MD medical director, Matthews Free Medical Clinic, Matthews, North Carolina.

Amy Carr, MBA executive director, Matthews Free Medical Clinic, Matthews, North Carolina.

Cindy Jones, RCP director of training and support, North Carolina Association of Free Clinics, Winston-Salem, North Carolina.

Lou Hill, MPH executive director, North Carolina Association of Free Clinics, Winston-Salem, North Carolina.

Acknowledgments

Financial support. Financial and in-kind support was received from the Blue Cross and Blue Shield of North Carolina Foundation.

Potential conflicts of interest. A.C. is an employee of the Matthews Free Medical Clinic. C.J. and L.H. are employees of the North Carolina Association of Free Clinics. L.A.M. has no relevant conflicts of interest.

References

1. American Diabetes Association. Standards of medical care in diabetes - 2015. *Diabetes Care*. 2015;38(suppl 1):S1-S93.
2. James PA, Oparil S, Carter BL, et al. 2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). *JAMA*. 2014;311(5):507-520.
3. Global Initiative for Chronic Obstructive Lung Disease. Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease. Global Initiative for Chronic Obstructive Lung Disease website. <http://www.goldcopd.org/guidelines-global-strategy-for-diagnosis-management.html>. Accessed August 25, 2015.
4. Health Resources and Services Administration. 2013 health center data. <http://bphc.hrsa.gov/uds/datacenter.aspx?year=2013&state=NC>. Accessed July 14, 2015.