

1. Applicant: Public Health Trust of Miami-Dade County d/b/a Jackson Health System

2. Medicaid Provider Number: Outpatient-010042101; Inpatient-010042100

3. Provider Type: County owned public, not-for-profit, hospital

4. Amount applying for: \$3,312,944

5. Identify as a new or enhanced program: Enhanced

6. Description of the delivery system and affiliations with other health care service providers:

Effective October 1, 1973, the Public Health Trust of Miami-Dade County d/b/a Jackson Health System (“Trust”/”JHS”) was created by county ordinance to provide for an independent governing body (the board of Trustees or Board) responsible for the operation, governance, and maintenance of “designated facilities.” Currently, the Trust operates six hospitals; two skilled nursing facilities; three primary care centers; as well as four specialty care centers, school-based care programs, and the corrections health services for Miami-Dade County and one insurance organization, JMH Health Plan. The Trust operates a total of 2,106 licensed hospital beds and 343 licensed nursing home beds.

The Trust is the largest provider of healthcare services in Florida and the 4th largest public healthcare system in the United States. Beyond its size and history, Jackson Health System has earned recognition for more of its specialty services than any other South Florida hospital; and JHS is consistently ranked among “America’s Best Hospitals” by *US News and World Report*. *US News and World Report* currently ranks the University of Miami/Jackson Memorial Hospital as the second best hospital in the Miami/Ft. Lauderdale area.

See Attachment I: For more thorough description of the delivery system and affiliations with other health care service providers.

7. Service Area: Miami-Dade County, FL

8. Service Area characteristics (including demographics or population served and distribution of current population served by funding source, e.g., Medicaid, Medicare, Uninsured, Commercial insurance, etc.):

With over 2.5 million documented residents, Miami-Dade County is the most populated and ethnically diverse County in Florida; 7th most populated in the United States (U.S. Census, 2010). The County’s 2.5 million residents are from diverse backgrounds with approximately 65% of the population being Hispanic or Latino origin. The population is a mix of 78% white (16% non-Hispanic), 19% Black (African-American, Haitian and Caribbean) and 3% unknown or other (U.S. Census, 2010). Given its geographic location and cultural diversity, Miami-Dade

County is a magnet for migration from the Caribbean and South America. Approximately half of the population was born in other countries.

Coupled with a large, diverse population Miami-Dade has one of the highest rates of uninsured, and underinsured, individuals in the nation. Over 25% of the population under 65 is uninsured; notably higher than the state average of 19% (Health Council of South Florida, Inc., Strategic Plan 2008-2011) and the national average of 18% (National Coalition on Health Care, Facts on Health Insurance Coverage, 2007). In addition, the rate of residents living below the Federal Poverty Level (FPL) is also higher in Miami-Dade County 18% compared to the state average 15% (U.S. Census, 2010).

The demographic mix of the patient population served at our primary care centers are estimated as follows:

| Race/Ethnicity | Jackson Health System Primary Care Center Clinics | Miami-Dade County Population Comparison | State Population Comparison |
|----------------------|---|---|-----------------------------|
| Black | 46% | 19% | 16% |
| Hispanic | 42% | 62% | 23% |
| White (Non-Hispanic) | 6% | 16% | 58% |
| Other | 6% | 3% | 3% |
| TOTAL | 100% | 100% | 100% |

The payor mix of our primary care center patient population is as follows:

| | |
|--------------------|-------|
| Commercial | 0.1% |
| Managed Care | 8.1% |
| Medicaid | 14.0% |
| Medicare | 7.6% |
| Other | 6.9% |
| Potential Medicaid | 2.1% |
| Self Pay | 61.2% |

9. Organizational Chart and point of contact:

Organizational Chart: **See Attachment II.**

Point of Contact: Eve Sakran, Director JHS Research & Grants Dept.; Phone: 305-585-7596; Email: esakran@jhs-miami.org

10. Proposed budget for funding detailing the request:

See Attachment III.

11. Provide a brief summary of your proposed project:

JHS being the only public hospital in Miami-Dade County, is most involved and familiar with patients' needs across the County; and can demonstrate from our own system's numbers where the greatest needs remain an issue. The aim of the proposed program is to increase care coordination and improve access to care for patients with chronic illnesses. This would include enhancing JHS' software solution, Cerner, to include a chronic disease management component; this will be detailed in the IT section of this grant application. The disease management program being proposed will be implemented at three of JHS' primary care centers: Jefferson Reaves Sr. Health Center (JRSHC), North Dade Health Center (NDHC), and Rosie Lee Wesley Health Center (RLWHC); as well as in JHS's Ambulatory Care Center (ACC)-which provides both primary and specialty care services. The depth and reach of the proposed services into the County depends on the amount funded. If funding is not received at amount requested JHS will scale back the disease management program to target the areas with greatest need and continue to explore strategies and opportunities to implement effective disease management at all locations.

It is estimated that by the year 2020, 25% of the American population will be living with multiple chronic conditions, and costs for managing these conditions will reach \$1.07 trillion. Experts estimate that chronic diseases are responsible for 83% of all health care spending. Persons living with multiple chronic conditions typically receive health care services from different sources and often from multiple providers. Even when receiving care within a single system. As a result, care for those with chronic conditions is complex, confusing, often fragmented and associated with inefficiency and higher costs (Partnership for Solutions).

Upon review of the number of charity care patients that visited JHS's Emergency Departments 2 or more times between July 1, 2011 and June 30, 2012 for issues related to the identified chronic illnesses it was revealed that: 1,349 patients accounted for 17,353 patient encounters; with the total patient charges amounting to \$62.8 million.

We have determined that there are key diseases that disproportionately impact the population of patients we serve. The Health Council of South Florida's 2009 Health Snapshot report of Miami-Dade noted that rates of diabetes diagnosis are lowest among Non-Hispanic Whites (6.6%), and highest among minority groups such as Asian Americans (7.5%), Hispanics (10.4%) and Non-Hispanic Blacks (11.8%). According to cause of death and hospitalization data, the Black community in Miami-Dade is disproportionately impacted by diabetes. Rates of death from diabetes among Blacks are on average about twice the rate among Whites and Hispanics. Additionally, the age-adjusted death rate due to hypertensive heart disease in Miami-Dade was 13.4 deaths per 100,000; worse than the statewide rate of 9.7 per 100,000. With Blacks having more than twice the hypertensive heart disease death rate as compared to Whites and Hispanics, at 23.3, 11.2 and 9.6 per 100,000.

Cases of untimely death, disabilities and hospitalizations attributed to conditions such as stroke, heart disease, infections and other chronic diseases can be managed and prevented by adequate healthcare access and evidence-based practices.

Persons without a medical home or primary care provider are more likely to delay treatment and seek care through the hospital's emergency department. These patients are often admitted for conditions that otherwise could have been treated on an out-patient basis.

The goal of the proposed disease management program is to improve the health outcomes of the target population and maximize the value of services provided; thereby reducing utilization and costs associated with avoidable ER visits and hospitalizations.

The disease management program will consist of multiple components. All components are designed to improve the patient's health status by providing education and support to the patient, evidence-based provider decision support, medication assistance, provider performance feedback and population standards of care. For the community, this will mean better health outcomes and improved patient satisfaction; creating a more empowered community invested in their own health, and less demand for services as well as lower costs.

- **Medical Home Model**

The medical home model will coordinate care through the use of electronic medical records and an evidence-based referral system. More importantly, the medical home is where the provider (team) has a relationship with the patient and the patient knows the provider making both mutually accountable for health outcomes.

The new care delivery model at the primary care centers will be based on the National Committee for Quality Assurance's Medical Home paradigm which places the patient at the center of a supportive integrated network of professionals. Providers will be educated to utilize disease-specific management principles and evidence-based guidelines to holistically meet the patients' medical and non-medical needs to achieve good health.

To implement this model, the current medical team at each location will need an additional Physician; 2 ARNPs; 2 Medical Assistants; 1 Case Manager; and 1 Administrative Assistant/Patient Registration. The following positions will rotate between locations as needed: 1 Psychiatric Social Worker and 1 Registered Dietician. Podiatry support services will be contracted.

Patient assignment to team panels will mirror the FQHC panel recommendation initially but will be modified if necessary to meet local needs.

- **Provider Education and Support**

Providers will receive ongoing education and support on evidence-based guidelines on the management protocols for diseases of focus: Diabetes, Hypertension, CHF and HIV/AIDS.

Providers will be trained to use clinical decision support alerts/tools and have access to knowledge-experts for complicated patients. To ensure Providers have an adequate knowledge base of the identified diseases, we will begin with best practice guidelines from recognized

experts in the fields. This will be done through a variety of settings; i.e. general staff and departmental meetings, grand rounds, and video conferences.

Additionally, information will be available to providers at the points of care in either a low-tech (laminated practice guidelines) or high-tech (computerized interactive programs) format. This will ensure that the clinical decision support information is conveniently available for the Providers.

Providers will receive alerts when a needed patient activity has not occurred or whenever the defined values for a patient's treatment plan do not meet the appropriate standard or therapeutic target.

- **Patient Education and Support**

The goal is to support the necessary behavioral changes that promote health and to empower the patient to take a proactive role in improving his/her health. This will include providing patients with the knowledge they need to actively participate in the management of their illness. Patients will be made aware that while most chronic diseases are incurable; their episodes of illness can be limited in frequency, severity, and duration by their own behavior.

Unless a provider knows what the minimal requirements are for care, supports them, and continuously reinforces them with the patient, effective self-management will not be achieved.

Education-Many of our patients lack the knowledge base to interpret or manage the symptoms and signs of their illness. Patients will be educated in a culturally and linguistically appropriate manner on the importance of active engagement in their care process. With the initial education coming from the physician, and reinforcement repeated by the case managers. Additionally, patients will receive guidance on how to change their lifestyle, diet and personal habits to mitigate their disease.

Telephone support-provided by the social workers, is a crucial part of the patient support effort. Patients may have questions that do not warrant making an appointment to see a provider. They can be provided with information and reassurance over the telephone. Telephone support will also allow for interim monitoring and counseling.

- **Medication Access and Assistance**

PHT/JHS Department of Pharmacy Services employs over 60 pharmacists and supportive personnel that provide medications and clinical services at JHS Main Campus. Pharmacy Services consist of sub-specialty areas including Pediatrics, Mental Health, Critical Care, Adult Medical/Surgical and Ambulatory Care. In addition, clinical pharmacy specialists provide drug therapy consultation in a variety of practice areas (i.e. HIV, organ transplants, neonatology, etc.).

Jackson Health System participates in the PHS 340B program which allows us to provide JHS "patients" medications at a significant discount. As a result of care coordination efforts, JHS

will implement electronic interfaces with our local pharmacies which will allow the PCP to receive real-time patient medication adherence information.

- **Case Management**

Case Management incorporates the elements of utilization review and considers the interaction of a patient's psychosocial and medical need. Case Management will take into account the patient's individual life issues that interact with their medical problems and result in their high utilization and costs. High-risk population health management is designed to achieve cost savings through concentrated, proactive case management efforts that complement the usual clinical care. These efforts include phone calls to the patient to identify/remind about appointments, lab draws, referrals, and impromptu health education opportunities. The population of patients to be focused on is stratified based on severity of illness and near term risk for the utilization of services. It is this group of high risk patients that the Case Managers will assess and manage.

Case Managers will be responsible for coordinating care and facilitating health action planning with the patient across the continuum of care; focusing their efforts on optimizing the processes of care and addressing unrecognized, sub-clinical, social and psychological contributors to the patient's deteriorating condition. The aim is to decrease future health resource use and the need for future hospitalizations by increasing the functional status of individual patients.

- **Provider Feedback and Performance Monitoring**

Providers will be expected to evaluate patients' progress and develop strategies based on performance required. Providers will receive regular (monthly) feedback on the population status. This will include feedback about individual patients on a regular basis as well as summary measures of how a particular population of patients is doing relative to the best practice guidelines, and how a particular provider is performing compared to peers and the evidence based standards.

- **Clinical Decision Support**

JHS currently utilizes the software solution Cerner. Cerner has the capacity to structure and capture patient level data and facilitate management and regulatory quality reporting as a by-product of patient care. Thereby, providing clinicians timely actionable feedback to improve patient outcomes and trending quality performance over time.

Within Cerner is the capability to add a chronic condition management component; a dashboard for tracking chronic conditions.

This component would provide:

- **Condition Summaries**
 - Patient compliance and provider performance reports
 - Data collection provider automated workflow across all venues of care

- Evidenced-based Treatment Algorithms – **See Attachment IV**
- Quality Measures
 - Track and report against quality measures specific to the condition above and beyond regulatory measures
 - Provides trending and comparisons across facilities, practices and providers

The Cerner’s chronic condition management component can be built to match the needs of the proposed disease management program. Alerts can be built into the system to notify providers when a needed patient activity has not occurred or whenever the defined values for a patient’s treatment plan do not meet the appropriate standard/therapeutic levels/ target. Additionally, disease-specific indicators and measures can be written to support the reporting requirements of the disease management model.

12. Describe plan for identification of participants for inclusion in the population to be served in the project:

Patients will be identified and referred to the primary care center nearest to their home if they have no primary care physician already identified. Priority will be given to those patients who are discharged from the hospital especially those who have Congestive Heart Failure, Pneumonia, HIV/AIDS, Acute Myocardial Infarction or Diabetes Mellitus with an Emergency Department visit, and those who have one or more of the chronic diseases of interest.

13. How will access to primary care access system services be enhanced by this project?

Currently there is a three month waiting list to be seen at any of the JHS primary care clinics listed. The implementation of a disease management program and addition of providers will increase capacity as well as create opportunities for additional ancillary support services. Enhancements include:

- Increased capacity through added number of health care providers and support staff; specifically Physician; 2 ARNPs; 2 Medical Assistants; 1 Case Manager; and 1 Administrative Assistant/Patient Registration. The following positions will rotate between locations as needed: 1 Psychiatric Social Worker and 1 Registered Dietician. Podiatry support services will be contracted.
- Evidence-based care coordination guidelines to support providers with education on how to effectively move patients through the care system;
- Enhanced data management/sharing;
- Medication reconciliation each visit;
- Integrated care team which will bring care continuity to the forefront and ensure patient is receiving comprehensive care; on a weekly or monthly basis;
- IT Improvement-to support access, support individual care plans, apply and enforce evidence based use of resources, and support evidence of performance.

14. Does the enhancement include hours of operation after 5:00 pm and/or on weekends at existing sites, or the establishment of a new clinic site?

JRSHC currently provides extended hours on Wednesday until 6:30 p.m.; regular hours operation are Monday, Tuesday, Thursday and Friday from 9 a.m. to 5 p.m. The added medical staff and support services will enable JHS to add an additional 60 service slots per day per site.

RLWHC's hours of operation are Monday through Friday, 8 a.m. to 5 p.m. NDHC operates Monday through Friday: 8:30 a.m. to 5 p.m.; with the evening primary clinic open three additional hours on Mondays and one extra hour on Thursday. Additionally, there are extended hours for case management Mondays 8:00 a.m. to 8:00 p.m., Tuesdays-Thursdays 8:00 a.m. to 6:30 p.m. and Fridays 8:00 a.m. to 5:00 p.m.

15. Describe your capability to serve minority and culturally diverse populations:

JHS staff is multi-ethnic and multi-cultural; Spanish, French and Haitian Creole are secondary languages spoken by our health care team. Providers also have access to a strong Interpreter Services Department through Language Line Cultural sensitivity, respect, and patient confidentiality are upheld with utmost importance. Caregivers, as well as support staff, receive yearly cultural awareness and sensitivity training in order to keep abreast of social, economic, and cultural changes occurring within Miami-Dade County.

16. Describe how you will identify and address health care diversity issues as well as health care literacy barriers:

JHS will utilize a multi-pronged approach to communicating with patients. Health care providers and support staff are fluent in English, Spanish, French and Haitian Creole; which reflects the language make-up of the target population. Patient education information will be based on self-educational material presented in a variety of formats including publications, workshops, group appointments, audio and video; which were created with an awareness of the differences in patient culture, language, literacy levels and comprehension abilities.

17. Describe measures and data sources that you will use to evaluate the effectiveness of each initiative comprising your project:

The proposed disease management program aims to achieve better health outcomes among patients with chronic illnesses; namely diabetes, CHF, hypertension and HIV/AIDS. These outcomes will be measured in three ways:

1. Reduction in ER visits for the target population. Based on the JHS reporting systems quarterly;
2. Patient's perception of access to care and satisfaction. Based on the JHS patient satisfaction form being modified to include the patient perception of access and quality of care;

3. Achievement of clinical measures will be reported by practitioners (illustrated in the table below).

The population status will be assessed for the achievement/improvement of process, outcome, utilization and cost measures.

Table 1: Disease Management Clinical Indicators

| | Construct | Measure |
|------------------------|---|---|
| Diabetes | Frequency of HbA1c testing | % with HbA1c test in past 6 months |
| | Frequency of lipid testing | % with lipid profile in past year |
| | Frequency of eye exams | % with dilated eye exam in past year |
| | Frequency of renal assessment | % with microalbumin test (or creatinine if on ACE) in past Year |
| | HbA1c control | % with HbA1c < 7% |
| | Lipid levels | % with LDL < 100 mg/dl |
| | Appropriate use of aspirin | % on aspirin |
| | Frequency of foot exams | % with foot exam in past year |
| | Blood pressure control | % with blood pressure less than 130/80 |
| | Regular clinic visits | % with primary care clinic visit in past 3 months |
| CHF | Appropriate use of ACE inhibitors | % on ACE inhibitor |
| | Appropriate use of beta-blockers | % on either Carvedilol or Metoprolol |
| | Avoid inappropriate use of Ca channel blockers | % on an inappropriate Ca channel blocker |
| | Avoid inappropriate use of NSAIDS | % on NSAIDS |
| | Hospital admission rate | # of admissions per 1000 patients over past 3 months |
| | Blood pressure control | % with blood pressure less than 130/80 |
| | Avoid inappropriate use of antiarrhythmics | % on an inappropriate antiarrhythmics medication |
| | Use of emergency department (ED) | # of ED visits per 1000 patients over past 3 months |
| | Regular primary care (or cardiology) visits | % with primary care (or cardiology) visit in past 3 months |
| HIV | Regular HIV clinic visits | % with HIV clinic visit in past 3 months |
| | Hospital admission rate | # of hospital admissions per 1000 patients over past 3 months |
| | Appropriate PCP prophylaxis | % on PCP prophylaxis medication among those with CD4 count <200 |
| | Appropriate MAC prophylaxis | % on MAC prophylaxis medication among those with CD4 count <50 |
| | Frequency of viral testing | % with viral load test in past 6 months |
| | Frequency of CD4 testing | % with CD4 test in past 6 months |
| | CD4 level | % with CD4 > 200 |
| | Screening for tuberculosis | % with PPD placed and read in past year |
| Appropriate medication | % on 3+ antiretroviral medications among those with CD4<200 | |

Population Management Utilization and Cost Variables

Utilization Variables (HIV, DM and CHF)

Total admissions

Total In-patients

Total ED visits

Total out-patient visits

30 – Day re-admission rate

Average # of admits/patient

Average # of in-patients days/patient

Average # of ED visits/patient

Average # of out-patient visits/patients

Average # of observation visits/patient

Costs (HIV, DM, and CHF)

Total costs of admission

Total cost of ED visits

Total cost of out-patient visits

Total cost of all admissions, ED visits

Average cost per admit (per patient)

Average cost per ED visit

Average cost per out-patient visit

Average cost per in-patient

Average total cost/patient

Patient Population Definitions

Total population: Patient who have had either an in-patient admission/observation stay or 2 out-patient visits (one of which may have been an ED visit in the past 2 years)

The measures will begin with a baseline established from historical experience with a similar patient population and will be measured monthly via automated data collection from current IT systems.

| Measures | Sources |
|---------------------------------------|--|
| Clinical Process and Outcome Measures | Medical Record (Hard Copy), Cerner (Electronic Medical Record System), and Mysis (Laboratory Information System) |
| Utilization Data | Siemens |
| Cost Data | Siemens |

18. Describe data collection and reporting capabilities including systems and staffing resources, provide a reporting template:

Depending on the metric being evaluated, JHS will use information from multiple enterprise software solutions, including Cerner, and other Electronic Medical Records, to continuously monitor patients’ progress and provider performance.

Patient satisfaction surveys will be administered to patients enrolled in the disease management program. Current JHS patient surveys ask for responses based on a five-point scale (excellent, very good, good, fair, or poor). JHS is benchmarked against peer groups nationally. JHS will work with research consultants to develop a survey questionnaire specific to the target population; which will be translated in Spanish and Creole.

See Attachment V.

19. Provide a letter of commitment from the local match fund source on that entity’s letterhead:

See Attachment VI.

Attachment I:

Description of the delivery system and affiliations with other health care service providers

The Trust operates the following facilities and programs in Miami-Dade County, Florida:

Jackson Memorial Medical Campus

Jackson Memorial Medical Campus consist of Jackson Memorial Hospital, Holtz Children's Hospital, Jackson Rehabilitation Hospital and Jackson Mental Health Hospital and is conveniently located in the City of Miami in close proximity to major highways and Miami-Dade County Metro-rail and mass transit system. In conjunction with the University of Miami School of Medicine faculty, University of Miami/Jackson Memorial Medical Campus provides a wide range of patient services, educational programs, a clinical setting for research activities and a number of health-related community services.

- ***Jackson Memorial Hospital*** opened in 1918, is an accredited, tax-assisted, tertiary teaching hospital with 1,498 licensed beds. In association with the Florida International University Herbert Wertheim College of Medicine and the University of Miami Leonard M. Miller School of Medicine and its faculty, Jackson Memorial is the third largest public teaching hospital in the United States. It is a regional referral center and a magnet for medical research and innovation.

Jackson Memorial's world-renown treatment facilities include the Ryder Trauma Center, the only adult and pediatric Level I trauma center in Miami-Dade County and one of the busiest in the nation; UM/JM Burn Center, the only such center in Miami-Dade County; and the Miami Transplant Institute, ranked among the busiest in the nation and is the only site in Florida where every kind of solid organ transplant is performed. More than half of the world's reported multi-organ transplants have been performed at Jackson Memorial Hospital. Based on the number of admissions to a single facility, Jackson Memorial is one of the nation's busiest hospitals.

- ***Holtz Children's Hospital*** is one of the largest children's hospitals in the southeast United States and, in collaboration with the Miami Transplant Institute, is one of three centers in the country that specializes in pediatric multi-organ transplants. Holtz is also home to one of the nation's largest neonatal intensive care units, producing some of the best medical outcomes in the United States. For 2011-12, Holtz was ranked among "America's Best Children's Hospitals" by U.S. News & World Report for neonatology, nephrology, diabetes and endocrinology, urology, cardiology/heart surgery, gastroenterology and cancer. In 2010 and 2011, Holtz had more pediatric physicians on the "Best Doctors in America" list than any other children's hospital in South Florida.
- ***Jackson Rehabilitation Hospital*** has been servicing the Miami-Dade community for over 46 years. Jackson Rehab is a leader in caring for adult and pediatric patients with brain and spinal cord injury, medically complex conditions, burns as well as hand and orthopedic injuries. Jackson Rehab is proud to be a Spinal Cord Injury (SCI) Model Center, one of only 14 SCI Model Systems in the country. It has also been credentialed

by The Joint Commission and the Commission on Accreditation of Rehabilitation Facilities, designated by Florida's Department of Health and Rehabilitative Services for acute and rehabilitative care for patients with brain and spinal cord injury.

- ***Jackson Mental Health Hospital*** is a three-story, 180,000-square-foot facility committed to the highest quality, treatment and service. Opened in 1999, JMHH consolidates evaluation, clinical treatment, teaching and research, to offer a full continuum of care for children, adolescents, adults and seniors, including inpatient, partial hospitalization, day treatment and outpatient programs. In association with the University of Miami Leonard M. Miller School of Medicine's Department of Psychiatry, JMHH offers specialized treatment for numerous conditions including depression and mood disorders, schizophrenia, suicidal ideation or behavior, anxiety and panic disorders, drug and alcohol abuse, Alzheimer's disease and maternal substance abuse. JMHH also specializes in criminal justice mental health services. All screening and referral services are free and confidential.

Jackson South Community Hospital is a 226-bed, acute-care hospital located in South Miami-Dade County approximately 17 miles south of University of Miami/Jackson Memorial Medical Campus. Jackson South provides a wide array of services and subspecialties practiced by nationally respected, board-certified physicians and healthcare professionals. Some of Jackson South's signature services include robotic surgery in the Urology Center of Excellence, bariatric surgery in the Gastric Sleeve Center, colorectal procedures in the Digestive Center of Health, a Comprehensive Breast Center, outpatient nutritional counseling with registered dietitians and a level I Cardiac Catheterization Lab. In February 2011, Jackson South doubled its size through a 157,000 square-foot expansion and renovation project that included an expanded emergency room and renovated minor care, surgical facilities, 48 new private patient rooms and 12 new Intensive Care Unit suites.

Jackson North Medical Center is a 382-bed, acute-care, community hospital located approximately 11 miles north of University of Miami/Jackson Memorial Medical Campus, serving the residents of North Miami-Dade County. It is also an academic affiliate of the Florida International University Herbert Wertheim College of Medicine. Jackson North's services include 24-hour adult and pediatric emergency care, cardiac care, maternity care, orthopedics, surgery, inpatient and outpatient rehabilitation, and wound care including hyperbaric chamber treatment/therapy. Jackson North is a Joint Commission certified advanced primary stroke center and a member of the Dade County STEMI Network for interventional cardiology. It is also home to specialized centers such as the Leon and Serena Simkins Thyroid and Neuroendocrine Tumor Clinic, Center for Geriatric Psychiatry, Comprehensive Cancer Program, Endovascular Institute, Uterine Fibroid Treatment Center, Pain Center, Women's Health Program, Special care Unit for medically complex patients, and Bariatric Center of Excellence. Jackson North is also one of only three hospitals in Florida to earn the 2012 U.S. Environmental Protection Agency's (EPA's) ENERGY STAR certification for energy efficiency.

Long Term Care Centers

Jackson Health System owns and operates two long-term care centers in Miami-Dade County. Both facilities assist Jackson Memorial Hospital, Jackson South Community Hospital and

Jackson North Medical Center with the timely discharge of patients who cannot be easily discharged from the hospital to home or other community nursing homes.

- ***Jackson Memorial Long-Term Care Center***, a 180-bed skilled nursing facility located in north Miami-Dade. It received the Governor's Gold Seal Award in 2002, which was given to only 10 nursing homes out of 600 in the state.
- ***Jackson Memorial Perdue Medical Center***, a 163-bed skilled nursing and rehabilitation facility in south Miami-Dade has been recognized as a 4-Star-Best Nursing Home by *U.S. News & World Report*.

Community-based Care

- **Primary and Specialty Care Centers:** Jackson Health System operates primary care and specialty care centers throughout the county. Vanguards of Jackson's mission to promote and preserve community wellness, the primary care centers provide services such as lab work, chronic disease management, prenatal care and optometry. The specialty care centers, a growing part of the Jackson network, provide unique and cutting-edge treatment in areas such as cardiology, bariatric surgery and digestive health.
- **School-Based Care:** Throughout Miami-Dade County, Jackson Health System operates 18 programs in elementary, middle and high schools where students receive first aid, immunizations, school physicals, health education, counseling and referrals.

Affiliations

The Trust has well established relationships with many area hospitals. Current affiliation agreements are in place with Mount Sinai Medical Center, the Miami Veterans Administration Medical Center, the University of Miami Hospital and Clinic, the Bascom Palmer Eye Institute, the University of Miami Hospital and Clinic's Sylvester Comprehensive Cancer Center, Morse Geriatric Center, Broward General Medical Center and Miami Children's Hospital for resident physician training and patient care.

Attachment III: Enhanced Program Budget
Public Health Trust of Miami-Dade County d/b/a Jackson Health System

| PROGRAM BUDGET | | Requested Funding | | Justification |
|--------------------------------------|--------------------------------|--------------------------|-----------------------|---|
| | | % | Amount | |
| SALARIES: | | | | |
| Full-Time Employees | | | | |
| <u>Position</u> | <u>Annual Salary (12 mths)</u> | | | |
| Physician - Jefferson Reaves | 159,600.00 | 100% | 159,600.00 | Provide medical treatment to patients, including assessment of physical conditions, prescribing treatment regimens, referrals to specialists |
| Physician - Rosie Lee Wesley | 159,600.00 | 100% | 159,600.00 | |
| Physician - North Dade | 159,600.00 | 100% | 159,600.00 | |
| Physician - ACC | 159,600.00 | 100% | 159,600.00 | |
| ARNP - Jefferson Reaves | 109,370.00 | 100% | 109,370.00 | Assist physician with medical assessments; order labs as necessary to determine appropriate medical treatment; monitor client's adherence with prescribed care plans |
| ARNP - Jefferson Reaves | 109,370.00 | 100% | 109,370.00 | |
| ARNP - Rosie Lee Wesley | 109,370.00 | 100% | 109,370.00 | |
| ARNP - Rosie Lee Wesley | 109,370.00 | 100% | 109,370.00 | |
| ARNP - North Dade | 109,370.00 | 100% | 109,370.00 | |
| ARNP - North Dade | 109,370.00 | 100% | 109,370.00 | |
| ARNP - ACC | 109,370.00 | 100% | 109,370.00 | |
| ARNP - ACC | 109,370.00 | 100% | 109,370.00 | |
| Medical Assistant - Jefferson Reaves | 36,203.00 | 100% | 36,203.00 | Perform administrative and certain clinical duties under the direction of physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician. |
| Medical Assistant - Jefferson Reaves | 36,203.00 | 100% | 36,203.00 | |
| Medical Assistant - Rosie Lee Wesley | 36,203.00 | 100% | 36,203.00 | |
| Medical Assistant - Rosie Lee Wesley | 36,203.00 | 100% | 36,203.00 | |
| Medical Assistant - North Dade | 36,203.00 | 100% | 36,203.00 | |
| Medical Assistant - North Dade | 36,203.00 | 100% | 36,203.00 | |
| Medical Assistant - ACC | 36,203.00 | 100% | 36,203.00 | |
| Medical Assistant - ACC | 36,203.00 | 100% | 36,203.00 | |
| Psychiatric Social Worker | 70,000.00 | 100% | 70,000.00 | Evaluate and monitor patients with identified mental health level |
| Registered Dietician | 53,000.00 | 100% | 53,000.00 | Registered Dietician will provide nutritional assessment and information to clients as a supplement to their medical treatment. |
| Case Manager - Jefferson Reaves | 60,000.00 | 100% | 60,000.00 | Case Manager will be responsible for coordinating care and facilitating health action plan with high-risk patients. Assist patients with sub-clinical, social and psychological needs. |
| Case Manager - Rosie Lee Wesley | 60,000.00 | 100% | 60,000.00 | |
| Case Manager - North Dade | 60,000.00 | 100% | 60,000.00 | |
| Case Manager - ACC | 60,000.00 | 100% | 60,000.00 | |
| Administrative Assistant/Patient | 36,500.00 | 100% | 36,500.00 | Administrative Assistant/Patient Registration Clerk will be responsible for the administrative functions for the disease management program. |
| Administrative Assistant/Patient | 36,500.00 | 100% | 36,500.00 | |
| Clinical Informatics Supervisor | 90,000.00 | 100% | 90,000.00 | Design the rules and system build out for implementation of chronic disease management component in JHS' software solution, Cerner. Also responsible for testing, product execution, training and continuous maintenance of the application. |
| Clinical Informatics Supervisor | 90,000.00 | 100% | 90,000.00 | |
| | | | 0.00 | |
| | | | 0.00 | |
| Full-Time Total | | 30.00 | 2,418,984.00 | |
| TOTAL FTEs/SALARIES | | 30.00 | \$2,418,984.00 | |
| FRINGE BENEFITS | | | \$2,225,465.28 | |
| Fica/Mica | Rate: 7.65% | | 170,248.09 | FICA calculated at a rate of 7.65%. \$2,225,465.28 x 7.65% = \$170,248.09 . The \$2,225,465.28 represents employees taxable wages at their respective percentages, 5% of employee salaries treated as a pre-tax contribution to employee health benefits, 3% of employees salaries treated as pre-tax contribution to employee retirement benefits. [\$2,418,984 - (\$2,418,984 x 8%)] = \$2,225,465.28 |
| W-Comp's | Rate: 1.10% | | 26,608.82 | Worker's Compensation calculated at a rate of 1.10%. \$2,418,984 base salaries x 1.10% = \$26,608.82 . |
| Retirement Health Ins. | Rate: 6.20% | | 77,407.49 | PHT/JHS retirement benefit is to 6.20% of salary. PHT/JHS employees contribute 3% of their base wages toward retirement. This amount will vary with each employee as their base salaries differ. (\$2,418,984 base salaries x 6.20% = \$149,977.01; \$2,418,984 x 3% = \$72,569.52; \$149,977.01 - \$72,569.52 = \$77,407.49 |
| | Varies | | 222,550.80 | |
| Life Ins. | Cost per Staff Rate: 0.13% | | 3,144.68 | The Health Insurance contribution for PHT/JHS staff is \$11,450 annually. PHT/JHS employees contribute 5% of their base wages towards this benefit. Amount per employee will vary as their base salaries differ. (\$11,450 x 30FTEs = \$343,500; \$2,418,984 base salaries x .05 = \$120,949.20; \$343,500 - \$120,949.20 = \$222,550.80 |
| Dental | Rate: \$25 | | 9,000.00 | Life Insurance Calculated at a rate of .13% of base salaries. (\$2,418,984x .13%) = \$3,144.68 |
| | Rate: | | | Dental Insurance at an average cost per staff of (\$25 x 12 months x 30 employees) = \$9,000 |
| TOTAL FRINGE BENEFITS | | | \$508,959.88 | |
| OPERATING EXPENSES: | | | Cost | |
| Equipment | | | 30,000.00 | |
| Retinal Camera | | | 30,000.00 | Retinal photos for diabetic and HIV/AIDS patients; to improve appropriate screening and interventions to prevent risk for blindness among these patients |
| Contracted Services | | | 355,000.00 | |
| Retinal Support | | | 30,000.00 | Ophthalmologist services for reading and interpreting retinal photos |
| Podiatry Support | | | 50,000.00 | Screening tools, cast, training of ARNPs/RNs to follow disease management protocols for diabetic patients |
| 24-hr Nurse Help Line | | | 275,000.00 | 24 hrs certified nurses to help route patients to the appropriate 'level' on the care coordination team-contracted service. |
| Other | | | 0.00 | |
| Background screening | | | | |
| TOTAL OPERATING EXPENSES: | | | \$385,000.00 | |
| Administrative/Indirect Costs | | 0% | | |
| TOTAL BUDGET | | | \$3,312,943.88 | |

CONGESTIVE HEART FAILURE DISEASE MANAGEMENT

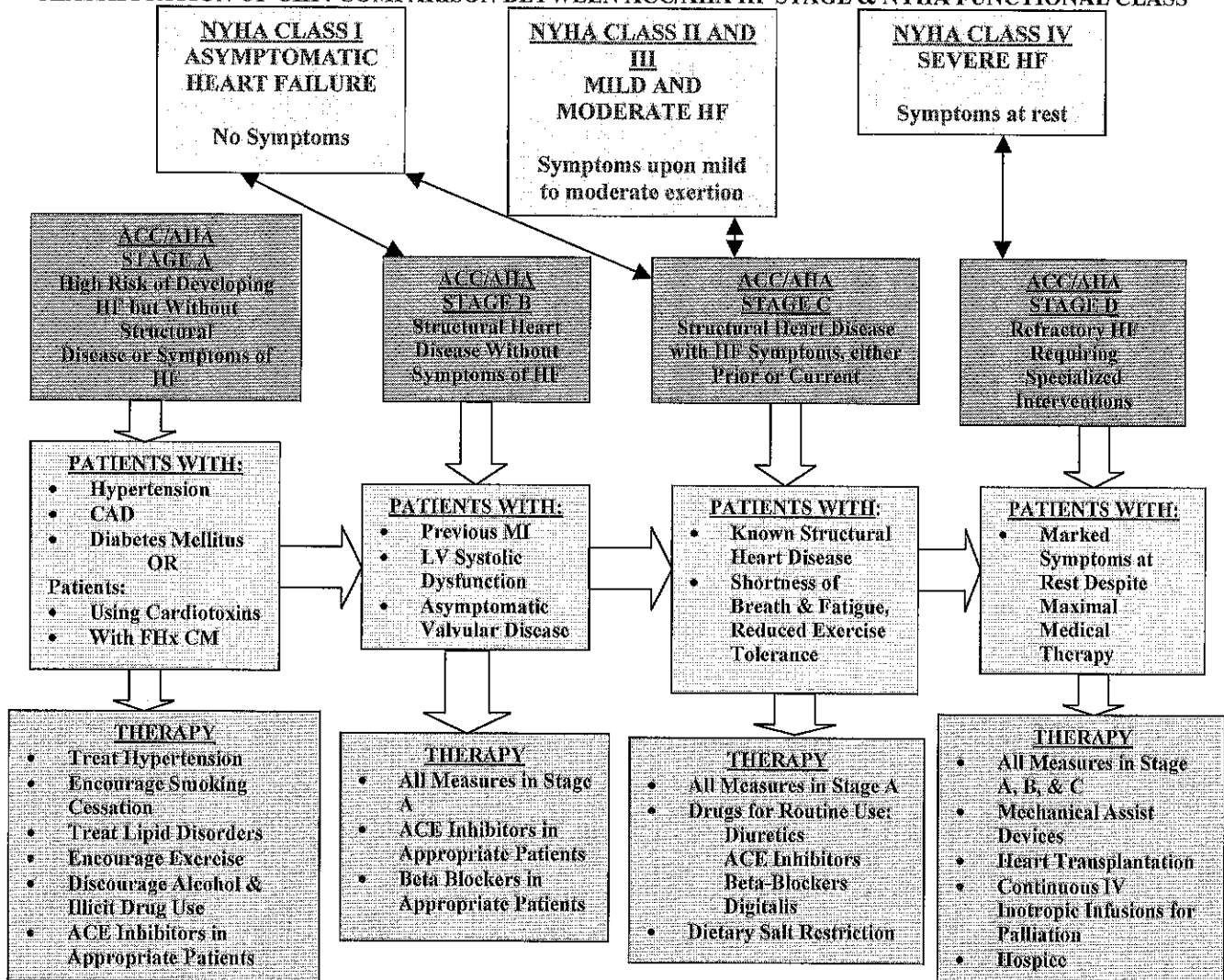
WHAT IS CONGESTIVE HEART FAILURE (CHF)?

- Generally, heart failure is identified as any condition in which the heart does not adequately pump blood to supply the metabolic needs of the body.
- CHF is a syndrome in which cardiac dysfunction causes decreased cardiac output (CO), resulting in reduced exercise tolerance, increased risk of arrhythmias, and shortened life expectancy. "Congestive Heart Failure" emphasizes the fact that decreased output results in the backing up of blood within the vasculature leading to the failing heart.
- CHF is a common condition affecting approximately 1% of the population, with an annual incidence rate of 3 per 1,000.
- 5 million Americans have heart failure and up to 700,000 new cases are diagnosed every year and has a part in 250,000 deaths per year.
- The annual direct cost of CHF care is anywhere from 10 to 38 billion dollars. Most of this cost comes from hospital stays for acute or decompensated CHF

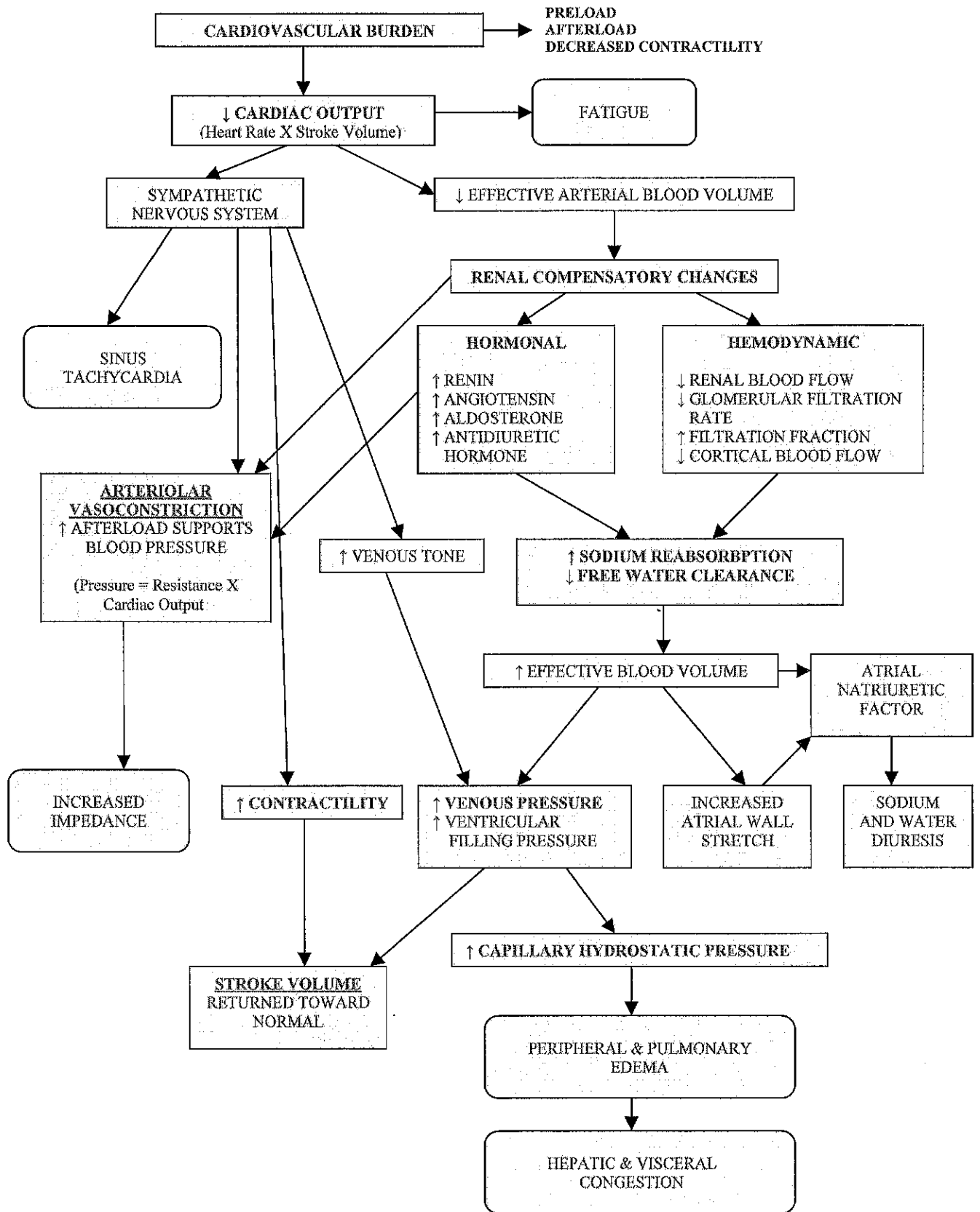
2001 ACC/AHA GUIDELINES FOR THE EVALUATION & MANAGEMENT OF CHRONIC HEART FAILURE

- The new approach to the classification of heart failure emphasizes the evolution and progression of the disease more focused on risk factors versus symptoms.
- The new classification system recognizes that there are established risk factors and structural prerequisites for the development of heart failure.
- Guidelines recommend therapeutic interventions before the appearance of LVD geared toward the ultimate goal of reducing heart failure mortality and morbidity.

CLASSIFICATION OF CHF: COMPARISON BETWEEN ACC/AHA HF STAGE & NYHA FUNCTIONAL CLASS



THE PATHOPHYSIOLOGY OF CONGESTIVE HEART FAILURE



CONGESTIVE HEART FAILURE DISEASE MANAGEMENT GUIDELINES

RATIONALE:

Evidence-based data demonstrate that, in patients with left ventricular systolic dysfunction, treatment with angiotensin-converting enzyme inhibitors (ACE) and selected beta-blockers reduce mortality due to heart failure, reduce admissions for heart failure, reduce ischemic events, reduce all-cause mortality, and improve functional capacity.

INITIAL WORK-UP FOR CHF

- **History and Physical** – Identify risk factors for heart failure
- **NYHA Classification** - Assess activities of daily living
- **Assess Volume Status**
- **CBC, Chemistry panel to assess level and renal function, TSH**
- **EKG and Chest X-Ray**
- **Echocardiogram**
- **Cardiac Catheterization** – Angina candidates for Revascularization

DRUGS TO TREAT HEART FAILURE

- **Loop Diuretics** – Used to restore and maintain an euvolemic state
- **ACE Inhibitors** - ↑ arterial compliance, ↑ Cardiac output, ↑ sodium excretion, ↑ renal blood flow, ↑ vasodilation, ↑ cardiac performance
- **Beta-Blockers** - ↓ blood pressure, ↓ wedge pressure, ↑ CO
- **Digoxin** - ↓ heart rate, ↓ myocardial oxygen demand, ↑ force of contraction, ↑ stroke volume and CO
- **Aldactone** - Improves dyspnea at rest

CHF DISEASE MANAGEMENT ALGORITHM



- **LOOP DIURETICS**
- **ACE INHIBITOR (At Night)**
- **ANGIOTENSIN RECEPTOR BLOCKERS (ARB) – Cough and Angioedema**
- **BETA-BLOCKER (Euvolemic Patients)**

Carvedilol - 3.1 mg BID for 2 weeks with food

6.25 mg BID for 2 weeks, then 12.5 mg BID for 2 weeks then 25 mg BID

Toprol XL 25 mg. – Titrate every 2 weeks to 200 mg. Q Day **(OR)**

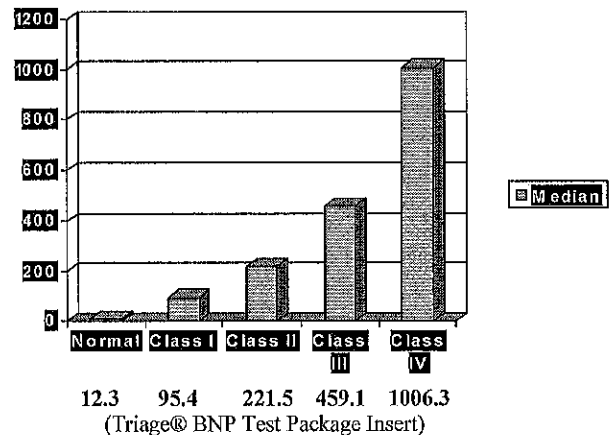
Lopressor 25 mg. – Titrate to maximum 150 mg. Q Day

- **EDUCATIONAL TAPE 12 MINUTES: SYMPTOMS, MEDICATIONS, DIET, ACTIVITY**

B-TYPE NATRIURETIC PEPTIDE (BNP)

- Found in the Cardiac Ventricles
- Released in response to stretch and increased volume in the ventricle
- BNP levels are related to:
 - Left Ventricular End-Diastolic Pressure
 - NYHA Classification
- BNP levels accurately reflect the cause of dyspnea in patients presenting to the Emergency Department
- **Triage BNP Test:**
 - Completely automatic
 - Uses 2 cc's of whole blood or plasma
 - Gives reproducible results within ~ 15 minutes
 - Small enough to use at the bedside, the Emergency Department, or in any point-of-care laboratory

BNP VS. NYHA CLASSIFICATION



Adapted from Burnett, JC. Journal of Hypertension 2000;17(Suppl 1):S37-S43. Dao, Q., Maisel, A. et al. Journal American College of Cardiology, Vol. 37, No. 2, 2001.

IV LASIX PROTOCOL

- 100 MG IV Bolus
- Initiate continuous infusion at 20 - 40 mg/hr
- Double infusion rate every 12 – 24 hours to achieve a diuresis of ≥ 100 ml/hr
- Maximum infusion 160 mg/hr **(OR)**
- Bumex 2 mg. bolus
- Initiate continuous infusion 0.5 – 2 mg. / hr. Titrate to a maximum dose of 4 mg/day

DOSAGES OF PRIMARY DRUGS USED IN THE TREATMENT OF HEART FAILURE

| Decrease Mortality & Improve Symptoms | Starting Dosage | Target Dosage or Common Dosage | Cost for Brand Name (*Generic) |
|---------------------------------------|--------------------------------|--------------------------------|-----------------------------------|
| ACE Inhibitors | | | |
| Captopril (Capoten) | 6.25 mg TID (One-half tablets) | 12.5 to 50 mg TID | \$82 (*\$52 - \$58) |
| Enalapril (Vasotec) | 2.5 mg BID | 10 mg BID | \$68 (*\$46 - \$48) |
| Lisinopril (Zestril) | 5 mg Daily | 10 to 20 mg Daily | \$29 |
| Ramipril (Altace) | 1.25 mg BID | 5 mg BID | \$60 |
| Trandolopril (Mavik) | 1 mg Daily | 4 mg Daily | \$22 |
| Aldosterone Antagonist | | | |
| Spironolactone (Aldactone) | 25 mg Daily | 25 mg Daily | \$14 (*\$12 to \$13) |
| Beta Blockers | | | |
| Bisoprolol (Zebeta) | 1.25 mg Daily (1/4 Tablet) | 10 mg Daily | \$36 |
| Carvedilol (CoReg) | 3.125 mg BID | 25 to 50 mg BID | \$95 |
| Metoprolol Tartrate (Lopressor) | 12.5 mg BID (1/4 Tablet) | 50 to 75 mg BID | \$42 (*\$26 to \$31) |
| Metoprolol Succinate (Toprol-XL) | 12.5 mg Daily (1/2 Tablet) | 200 mg Daily | \$52 |
| Treat Symptoms | | | |
| Thiazide Diuretics | | | |
| Hydrochlorothiazide (Esidrex) | 25 mg Daily | 25 to 100 mg Daily | \$5 (*\$1 - \$3) |
| Metolazone (Zaroxolyn) | 2.5 mg Daily | 2.5 to 10 mg Daily | \$20 |
| Loop Diuretics | | | |
| Bumetanide (Bumex) | 1 mg Daily | 1 to 10 mg 1-3 times daily | \$14 (*\$12 - \$13) |
| Ethacrynic Acid (Edecrin) | 25 mg Daily | 25 to 200 mg 1-2 times daily | \$10 |
| Furosemide (Lasix) | 40 mg Daily | 40 to 400 mg 1-3 times daily | \$8 (\$4 - \$5) |
| Torsemide (Demadex) | 20 mg Daily | 20 to 200 mg 1-2 times daily | \$23 |
| Inotrope | | | |
| Digoxin (Lanoxin) | 0.125 mg Daily | 0.125 to 0.375 mg Daily | \$6 (*\$3 - \$5) |

Adapted with permission from Heart Failure – Systolic Dysfunction. Retrieved May22, 2001, from: <http://cme.med.umich.edu/pdf/guideline/heart.pdf>

COMMON DRUG INTERACTIONS

| Drug or Drug Class | Interacting Drugs | Effect |
|-------------------------------|---|---|
| ACE Inhibitors | <ul style="list-style-type: none"> • Antacids • Lithium • NSAID • Spironolactone (Aldactone) | <ul style="list-style-type: none"> • ↓ drug absorption • ↑ Lithium levels • May ↓ renal function • With co-administration, may result in ↑ potassium levels, especially in the elderly and in patients with renal dysfunction |
| Amiodarone (Cordarone) | <ul style="list-style-type: none"> • Beta Blockers • Calcium Channel Blockers (Cardiazem, Calan) • Digoxin (Lanoxin) • Quinidine • Phenytoin (Dilantin) • Procainamide (Pronestyl) • Theophylline • Warfarin | <ul style="list-style-type: none"> • ↓ heart rate & AV node conduction • ↓ heart rate & AV node conduction • ↑ digoxin concentration, ↓ heart rate & AV node conduction • ↑ quinidine concentration • ↑ phenytoin concentration, ↓ amiodarone concentration • ↑ procainamide concentration • ↑ theophylline concentration • ↑ INR |
| Beta Blockers | <ul style="list-style-type: none"> • Amiodarone, diltiazem, verapamil, propafenone (Rythmol), sotalol (Betapace) | <ul style="list-style-type: none"> • ↓ heart rate & AV node conduction |
| Digoxin | <ul style="list-style-type: none"> • Amiodarone • Antacids • Beta Blockers • Cholestyramine (Questran), colestipol (Colestid), diltiazem, verapamil • Omeprazole (Prilosec) • Propafenone • Quinidine • Rifampin (Rifadin) • Sotalol • Spironolactone | <ul style="list-style-type: none"> • ↑ digoxin concentration, ↓ heart rate & AV node conduction • ↓ digoxin absorption (space administration at least 2 hrs apart) • Carvedilol (CoReg) may ↑ digoxin concentration; ↓ heart rate & AV node conduction • ↓ digoxin absorption • ↑ digoxin concentration, ↓ heart rate & AV node conduction • ↑ digoxin concentration • ↑ digoxin concentration, ↓ heart rate & AV node conduction • ↑ digoxin concentration • ↓ digoxin concentration • ↓ heart rate & AV node conduction • ↑ digoxin concentration, interferes with some digoxin assays yielding falsely ↑ digoxin concentrations |
| Warfarin | <ul style="list-style-type: none"> • Amiodarone, antibiotics (Bactrim, Septra), beta blockers, Tagamet, Diflucan, Nizoral, oral diabetic agents, Phenytoin, Zocor • NSAIDs, ASA, Ticlid, Plavix | <ul style="list-style-type: none"> • ↑ INR • ↑ risk of bleeding because of effect on platelet function |

Examples of Reporting Format

Table 1: Intermediate Process and Outcome Measures of Care

| Diabetes | Baseline Year | Current year | First Level | Last Level | % change |
|------------------------------------|---------------|--------------|-------------|------------|----------|
| On aspirin as of last clinic visit | 2011 | 2012 | 37% | 68% | 31% |
| Lipid profile in last year | 2011 | 2012 | 72% | 79% | 8% |
| Current LDL < 100 | 2011 | 2012 | 38% | 55% | 17% |
| Renal function test in past year | 2011 | 2012 | 60% | 85% | 25% |
| Eye exam in past year | 2011 | 2012 | 37% | 47% | 10% |
| HBA1c test in past 6 months | 2011 | 2012 | 74% | 72% | -2% |
| Current HBA1c < 7.0 | 2011 | 2012 | 46% | 57% | 11% |
| Blood pressure < 130/80 | 2011 | 2012 | 31% | 31% | 0 |
| Foot exam in past year | 2011 | 2012 | 29% | 62% | 33% |

Table 2: Charges and Utilization of Care

| Diabetes | | | | Charges by Category | | | | Charges as % of Baseline Year | | | |
|----------|--------|--------|----------|---------------------|---------|---------|---------|-------------------------------|------|--------|-------|
| Year | Pts | Ipdays | EDvisits | IP | ED | OP xED | Total | IP | ED | OP xED | Total |
| 2011 | 17487 | 1.29 | 1.63 | \$3,501 | \$1,149 | \$2,109 | \$6,758 | 100% | 100% | 100% | 100% |
| 2012 | 18/810 | 1.27 | 1.20 | \$3,349 | \$842 | \$2,102 | \$6,292 | 96% | 73% | 100% | 93% |
| 2013 | 20465 | 1.13 | 1.12 | \$3,027 | \$788 | \$2,128 | \$5,942 | 86% | 69% | 101% | 88% |
| 2014 | 19696 | 1.02 | 0.92 | \$2,758 | \$649 | \$2,108 | \$5,541 | 79% | 56% | 100% | 82% |
| 2015 | 13880 | 0.85 | 0.94 | \$2,332 | \$659 | \$2,706 | \$5,698 | 67% | 57% | 128% | 84% |
| 2016 | 15635 | 0.77 | 0.90 | \$2,118 | \$629 | \$2,763 | \$5,510 | 61% | 55% | 131% | 82% |
| 2017 | 16067 | 0.90 | 0.84 | \$2,489 | \$593 | \$2,841 | \$5,923 | 71% | 52% | 135% | 88% |
| 2018 | 17106 | 0.94 | 0.87 | \$2,605 | \$611 | \$2,843 | \$6,059 | 74% | 53% | 135% | 90% |

As other programs have shown (#), the main cost savings have been achieved by reducing the number of in-patient stays, reducing the length of inpatient stays, and reducing emergency department visits. This was associated with small increases in outpatient clinic visits per patient and higher out-patient costs.



Executive Offices
Jackson Memorial Hospital
West Wing 108
1611 N.W. 12TH Avenue
Miami, Florida 33136-1096
305-585-6086

July 31st, 2012

Agency for Health Care Administration
2727 Mahan Drive
Tallahassee, FL 32308

Re: Match Letter for 2012-13 Low Income Pool (LIP) Tier-One Milestone (STC 61) Application

To Whom It May Concern:

Jackson Health System is enthusiastically submitting two applications to ACHA under the Lower Income Pool Funding for the new funding as well as the Enhanced. Expansion of our primary care infrastructure and reducing avoidable emergency department visits is a goal we strive for as the public safety net hospital of Miami Dade County.

JHS commits to providing the state share in the *enhanced* grant application in the amount of \$1,400,381 which is 42.27 % of the requested budgeted \$3,312,944.

Sincerely,

A handwritten signature in purple ink that reads "Mark T. Knight".

Mark T. Knight
Executive Vice-President & Chief Financial Officer
Jackson Health System
1611 NW 12th Avenue
Miami, FL 33136