

# ST. JOHNS RIVER RURAL HEALTH NETWORK



## COMPREHENSIVE DIABETES MANAGEMENT

*Presented to:*

**Florida LIP Council**

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# RURAL HEALTH NETWORKS IN FLORIDA

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- Established by State Statute in 1993
- 9 Rural Health Networks in Florida
  - cover 28 rural counties and parts of 13 non-rural counties
- Intended to address fundamental problems:
  - Inadequate Funding
  - Recruitment and retention of health professionals
  - Migration of patients from rural to urban providers
- Intended to integrate public and private health resources, and to emphasize cooperation over competition.
- Department of Health has responsibility for certifying networks and distributing grant funds to eligible networks.



# FLORIDA STATUTE<sup>(2008)</sup>

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## 381.0406 ~ Rural Health Networks

- a) The Legislature finds that, **in rural areas, access to health care is limited** and the quality of health care is negatively affected by **inadequate financing, difficulty in recruiting and retaining** skilled health professionals, and because of a migration of patients to urban areas for general acute care and specialty services.
- b) The Legislature finds that the efficient and effective delivery of health care services in rural areas requires the **integration** of public and private resources and the **coordination** of health care providers.
- c) The Legislature finds that the availability of a **continuum of quality health care services**, including preventive, primary, secondary, tertiary, and long-term care, is essential to the vitality of rural communities.



# FLORIDA STATUTE<sup>(2008)</sup>

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- d) ... the creation of rural health networks can help to alleviate these problems. Rural health networks shall act in the broad public interest and, to the extent possible, be structured to provide a continuum of quality health care services for rural residents through the cooperative efforts of rural health network members.
- e) **... rural health networks shall have the goal of increasing the utilization of statutory rural hospitals for appropriate health care services whenever feasible, which shall help to ensure their survival and thereby support the economy and protect the health and safety of rural residents.**
- f) ... rural health networks may serve as "laboratories" to determine the best way of organizing rural health services, to move the state closer to ensuring that everyone has access to health care, and to promote cost containment efforts.



# NETWORK SERVICES

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- Home-based care:
  - Home Health
  - Hospice
- Within 30 Minutes:
  - **Primary care**
  - EMS, incl. ALS, Transport and ER
  - Prenatal and postpartum for uncomplicated pregnancies
  - Community-based services for Elders
  - **Public Health services, incl. disease prevention, health promotion, education**
  - Outpatient Psych. and S/A
- Within 45 Minutes:
  - Acute inpatient hospital care
  - Level I OB services
  - Skilled nursing and long term care
  - Dialysis
  - Osteopathic and chiropractic
- Within 2 Hours:
  - **Specialist physician care**
  - Inpatient care for severe problems
  - Level II and III OB services and NICU
  - Comprehensive medical rehab.
  - Inpatient Psych. and S/A
  - Advance radiology and diagnostics
  - Subacute care



## MISSION OF SJRRHN

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*To recognize, encourage, and support partnerships that improve the health of rural communities of Baker, Clay, Flagler, St Johns, Putnam, and Volusia Counties.*



# STRATEGIC ASSESSMENT

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- **5 Rural Counties**
  - 2,371 sq. miles
  - 320,000+ population
- **Medically Underserved / Health Professional Shortage Area**
  - All of Baker, Bradford and Union
  - Specific populations in Clay and Nassau
- **Socio-Economically Disadvantaged**
  - Per capita income as much as 43% below avg. for FL
  - Population below FPL: 14-18%
  - Higher rates of Medicaid enrollment and un-insured
- **Leading causes of Death**
  - Cancer, CVD/Stroke, Respiratory Disease, Diabetes
  - High rates of overweight and obesity
  - Very high rates of hospitalization and lower-limb amputations from diabetes



# LIP PROGRAM FUNDING AND FOCUS

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## LIP Program Funds

- Funded at \$1 Million in 2006 by AHCA
- Funded at \$650,000 in July 2008 under DOH
  - *44.60% provided in local match by CHD's*

## Target population

- Low-income ( $\leq 150\%$  FPL)
- Un-insured Adults, ages 18-64
  - *Clients are pre-screened for eligibility for Medicaid and other programs, including compassion use programs.*
- Clinical diagnoses of Diabetes
- Five counties (*Baker, Bradford, Clay, Nassau, and Union*)





# PROGRAM PARTNERS

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- 5 County Health Departments
- Area Hospitals (4 rural hospitals)
- Independent Eye and Foot specialists
- Behavioral Health service providers
- Nassau County Government
- Winn-Dixie Pharmacies
- Florida Academy of Family Physicians



# COVERED SERVICES

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- Primary medical care
- Related diagnostic testing/labs
- Diabetes management education
- Service Coordination and Follow-up
- Annual Eye and Foot exams
- Diabetic medications and supplies
- Immunizations (Influenza and Pneumococcal)



## **SERVICES ELIMINATED OR REDUCED DUE TO FUNDING CUT**

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- All non-diabetic related medications
  - Antidepressants
  - Cardiac meds
  - Cough/Cold meds
  - Hormones
- Some diagnostic tests
- Eye glasses
- Diabetic Shoes



# SUMMARY OF SERVICES PROVIDED

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<u>INDICATOR</u>	<u>FY06-07</u>	<u>FY07-08</u>	<u>TOTAL</u>
Unduplicated Clients	279	372	444
Primary Care Encounters	1,770	1,828	3,598
Disease Management Encounters	539	2,730	3,269
Care Coordination Services Provided	271	1,529	1,800
Prescriptions Filled	950	3,965	4,915
Laboratory Tests	1,323	2,636	3,959



# PRIMARY CARE SERVICES AND MEDICAL HOME

Current Enrollment:  
**FULL CAPACITY**

Baker	35
Bradford	35
Clay	75
Nassau	55
Union	35
<b>TOTAL</b>	<b>235</b>

- 100% of clients are screened for eligibility for Medicaid and Drug Assistance Programs.
- 100% of enrolled clients given a medical home.
- Together, the 5 CHD's provided more than \$710K in primary care services during FY06-07, despite only 8 months of activity.
  - *LIP Draw FY06-07: \$583,333*
  - *Cost Savings: \$126,667*
- Self-reported ER utilization was reduced by 50%.

**Preventing just 1 hospital ER visit for each client during the year will save area hospitals a minimum of \$304,000 in uncompensated care\*.**

\*Based on AHCA ER Utilization data, 2007



# DIAGNOSTIC AND SPECIALTY SERVICES

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- Annual Eye Exams
- Annual Foot Exams
- Diabetes-related labs (every 6 months)
  - *HbA1c*
  - *Cholesterol (LDL)*
  - *Blood Pressure*
- Dietary consultations
- Diabetic medications and supplies



# DISEASE MANAGEMENT AND EDUCATION

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- **2 FTE Disease Managers/Health Educators**
- More than 3,200 individual encounters in FY07-08
  - *More than \$32K of disease management svcs. in FY06-07*
- Community Outreach and Home Visits
- Individual and Group Education
- FAFP Diabetes Master Clinician Program
  - Diabetes Registry
  - Group Visits
- Care Coordination



# FAFP DIABETES MASTER CLINICIAN PROGRAM

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- Developed by Dr. Edward Shahady MD and FAFP in 2003
- Currently more than 58 practices participating (*8,650+ patients*)
- Internet based “relational” database (*HIPPA Compliant*)
- Based on American Diabetes Association recommended goals:
  - HbA1c  $\leq$  7%
  - LDL’s  $\leq$  100
  - BP  $\leq$  130/80
- Individual Client Report Cards and Aggregate Clinic Reports
- Projected cost-saving up to \$1,122 per client/year
  - *Totaling at least \$263K in overall savings for all clients enrolled.*





## BACKGROUND ON ESTIMATED ANNUAL COST SAVINGS\*

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- Hb A1C: Good control (<7%) = \$279
- Blood pressure: <130/80 = \$464
- LDL: Reduced to <100mg/dl = \$369
- Total: All 3 targets met = \$1,112

\* *Towers Perrin 2005 actuarial analysis conducted for ADA/NCQA for Diabetes Physician Recognition Program*

**Patient Report Card for Sponge Bob**

**Age: 48**

**Sex: Male**

**Non-Smoker**

**Medical Record #: dis123**

	Goal	Dec 2008	Oct 2008	Sep 2008	Jun 2008
<b>Weight</b>		140	166	124	120
<b>BP</b>	Less than 130/80 Best 120/80	130/80	120/77	136/79	140/76
<b>Tests</b>					
<b>HbA1c</b> (Sugar for 3 months)	Less than 7 Best if 6	7.4	6.4	6.0	6.7
<b>LDL</b> (Lousy or bad cholesterol)	Less than 100 Best if 70	80		120	140
<b>HDL</b> (Happy or good cholesterol)	Greater than 40	55		50	45
<b>Triglycerides</b> (another bad fatty substance)	Less than 150	75		89	79
<b>Medication</b>					
Aspirin or Anti-coagulant (to prevent heart attacks)	Take daily	Yes	Yes	Yes	Yes

Important Yearly Activities	Goal	Status	Next Test Due	Most Recent Test
<b>Eye Check</b> (to prevent blindness)	1 time a year	Completed	9/12/2009	9/12/2008
<b>Foot Check</b> (to check for numbness and sores)	1 time a year	Completed	6/17/2009	6/17/2008
<b>Urine Micro Albumin</b> (to check for kidney failure)	1 time a year	Completed	6/17/2009	6/17/2008
<b>Flu Shot</b> (to prevent flu)	1 time a year	Completed	12/5/2009	12/5/2008

Special Vaccine	Goal	Status
<b>Pneumovax</b> (to prevent a special pneumonia: given once in a lifetime - twice if first was given before age 65)	1 <sup>st</sup>	1st Shot Completed

Averages
Patients' Goals by Clinician
HbA1c
LDL
Non-HDL
Triglycerides
Blood Pressure
Annual Checks

Dr. Sample Clinic's Clinic

Clinic ID		HbA1c	LDL	BP	HbA1c & LDL & BP
1	Percentage Met Goals	38%	17%	54%	7%
	33 Patients	33	15	47	6
	86 Patients	86	87	87	86
All Clinics	Percentage Met Goals	56%	57%	57%	22%
	8097 Patients	8097	7880	8913	2808
	14445 Patients	14445	13850	15723	12860
<b>GOALS</b>		<7.0	<100	SP<=130	

	Goals	All Clinics	Clinic's Average
# of Patients		16337	108
# of Visits		51645	146
Weight		211	170
BMI		34	29
Waist Range		41	34
B/P	119/79	132/77	136/82
EyeCheck	Once a year	18 %	24 %
FootCheck	Once a year	29 %	18 %
HbA1c<	<6	7.3	7.4
Total Chol	<135	179	198
LDL	<70	100	123
HDL	(M: >40 F: >50)	46	49
Non-HDL	<100	133	149
Triglycerides	<150	174	192
U Micro Alb	Once a year	27 %	21 %
Pneumovax	Once	28 %	55 %
FluShot	Once a year	19 %	16 %
Daily ASA	100%	47 %	69 %
Attended Group Visit		3 %	6 %

<b>Averages</b>
<b>Patients' Goals by Clinician</b>
<b>HbA1c</b>
<b>LDL</b>
<b>Non-HDL</b>
<b>Triglycerides</b>
<b>Blood Pressure</b>
<b>Annual Checks</b>

Dr. Sample Clinic's Clinic

**Average HbA1c**

Clinic	Very High (avg HbA1c>8)	High (>6.5 & <=8)	Target (avg HbA1c<=6.5)	# of Tests	# Patients Tested
1	12	57	17	131	86

**Avg HbA1c**

Very High	High	Target	ALL
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	MR Number	Patient	Avg HbA1c	# of Tests	# of Visits
-	89493	<a href="#">Jones, Bubba</a>	12.4	2	2

**Appointments and test results**

Appt Date	HbA1c
02/24/2007	14.7
02/27/2007	10.0

+	56473	<a href="#">Charming, Prince</a>	11.3	2	4
+	333-45-3333	<a href="#">jones, mary</a>	10.0	1	1
+	12356	<a href="#">Dean, Jean</a>	9.0	1	1
+	0000000	<a href="#">thomas, brandi</a>	9.0	1	1
+	1234567	<a href="#">Miller, Barney</a>	8.9	1	1
+	2772	<a href="#">Gamba, Josette</a>	8.9	1	1
+	577	<a href="#">Bunny, Buggs</a>	8.7	1	1
+	1234	<a href="#">Duck, Donald</a>	8.4	1	1
+	12526	<a href="#">Mouse, Micky</a>	8.4	2	2
+	11111	<a href="#">Doe, Jane</a>	8.2	2	2
+	654-23-4437	<a href="#">Horner, Sam</a>	8.2	11	12
+	12345	<a href="#">Smith, John</a>	8.0	4	4
+	2456	<a href="#">White, Snow</a>	8.0	2	2



# SAMPLE OUTCOMES

TEST	BASELINE AVERAGE	CURRENT AVERAGE	PERCENT CHANGE
<b>A1c</b>	7.9	7.8	-2%
<b>LDL</b>	112	104	-7%

ANNUAL EXAMS	% THROUGH 11/6/07	% THROUGH 1/5/09
<b>Eye Exam</b>	<b>48%</b>	<b>70%</b>
<b>Foot Exam</b>	<b>48%</b>	<b>70%</b>



# PLANNED ENHANCEMENTS

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- Incorporation of Behavior Change assessment and evaluation
- Expansion of existing services to larger segment of community
- Expansion into adjacent rural counties
  - *Flagler*
  - *Putnam*
  - *St. Johns*
- Expansion into additional chronic diseases
  - *Heart Disease*
  - *Respiratory disease*
  - *Volusia*
- Increase disease management staff
- Increase outreach to area hospitals and EMS providers
- Increase/Expand available provider network (*i.e. specialty services*)