



HIVQUAL-US

BRIEF
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Improving Primary Care for Aging HIV-patient Population in Brooklyn, NY

SUNY Downstate Medical Center - STAR Health Center

Ryan White Part C grantee, the State University of New York (SUNY) Downstate Medical Center's Special Treatment And Research (STAR) Health Center, has offered HIV-specific adult ambulatory care since 1985, serving 1129 unique patients in Central Brooklyn in 2010. In addition to specialized HIV primary care, the STAR Health Center (SHC) provides: "well woman" services and integrated obstetrics care; hepatitis C screening and treatment; behavioral health and psychiatry services; case management; medication adherence education; nutrition counseling; rapid HIV counseling and testing; cardiology; buprenorphine treatment; and acupuncture/Reiki/seeking safety.

SHC's quality management infrastructure operates in a layered manner (see figure on next page). Each quality management "team" is composed of staff members across various disciplines with specified objectives. The Leadership Team includes the director of HIV services, the clinic-wide medical director, the clinic administrator and the quality management (QM) coordinator, and is responsible for setting the clinic-wide commitment to the quality improvement (QI) process. The Core Team (the Leadership Team with the addition of the data manager and administrative assistant) manages: HSC's performance data collection process (see figure on next page) and the subsequent presentations of results; staff development activities; and all other QM-related administrative issues. Finally, the Multi-Disciplinary Team (the Core Team plus all discipline-specific supervisors and representatives from the Consumer Advisory Board) develops HSC's performance measures to be tracked and reported as well as intervention strate-

SHC DIABETES MANAGEMENT - INTERVENTIONS

Diabetes Mellitus	Framingham Score Calculation
<u>Specialty referrals made:</u> annual ophthalmology & foot exam; nutrition consult.; endocrine referral for secondary organ involvement/uncontrolled diabetes	Added to all the providers' desktops
<u>Medication interventions:</u> ASA (for pts. age > 40 yrs.); statin (as indicated); angiotensin-converting enzyme (ACE) inhibitor/angiotensin receptor blocker (ARB) (Microalbuminuria, CR, HTN)	Each provider completed score for eligible pts when they were in clinic and determined if intervention was necessary
<u>Behavioral interventions:</u> Weight management	Extensive education on cardiac health strategies and health behavior changes that could reduce risk of a CV event were discussed

Source: SUNY Downstate Medical Center - STAR Health Center

gies to be used in QI initiatives.

Between 2000 and 2009, SHC targeted such elements of HIV care as antiretroviral therapy management and adherence assessment. Yet with HIV-specific performance consistently at an acceptable range, medical providers wished to meet the needs of an aging HIV-patient population in which nearly 59% are 45 years and older. To that end, SHC chose improving non-HIV-specific primary care as its new focus area beginning in 2010. In particular, staff aimed to improve the care for the large number of patients that are diabetic and/or at risk for a cardiovascular event. Because this project was spearheaded by the medical director and other clinical leadership, it was well-received by all medical providers.

The Multi-Disciplinary Team chose performance measures based upon the 2010 best practice guidelines from the American College of Physicians in order to capture and quantify the essential components of appropriate diabetes management and to identify patients at high risk for a cardiovascular event in a user-friendly format, i.e. the Framingham Risk Calculator. The Team also established clear and comprehensive eligibility criteria (i.e. which patients are diabetic and/or in need of a calculated Framingham Score). Four diabetes mellitus-related indicators were selected and implemented by the Multi-Disciplinary Team: (1) percentage of patients with an HbA1c completed every 6 months; (2) percentage of patients on Angiotensin-Converting Enzyme (ACE) Inhibitor/Angiotensin II Receptor Blocker

RESULTS: SHC QI PROJECT (DIABETES MANAGEMENT)

2010 Primary Care Indicators	Goal	Baseline (Jan. 2010)	Interim (Dec. 2010)
Diabetes Mellitus Indicators			
HbA1c checked every 6 mos. and <7%	85%	56%	75%
Patients on ACE inhibitor/ARB	90%	71%	100%
Patients on statin	95%	88%	100%
Patients on ASA	90%	63%	100%
Framingham Score Calculation	50%	7%	44%

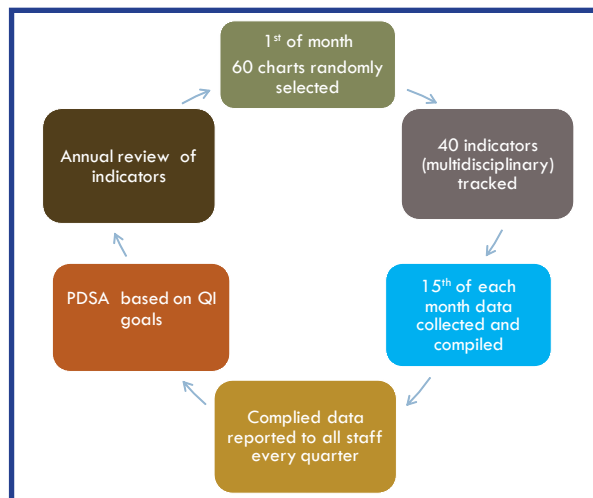
Source: SUNY Downstate Medical Center - STAR Health Center



(ARB); (3) percentage of patients on statin; and (4) percentage of patients on aspirin (ASA). The Team also agreed upon a measure in which the percentage of patients in need of a Framingham Risk Score calculation (excluding those with pre-existing conditions such as diabetes mellitus and confirmed coronary artery disease) who received one would be evaluated. The Framingham Risk Score is used to assess a patient's risk of having a heart attack or dying from coronary heart disease in the next 10 years based upon: age; gender; total cholesterol (mg/dL); current smoking status; HDL cholesterol (mg/dL); systolic blood pressure (mm Hg); and whether the patient is currently on medication to treat high blood pressure. SHC's measured rates were **drawn from a random sample of patients that were collected from the Cerner Labs System and/or the Eclypsis-based Electronic Health Record**. The data were then stored and analyzed in Excel to be reviewed monthly. Baseline and interim performance measurements were calculated for each indicator, as shown on the first page with corresponding goals. The baseline Framingham Risk Score rate in Jan. 2010 was recorded as 7% whereas diabetes management values ranged between 56 and 88%.

Interventions to improve baseline scores were developed for diabetes management and Framingham Risk Score (see figure on first page). With a small sample of patients, a **Plan-Do-Study-Act (PDSA) cycle was employed** for each individual patient. Additionally, each provider created a care pathway based on the most up-to-date guidelines for diabetes, hypertension, and hyperlipidemia. The information learned was disseminated during the biweekly provider meetings and the diabetic pathway was added as a template in the Electronic Health Record, highlighting crucial elements in caring for a diabetic patient in a quick, easy-to-use format.

Over the ensuing twelve months, SHC staff **saw substantial improvement across all five diabetes management and Framingham Score indicators**. As of Dec. 2010, rates for diabetic patients on ACE inhibitor/ARB (100%), a statin (100%) or ASA (100%) all exceeded the determined



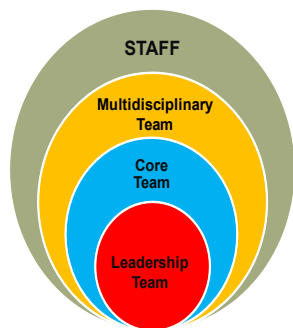
Source: SUNY Downstate Medical Center - STAR Health Center

goals. Increases in rates for HbA1c every 6 months for diabetic patients (56 to 75%) and Framingham Score indicated for eligible patients (7 to 44%) were achieved, although goal-rates were not reached for either. However helpful the Framingham Risk Score may have been for staff education, it was deemed too time- and labor-inefficient to be used routinely in clinic beyond 2010 during the Teams' evaluation of interventions implemented.

In 2011, SHC's QM teams expanded efforts towards outcome-based clinical indicators and began to apply the use of care pathways to other comorbidities. The Multidisciplinary Team chose to instead measure the percentage of patients for whom the most recent HbA1c < 7.0, etc. In terms of next steps for 2012, SHC will shift focus to glucose-control while also transitioning from a random sampling approach to a universal-patient model in all performance measurement and monitoring activities.

These efforts demonstrate the STAR Health Center's system-wide approach to the improvement of care for HIV-patients with comorbidities and additional chronic illnesses. As a recipient of the 2011 National Quality Center Quality of Care Award for Quality Improvement Activities, SHC is committed to enhancing all elements of HIV primary care.

STAR Health Center's Quality Management Infrastructure - Overview



Source: SUNY Downstate Medical Center - STAR Health Center

NEWS: HIVQUAL-US 2009 Performance Data Report Released

The HIVQUAL-US 2009 Performance Data Report, which summarizes how grantees performed, in aggregate, on a broad spectrum of clinical indicators during the review period (2009), is now available for release and distribution.

If you participated in the 2009 eHIVQUAL data review, your work is reflected in our findings! We encourage you to follow up with your HIVQUAL consultant, who can provide you with a summary report of your own performance data for these indicators to facilitate your identification of areas for quality improvement projects. You will also be receiving a more detailed, program-specific report on your data in the near future.

To access the HIVQUAL-US 2009 Performance Data Report please visit: <http://www.hivqualus.org/index.cfm/22/10039>.

For further information regarding the HIVQUAL-US 2009 Performance Data Report, please contact Darryl Ng at dwn01@health.state.ny.us.

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For more information on HIVQUAL-US or the HIVQUAL-US Briefs, please contact Amanda Bowes at acb11@health.state.ny.us.