

Patient Navigation



- 9-1-1 Nurse Triage
- Community Health Program
- System Abusers
- CHF/High Risk Dx Readmissions
- Observational Admission Avoidance
- Hospice Revocation Avoidance
- Home Health Partnership

Mobile Integrated Healthcare



The
Reforming
States
Group



About MedStar...

- Governmental agency (PUM) serving Ft. Worth and 14 Cities
 - Self-Operated
 - 880,000 residents, 421 Sq. miles
 - Exclusive provider - emergency and non emergency
- 120,000 responses annually
- 405 employees
- \$37.5 million budget
 - No tax subsidy
- Fully deployed system status management
- Medical Control from 14 member Emergency Physician's Advisory Board (EPAB)
 - Physician Medical Directors from all emergency departments in service area + 5 Tarrant County Medical Society reps



Texas is 'Different'



Community Health Programs

- “EMS Loyalty Program” or “HUG” Patients
 - Proactive home visits
 - Educated on health care and alternate resources
 - Enrolled in available programs = PCMH
 - 10-digit access number 24/7
 - Flagged in computer-aided dispatch system
 - Co-response on 9-1-1 calls
 - Ambulance and MHP
- Non-Compliant enrollees moved to “system abuser” status
 - No home visits
 - Patient destination determined by Medical Director



Community Health Program

- Total **CHP** Enrollment = 646
- 97 graduated patients with 12 month data pre and post enrollment as of September 30, 2014...
 - **During enrollment**
 - 22.2% reduction in ED use
 - 58.1% in JPS patients
 - **Post Graduation (30 – 90 days)**
 - 75.3% reduction in 9-1-1 to ED use



Expenditure Savings Analysis (1)

Based on Medicare Rates

High Utilizer Program - All Referral Sources

Analysis Dates: **January 1, 2010 - September 30, 2014**

Number of Patients Enrolled (2): **97**

9-1-1 Transports to ED

Category	Base	Avoided	Savings
Ambulance Charge	\$1,668	1682	\$2,805,576
Ambulance Payment (3)	\$427	1682	\$718,214
ED Charges	\$904	1682	\$1,520,528
ED Payment (4)	\$774	1682	\$1,301,868
ED Bed Hours (5)	6	1682	10,092

Total Charge Avoidance \$4,326,104

Total Payment Avoidance \$2,020,082

Per Patient Enrolled

CHP

Charge Avoidance

\$44,599

Payment Avoidance

\$20,826



The Real Benefits:



Antoine Hall, MIH/CHP Patient
Enrolled 11/20 – 12/29/13

“Before I started this program I was sick every day; I was going to the emergency room nearly every day.”

“I have learned more in the last three months from John and you than I have ever learned from the doctors, the hospitals, or the emergency rooms.”

“Since this program, I have not had any pain medicines and have not been to the emergency room. I am keeping up with my doctor’s appointment and my MHMR appointments.”



Used by special permission from Antoine Hall



Patient Self-Assessment of Health Status (1)

As of: 10/31/2014

		HUG	
	Pre	Post	Change
Mobility (2)	2.38	2.44	2.4%
Self-Care (2)	2.70	2.75	1.7%
Perform Usual Activities (2)	2.25	2.56	13.7%
Pain and Discomfort (2)	1.86	2.44	31.1%
Anxiety/Depression (2)	2.04	2.50	22.4%
Overall Health Status (3)	5.23	6.75	29.2%

Notes:

1. Average scores of pre and post enrollment data from EuroQol EQ-5D-3L Assessment Questionnaire
2. Score 1 - 3 with 3 most favorable
3. Score 1 - 10 with 10 most favorable



9-1-1 Nurse Triage Program

- Navigate low-acuity 9-1-1 calls to most appropriate resource
- Low acuity 9-1-1 calls (ALPHA & OMEGA)
 - Warm handoff to specially trained in-house RN
- Uses RN education and experience
 - With Clinical Decision Support software
- Referral eligibility determined by:
 - IAED Physician Board
 - Local Medical Control Authority



The
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911 Nurse Triage Patient Experience Survey Results

Alternative Disposition Cases

Through: **31-Aug-14**

Completed Surveys **143**

Likert Scale 1-5 (5 = Highest Rating)

911 Call Taking Process?	4.81
Satisfied with Nurse?	4.78
Do You Feel the Nurse Understood Your Medical Issue?	4.80
Were You Satisfied With Recommendation?	4.61
Did Speaking with the Nurse Help?	91.6%
Did Your Condition Get Better?	88.8%
Should Your Call Have Been Handled Differently = No	80.4%
Did Recommendation Save you Time and Money = Yes	87.4%
Would Knowing the Cost in Advance Make a Difference?	
Yes	46.9%
No/Unsure	53.1%



Expenditure Savings Analysis (1)

9-1-1 Nurse Triage Program

Based on Medicare Rates

Analysis Dates: June 1, 2012 - October 31, 2014

Number of Calls Referred: 2268
 % of Calls with Alternate Response: 39.7%
 % of Calls with Alternate Destination: 37.8%

Category	9-1-1 Responses (5)			ED Visits (5)		
	Base	Avoided	Savings	Base	Avoided	Savings
Average Charge (1, 4)	\$1,668	900	\$1,501,200	\$ 904	858	\$ 775,632
Average Payment (2, 4)	\$427	900	\$384,300	\$ 774	858	\$ 664,092
ED Bed Hours (4)				6	858	5,148

Total Charge Avoidance	\$2,276,832
Total Payment Avoidance	\$1,048,392

Per Patient Enrolled	ECNS
Charge Avoidance	\$2,530
Payment Avoidance	\$1,165

Notes:

1. Average ambulance charge by MedStar
2. Average Medicare payment rec'd by MedStar
3. Base expenditures derived from AHRQ reports
4. Provided by John Peter Smith Health Network
5. Result of EPAB approved change to allow locus of care to include ED visit by alternate transportation



CHF Readmission Prevention

- At-Risk for readmission
 - Referred by cardiac case managers
 - Routine home visits
 - *In-home education!*
 - Overall assessment, vital signs, weights, 'environment' check, baseline 12L ECG, diet compliance, med compliance
 - *Feedback to primary care physician (PCP)*
 - Non-emergency access number for episodic care
 - Decompensating?
 - Refer to PCP early
 - In-home diuresis



Expenditure Savings Analysis

CHF Program - All Partners

Based on Medicare Rates

Analysis Dates: **October 2010 - September 2014**

Number of Patients (1): **63**

Category	All-Cause 30-day Hospital Utilization				Outcome Analysis	
	Base	Expected	Actual	Prevented	Rate	Reduction
ED Visits		63	26	37	41.3%	58.7%
ED Charge (2)	\$ 904	\$ 56,952	\$ 23,504	\$ 33,448		
ED Payment (2)	\$ 774	\$ 48,762	\$ 20,124	\$ 28,638		
Admissions		63	17	46	27.0%	73.0%
Admission Charge (3)	\$ 35,293	\$ 2,223,459	\$ 599,981	\$ 1,623,478		
Admission Payment (3)	\$ 8,276	\$ 521,388	\$ 140,692	\$ 380,696		

Total Charge Avoidance	\$ 1,656,926
Total Payment Avoidance	\$ 409,334

Per Patient Enrolled	CHF
Charge Avoidance	\$26,300
Payment Avoidance	\$6,497



CHF Program Statistics

JPS

30 Day Enrollment Utilization

ID	Program	Status	Referral Date	Graduation Date	Referral Source	Assigned Hospital	Primary Medical Complaint	MHP	ED Visits	Admits
1165	CHF	Graduated	01/07/2014	02/09/2014	JPS	JPS	Cardiac	11	0	0
1166	CHF	Graduated	01/09/2014	02/19/2014	JPS	JPS	Cardiac	8	0	0
1854	CHF	Graduated	02/20/2014	03/20/2014	JPS	JPS	Cardiac	11	1	1
1843	CHF	Graduated	02/14/2014	03/27/2014	JPS	JPS	Cardiac	7	0	0
1886	CHF	Graduated	02/26/2014	04/03/2014	JPS	JPS	Cardiac	7	0	2
1892	CHF	Graduated	03/05/2014	04/08/2014	JPS	JPS	Cardiac	6	0	0
1883	CHF	Graduated	02/26/2014	04/11/2014	JPS	JPS	Cardiac	6	0	0
1850	CHF	Graduated	02/19/2014	04/14/2014	JPS	JPS	Cardiac	13	4	0
1840	CHF	Graduated	02/14/2014	04/15/2014	JPS	JPS	Cardiac	6	0	0
1906	CHF	Graduated	03/12/2014	04/17/2014	JPS	JPS	Cardiac	7	1	0
1905	CHF	Graduated	03/12/2014	04/22/2014	JPS	JPS	Cardiac	8	0	0
1920	CHF	Graduated	03/19/2014	04/23/2014	JPS	JPS	Cardiac	5	0	0
1959	CHF	Graduated	04/01/2014	05/09/2014	JPS	JPS	Cardiac	9	0	0
1957	CHF	Graduated	04/01/2014	05/13/2014	JPS	JPS	Cardiac	11	0	0
1981	CHF	Graduated	04/09/2014	05/15/2014	JPS	JPS	Cardiac	9	0	0
1978	CHF	Graduated	04/09/2014	05/23/2014	JPS	JPS	Cardiac	9	0	0
2019	CHF	Graduated	04/18/2014	06/06/2014	JPS	JPS	Cardiac	10	0	0
2077	CHF	Graduated	04/30/2014	06/09/2014	JPS	JPS	Cardiac	11	0	0
2108	CHF	Graduated	05/07/2014	06/26/2014	JPS	JPS	Cardiac	9	0	0
2141	CHF	Graduated	05/14/2014	06/26/2014	JPS	JPS	Cardiac	8	0	0
2282	CHF	Graduated	06/19/2014	08/04/2014	JPS	JPS	Cardiac	13	0	0
2293	CHF	Graduated	06/25/2014	08/24/2014	JPS	JPS	Cardiac	12	0	0
2350	CHF	Graduated	07/24/2014	09/05/2014	JPS	JPS	Cardiac	10	0	0
2386	CHF	Graduated	08/15/2014	09/23/2014	JPS	JPS	Cardiac	11	1	1

Average MHP
Contacts Per
Patient:

9.0

7

4

**Readmit
Rate (2): 16.7%**



Assessment of Health Status: CHF Patients

Patient Self-Assessment of Health Status

As of: **10/31/2014**



		CHF	
	Pre	Post	Change
Mobility (2)	2.24	2.71	20.9%
Self-Care (2)	2.57	2.82	9.8%
Perform Usual Activities (2)	2.10	2.71	29.1%
Pain and Discomfort (2)	2.24	2.65	18.3%
Anxiety/Depression (2)	2.05	2.65	29.3%
Overall Health Status (3)	3.90	6.00	53.7%

Mobile Healthcare Programs

Patient Experience Summary

As of October 31, 2014

	HUG	CHF	OBS	Overall Avg.
Medic Listened?	4.93	4.87	4.72	4.84
Time to answer your questions?	5.00	4.89	4.79	4.89
Overall amount of time spent with you?	5.00	4.76	4.81	4.86
Explain things in a way you could understand?	5.00	4.84	4.72	4.86
Instructions regarding medication/follow-up care?	5.00	4.79	4.77	4.85
Thoroughness of the examination?	5.00	4.84	4.72	4.86
Advice to stay healthy?	5.00	4.82	4.53	4.78
Quality of the medical care/evaluation?	5.00	4.89	4.81	4.90
Level of Compassion	5.00	4.95	4.85	4.93
Overall satisfaction	4.93	4.92	4.85	4.90
Recommend the service to others?	100.0%	100%	97.9%	99.3%



Observation Admission Avoidance

- Partnership with ACO
 - ED Physician (*Case Manager*) identifies eligible patient
 - Refer to MedStar Community Health Program
 - Non-emergency contact number for episodic care given to patient
 - In-home care coordination with referring physician
 - Assure attendance at PCP follow-up next business day
 - Initiated August 1, 2012
 - 104 patients enrolled
 - 3 patient revisited prior to PCP follow-up



Expenditure Savings Analysis Obs Admission Avoidance Program

Analysis **August 1, 2012 - September 30,**
 Dates: **2014**

Referred: 125
 Enrolled: 104

Obs Admits Avoided

Category	Base	Avoided	Gross Savings	Enrollment Fees	Net Savings
Average Obs Admit Expense (1)	\$ 8,046	101	\$ 812,646	\$ 20,200	\$ 792,446
ED Bed Hours	23	101			2,323

Per Patient Enrolled	Obs Admit
Payment Avoidance	\$ 7,846

Notes:

1. From North Texas Specialty Physician Records



Framing the Hospice Issue:

- Patients & families want patients to die comfortably at home
- Hospice wants the patient to die at home
- Death is scary
- When death is near....
- 9-1-1 usually = Hospice Revocation
 - Voluntary or involuntary



Economic Model

- Hospice benefit
 - Per diem from payer to agency
 - Agency pays hospice related care
 - LOS issues
 - Varies based on Dx
- MedPAC recommends increasing hospice benefit
- IHI recommends increase hospice enrollment



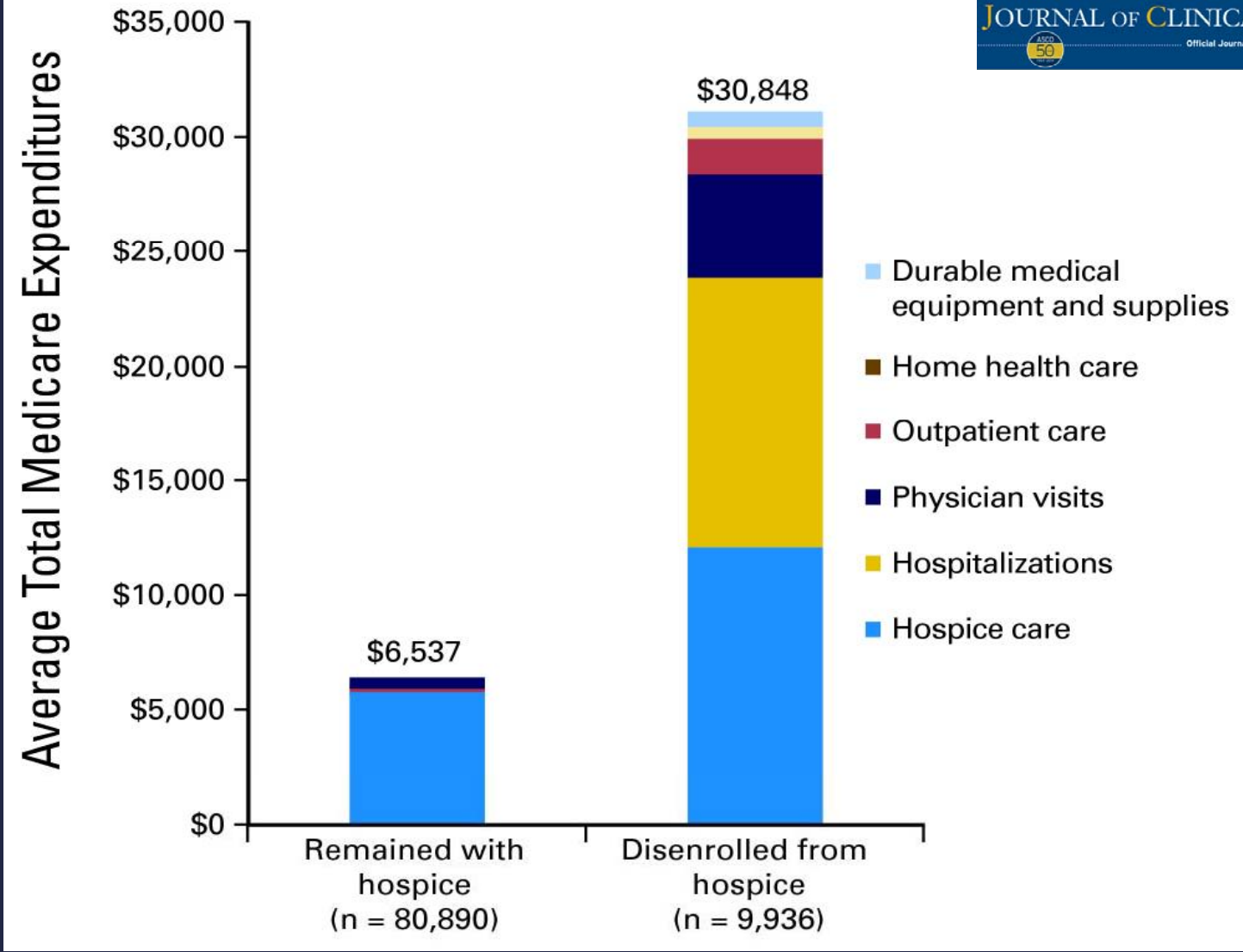
**TABLE
11-2**

Use of hospice continues to increase

Percent of Medicare decedents who used hospice

	2000	2007	2008	2009	2010	Average annual percentage point change 2000-2009	Percentage point change 2009-2010
All beneficiaries	22.9%	38.9%	40.1%	42.0%	44.0%	2.1%	2.0%
FFS beneficiaries	21.5	38.0	39.2	41.0	43.0	2.2	2.0
MA beneficiaries	30.9	42.9	44.0	46.1	47.8	1.7	1.7
Dual eligibles	17.5	34.5	35.9	37.5	39.2	2.2	1.7
Nondual eligibles	24.5	40.3	41.5	43.4	45.5	2.1	2.1
Age (in years)							
<65	17.0	24.5	25.1	26.0	27.2	1.0	1.2
65-74	25.4	35.6	36.2	37.3	38.6	1.3	1.3
75-84	24.2	40.1	41.2	43.1	45.0	2.1	1.9
85+	21.4	43.5	45.4	48.0	50.4	3.0	2.4





J Clin Oncol. Oct 1, 2010; 28(28): 4371–4375



R E C O M M E N D A T I O N

11 The Congress should update the payment rates for hospice for fiscal year 2013 by 0.5 percent.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

.....

(For additional recommendations on improving the hospice payment system, see text box on pp. 285–287.)



Hospice Revocation Avoidance

- Enroll patients “at risk” for revocation
- Visit at home
 - Counsel – instruct – 10 digit access
 - “Register” patient in CAD
 - Co-respond with a “9-1-1” call
 - Help family through process
 - *While awaiting hospice RN*



Hospice Revocation Avoidance

Hospice Program Summary

As of October 31, 2014

	#	%
Referrals	191	
Enrolled	155	
Deceased	90	58.1%
Active	46	29.7%
Improved	3	1.9%
Revoked	16	10.3%

Activity:

911 calls	20
911 transports	15
ED visits	10
Direct Admits	5





AHRQ HEALTH CARE INNOVATIONS EXCHANGE

Innovations and Tools to Improve Quality and Reduce Disparities

Service Delivery Innovation Profile

Trained Paramedics Provide Ongoing Support to Frequent 911 Callers, Reducing Use of Ambulance and Emergency Department Services

Snapshot

Summary

The Area Metropolitan Ambulance Authority (more commonly known as MedStar), an emergency medical service provider serving the Fort Worth, TX, area, uses community health paramedics to provide in-home and telephone-based support to patients who frequently call 911 and to other patient populations who are at risk for potentially preventable admissions or readmissions. Working as part of MedStar's Mobile Integrated Healthcare Practice, these paramedics conduct an in-depth medical assessment, develop a customized care plan based on that assessment, and periodically visit or telephone the patient and family to support them in following the plan. Support generally continues until they can manage on their own. Three additional similar programs serve individuals with congestive heart failure, patients who can be managed transitionally at home versus an overnight observational admission in the hospital, and in-home hospice patients who are at risk for hospice revocation. These programs have significantly reduced the number of 911 calls, the number of potentially preventable emergency department visits and hospital admissions, the number of overnight observational admissions, and the number of hospice revocations, leading to declines in emergency medical services and emergency department charges and costs, and freeing up capacity in area emergency departments.

See the Description section for an update on programs, identification of eligible individuals, patient assessment, and special protocols for patients with congestive heart failure; the Patient Population section for a description of patients served; the References section for two new resources; the Results section for updated data on the decline in ambulance and emergency department usage, charges, and costs, as well as results related to congestive heart failure and hospice patient admissions; the Planning and Development section for information about a hospice patient pilot test; the Resources section for updated staffing and cost data; the Funding section for updated information about program funders; and the Use by Other Organizations section for updated data on program adopters (updated January 2013).

Evidence Rating (What is this?)

Moderate: The evidence consists of pre- and post-implementation comparisons of 911 calls from program participants, along with estimates of the cost savings generated and emergency department capacity freed up as a result of the reduction in calls.



Around the Nation

- Round 2 - NAEMT MIH/CP Survey
 - **230** surveys + new one's known
 - **133** returned surveys!
 - 113 completed
- Program updates
 - Structure
 - Integration
 - Economic models



'Maturing' Programs

- Reno, NV (CMS HCIA Grantee)
 - REMSA
 - Community paramedicine
 - High Utilizers & CHF
 - Ambulance transport alternative destinations
 - 9-1-1 Nurse Triage
- Dallas, TX
 - Dallas Fire
 - Community paramedicine
 - High Utilizers & CHF
- Pittsburgh, PA
 - UPMC/Emed Health Community Connect
 - Community paramedicine
 - High Utilizers & CHF
 - Partnership between Highmark and UPMC



'Maturing' Programs

- Mesa, AZ
 - Mesa **Fire and Medical Dept.**
 - Transitional Response Vehicle
 - NP/Behavioral Health specialist & Paramedic



- Eagle County, CO
 - Eagle County Paramedics
 - Primary Care/Rural Model



- Wake County, NC
 - Wake EMS
 - Community paramedicine
 - High Utilizers, CHF, Behavioral Health and Substance Abuse
 - ALF/SNF falls alternative destination



Additional Partnerships...

- Delivery System Reform Incentive Payments
 - 1115a waiver - Regional Health Partnership
 - IGT Based
 - New process for Disproportionate Share Hospitals
 - Paid for programs that meet:



- How can EMS change the landscape of healthcare?



MedStar Patient Navigation

- Partnership with John Peter Smith Health Network to expand:
 - 9-1-1 Nurse Triage
 - High Utilizer Group
 - Obs Admit Avoidance
 - CHF
- And add:
 - Homeless Connect
 - Community Connect
 - ? Asthma program



Regional Healthcare Partnership

Region 10

Summary of Categories 1-2 Projects

Project Title	Brief Project Description	Related Category 3 Outcome Measure	Estimated Incentive Amount (DSRIP) for DYs 2-5
126675104.2.8 MedStar patient navigation JPS Hospital 126675104	Expand 911 Nurse Triage program and MedStar CHF program	126675104.3.29 IT-3.2 Reduction CHF readmission -126675104.3.52 IT-2.11 Ambulatory care sensitive conditions admission rate	\$4,814,232
Year 2 (10/1/2012 – 9/30/2013)	Year 3 (10/1/2013 – 9/30/2014)	Year 4 (10/1/2014 – 9/30/2015)	Year 5 (10/1/2015 – 9/30/2016)
<p>Process Milestone 1: (P-1): Conduct a needs assessment to identify the patient population(s) to be targeted with the Patient Navigator program. (Including frequency and costs of episodic care for traditional care model.)</p> <p>Metric 1 (P-1): Provide report identifying the following:</p> <ul style="list-style-type: none"> •Targeted patient population characteristics (e.g., patients with no PCP or medical home, frequent ED utilization, homelessness, insurance status, low health literacy). •Gaps in services and service needs. 	<p>Process Milestone 2: (P-3): Provide care management/navigation services to targeted patients. (Targeted patients include low acuity 911 callers, patients that are candidates for observation only admissions, frequent ED/EMS users and CHF patients at risk for 30-day readmissions.)</p> <p>Metric 1 [P-3]: Increase in the number or percent of targeted patients enrolled in the program</p> <p>Baseline/Goal: <u>911 Nurse Triage</u> – Enroll 1500 in the program. <u>Data Source:</u> MedStar 911 Records</p>	<p>Milestone - 4: (I-8): -Reduction in ED use by identified ED frequent users receiving navigation services.</p> <p>Metric 1: I-8.1: <u>911 Nurse Triage-</u> Reduce ED visits (pre and post navigation services) by 35% for the 911 Nurse Triage Program. Goal: 630 patients (35% of the 1,800 DY-4 enrollees) will be navigated away from the ED.</p> <p>Enroll 1800 new patients into the program. <u>Data Source:</u> MedStar 911 Records</p>	<p>Milestone - 5: (I-8): -Reduction in ED use by identified ED frequent users receiving navigation services.</p> <p>Metric 1: I-8.1: <u>911 Nurse Triage-</u> Reduce ED visits (pre and post navigation services) by 40% for the 911 Nurse Triage Program. Goal: 840 patients (40% of the 2,100 DY-5 enrollees) will be navigated away from the ED.</p> <p>Enroll 2,100 new patients into the program. <u>Data Source:</u> MedStar 911 Records</p>



Regional Healthcare Partnership

Region 10

Year 2 (10/1/2012 – 9/30/2013)	Year 3 (10/1/2013 – 9/30/2014)	Year 4 (10/1/2014 – 9/30/2015)	Year 5 (10/1/2015 – 9/30/2016)
<p>needed to be hired</p> <ul style="list-style-type: none"> •Available site, state, county and clinical data including flow patients, cases in a given year by race and ethnicity, number of cases lost to follow-up that required medical treatment, percentage of monolingual patients. <p><u>Baseline/Goal:</u> <i>For 911 Nurse Triage</i> – Review 911 call volume records to identify protocol/call types most appropriate for transfer to MedStar Triage Nurse. <u>Data Source:</u> MedStar 911 call records, JPS Health Network and MedStar EMR records.</p>	<p>100 observational admission patients referred for navigation to a PCMH instead of observational admission <u>Data Source:</u> JPS EMRs.</p> <p><u>CHF In-Home Management</u> – Enroll 50 patients at risk for PPR for CHF are referred to the MedStar program. <u>Data Source:</u> JPS and MedStar EMRs.</p> <p><u>High Utilization Group</u> – Enroll 100 of the patients identified by JPS as having used the ED for ACSC services 4 or more times in the past 12 months. <u>Patient Count:</u> <u>Data Source:</u> JPS EMRs. Milestone 2 Estimated Incentive Payment (maximum amount): \$612,306</p>	<p><u>High Utilization Group Program</u>– Improvement Target: High Utilization Group (HUG) program Metric: Reduce ED visits for potentially avoidable admissions. Goal: 52 patients (35% of the DY4-150 enrollees) will experience reduced PPA to the ED for 12 months. Enroll 150 of the patients identified by JPS as having used the ED for ACSC services 4 or more times in the past 12 months. <u>Metric:</u> Patient Count. <u>Data Source:</u> JPS EMRs.</p> <p>Milestone 4 Estimated Incentive Payment (maximum amount): \$1,310,049</p>	<p><u>High Utilization Group Program</u>– Improvement Target: High Utilization Group (HUG) program Metric: Reduce ED visits for potentially avoidable admissions. Goal: 80 patients (40% of the DY4-200 enrollees) will experience reduced PPA to the ED for 12 months. Enroll 200 of the patients identified by JPS as having used the ED for ACSC services 4 or more times in the past 12 months. <u>Metric:</u> Patient Count. <u>Data Source:</u> JPS EMRs.</p> <p>Milestone 5 Estimated Incentive Payment (maximum amount): \$1,082,215</p>



Questions/Comments?

