

Transforming Healthcare Delivery Through a Family Medicine Residency and Community Paramedicine Partnership

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Disclosures

- The authors have no financial relationships to disclose.

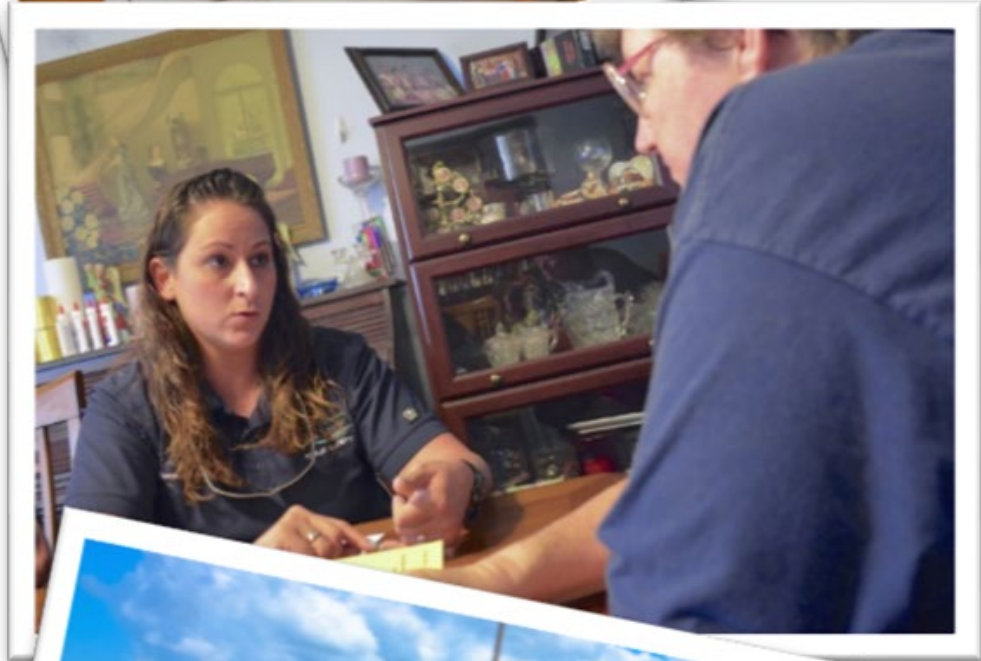


Session Objectives

- Effectively coordinate system level change to improve health outcomes
- Identify medically vulnerable patient populations and design strategies for coordinated care
- Establish collaborative partnerships to provide patient centered care

Community Paramedicine

- Increase access to primary and preventative care
- Decrease ambulance and emergency department utilization
- Save healthcare dollars
- Realign patients with primary / specialty network
- Improve patient outcomes



Community Paramedic Program Target Patient Populations

- **Frequent Falls** - mitigate fall risks by performing in-home safety assessments and fall prevention education.
- **Mental Health / Substance Abuse** - identify patients that would be better served outside the emergency room setting and redirect these individuals to the appropriate community resource(s).
- **Diabetic Patients** - provide nutritional and disease management education to diabetic patients to prevent unnecessary Emergency Department / EMS utilization.
- **Congestive Heart Failure / Chronic Respiratory Conditions** - ensure proper medication compliance, nutrition, and education on disease management for patients who are diagnosed with congestive heart failure or other chronic respiratory conditions.
- **High System Utilizers** - include all patients that are high utilizers of the 911 system and Emergency Department, by providing education and aligning the patient's with primary care resources available within the community.

Community Paramedicine Goals & Outcomes

- Increase Health Equity by Improving Health Outcomes of Targeted Patient Populations
- Save Healthcare Dollars by Preventing Unnecessary Ambulance Transports, Emergency Room Visits and Inpatient Hospitalizations

Diverted 800+ Ambulance Transports
Diverted 600+ Emergency Department Visits
Identified 200+ Medication Concerns
Graduated 300+ Patients

Total Cost Avoidance:
Greater than 1.4 Million



Achieving the Quadruple AIM Through Partnerships

- Bridges existing health care gaps; avoids duplication
- Reduces the cost of overall health care expenditures
- Reduces stress on vulnerable patients and improves care coordination
- Reduces hospital readmissions and ED & EMS utilization

**Improve
Health of
Population**

**Improve
Provider
Satisfaction**

**Improve
Patient
Satisfaction**

**Eliminate
Waste &
Lower Cost**

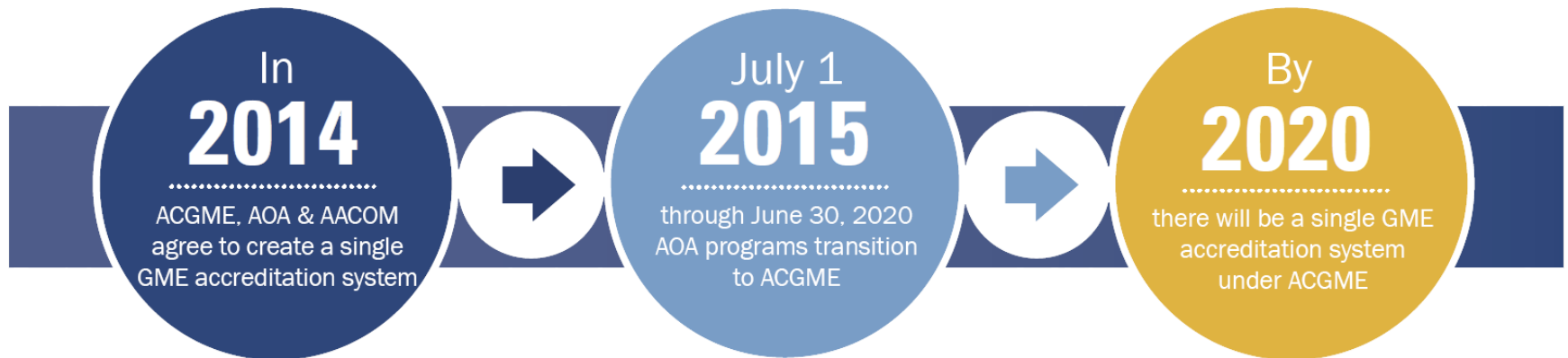
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Manatee Memorial Hospital Family Medicine Residency Program



GME Single Accreditation System



MMH FM Residency Program in process
of transitioning from AOA to ACGME
requirements → Curriculum Changes

Community Medicine Longitudinal Rotation

- 24 month longitudinal rotation
- Modules
 - Health Care Disparity
 - Implicit Bias
- Field Experience
- Reflection Questions
- Paramedic Evaluation of Resident

Benefits of Partnership

- Home Visits
- Transition of Care
- Communication with Health Care Team
- Medication Reconciliation
- Patient Education
- Education of Paramedics
- Multidisciplinary Approach to Patients

Social Determinates of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education			
Support	Walkability				

Health Outcomes

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

Resident Experience - Ride Along with Community Paramedic

- Immersion into the community
- Home visit
- Medication reconciliation
- Patient education
- Community support
- Barriers to care

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Reflective Statements from Residents

- “I gained valuable knowledge in regards to the underserved community of Manatee county.”
- “I learned that home health assistance ordered by a physician isn’t always the best care for the patient.”
- I witnessed “struggles that patients experience after they leave office/hospital”
- “More people should be enrolled in this program. It helps with patient’s safety and decreases re-admissions.”

Resident Experience – Utilization Review Meetings

- Witness and participate in multidisciplinary approach to individual patient cases
 - Case workers
 - Government agencies
 - FQHC representatives
 - Mental Health Facility representatives
 - Pharmacist (with Pharmacy Students)
 - Community Paramedics
 - FM & IM Resident representatives

Resident Experience – Future Plans

- Electives for 2 or 4 weeks
- Quality Improvement Initiatives
- Research Projects
- Improve Transition of Care
 - Formalize process of warm hand-offs to medical team
 - Apply to CLER pathway (patient safety)

Hospital Multidisciplinary Initiative

- Operation BREATHE (**BR**eathing **E**ducation **A**dvancing **T**eam **H**ealthcare **E**xcellence)
 - Detection of patients (COPD)
 - Completion of the LACE questionnaire
 - Appropriate referrals to health care team members
 - Interdisciplinary meetings to update key players, work flow and policy
 - Follow outcomes for decreased readmission and overall mortality

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Modified LACE Tool

- 4 variables independently associated with unplanned readmissions within 30 days
- Risk score as a tool to assist with discharge planning.

Attribute	Value	Points	Prior Admit	Present Admit
Length of Stay	Less 1 day	0		3
	1 day	1		
	2 days	2		
	3 days	3		
	4-6 days	4		
	7-13 days	5		
	14 or more days	6		
Acute admission	Inpatient	3		0
	Observation	0		
Comorbidity: <small>(Comorbidity points are cumulative to maximum of 6 points)</small>	No prior history	0		6
	DM no complications, Cerebrovascular disease, Hx of MI, PVD, PUD, Mild liver disease, DM with end organ damage, CHF, COPD, Cancer, Leukemia, lymphoma, any tumor, cancer, moderate to severe renal dz	1		
		2		
	Dementia or connective tissue disease	3		
	Moderate or severe liver disease or HIV infection	4		
	Metastatic cancer	6		
Emergency Room visits during previous 6 months	0 visits	0		0
	1 visits	1		
	2 visits	2		
	3 visits	3		
	4 or more visits	4		
Take the sum of the points and enter the total →				9

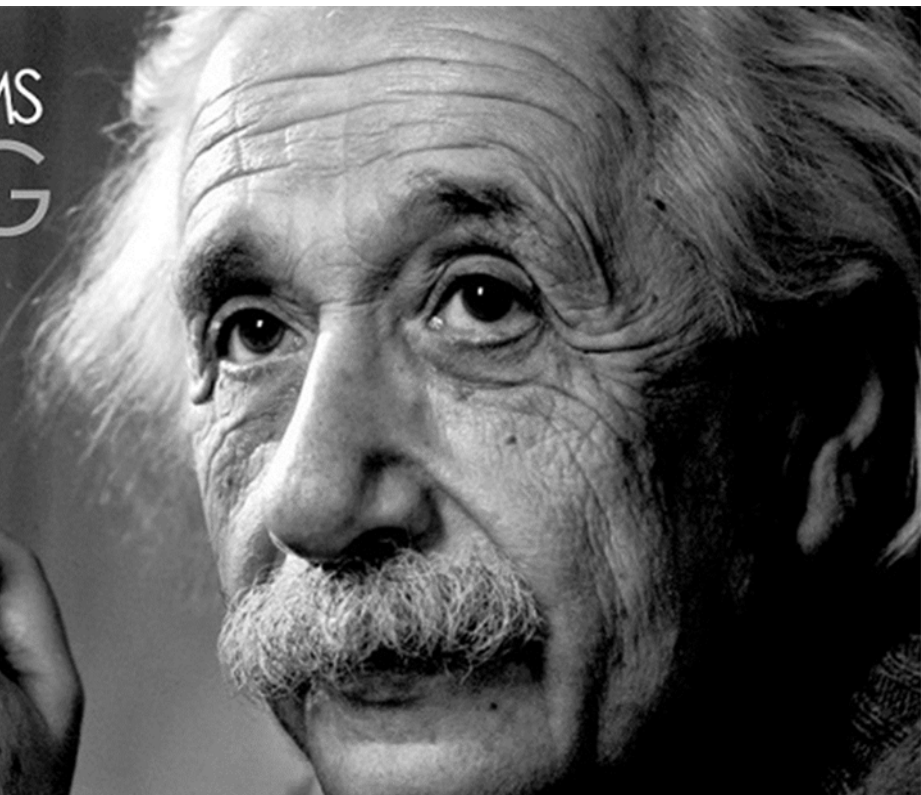
Brainstorming / Questions

- Community Paramedicine Program
- Adopt aspects of Community Medicine Curriculum
- Pilot interdisciplinary initiatives into patient care (inpatient or ambulatory)

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Practice Improvement

WE CANNOT SOLVE OUR PROBLEMS
WITH THE SAME THINKING
WE USED WHEN WE
CREATED THEM
- Albert Einstein



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