Maryland Mid-Shore Rural Health Study Update

Presentation to Rural Health Care Delivery Working Group

July 25, 2017

The Walsh Center
for Rural Health Analysis

NORC AT THE UNIVERSITY OF CHICAGO

UNIVERSITY OF MARYLAND
18 56

SCHOOL OF
PUBLIC HEALTH

Research study

- Assess health and health care in the 5 county region and propose solutions

- Approach used
  - Existing data and resources
  - Focus groups
  - Stakeholder and key professional interviews
  - Claims data analyses
  - Develop option models

- Today's presentation:

  Select findings from claims data analyses

Claims data analyses: Key questions

- Where do residents of the 5 counties go for health care?

- By type of service

  Where do residents go for inpatient care, ED visits, and ambulatory care?

- By payer

  Where do residents insured by Medicare, Medicaid and private insurance go for care?

- By condition (will be in Technical Report)

  Where do residents go for care for chronic conditions, mental/behavioral health, and maternity?

The Walsh Center for Rural Health Analysis
NORC AT THE UNIVERSITY OF CHICAGO

SCHOOL OF PUBLIC HEALTH

Methods

- Data sources
  - HSCRC data
  - The Maryland Medical Care Data Base (MCDB) - All Payer Claims Database
  - Medicare
  - Medicaid
- All data are for 2014
- Data limitations
  - HSCRC data are hospital care claims for Medicare, Medicaid, privately insured, uninsured and other pay patients. Do not include all hospital care out of state.
  - Medicare, Medicaid, and All Payer claims data include all types of care in state and out of state. No information on uninsured.
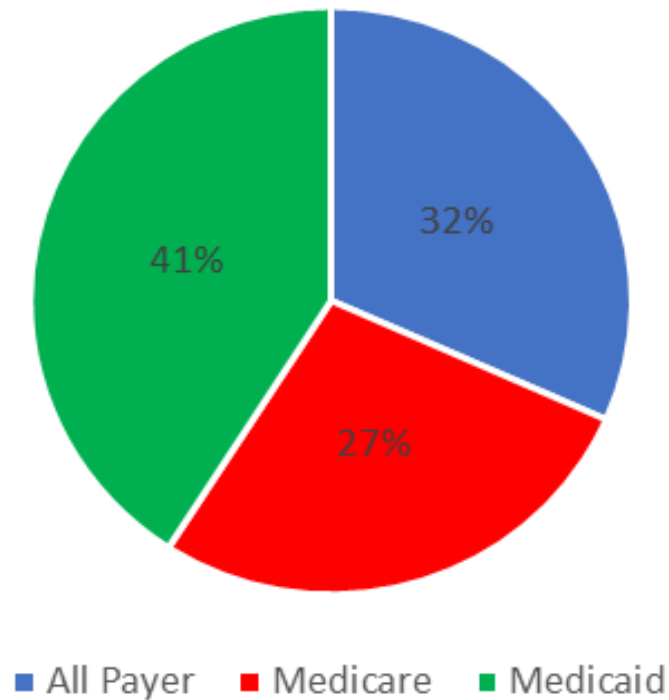
Presentation overview

- Where do residents of the 5 counties go for care?
- Overall and by county
- By service type and by payer
  - Ambulatory Care using All Payer, Medicare, and Medicaid data
  - ED visits using HSCRC data
  - Inpatient claims using HSCRC data
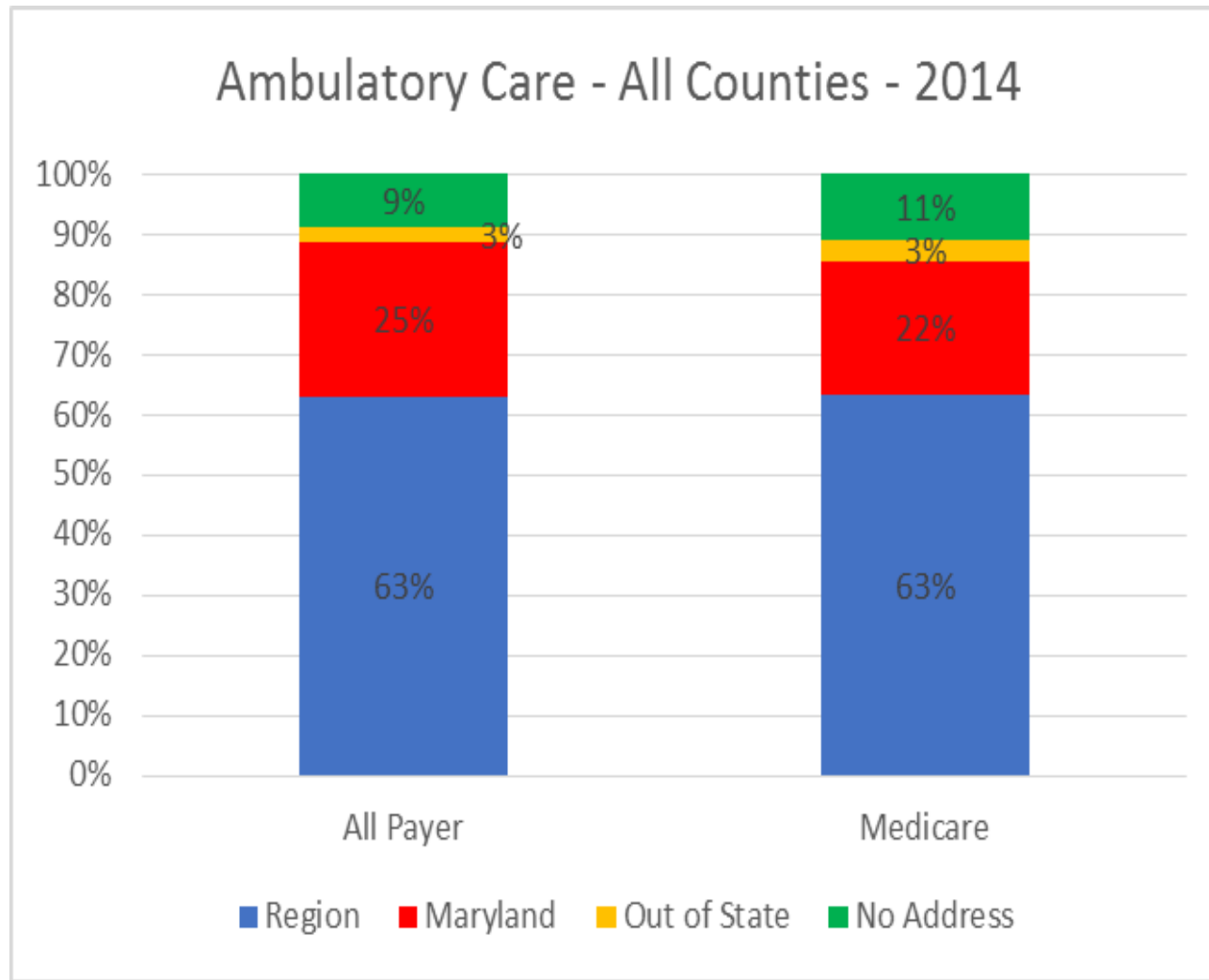- Visits (not patients) are the unit

- Technical report presents
  - Visits and patients
  - By payer, by type of service, by condition

Ambulatory care visits by payer

Ambulatory Care Utilization by Payer Type - 2014

- 32% — All Payer
- 27% — Medicare
- 41% — Medicaid

The Walsh Center for Rural Health Analysis
NORC AT THE UNIVERSITY OF CHICAGO

SCHOOL OF PUBLIC HEALTH

Ambulatory care visits: In-region, in-state, out-of-state

Ambulatory Care - All Counties - 2014

Ambulatory care visits top 2 provider seen by payer and by county

County	Medicaid				Medicare				All-Payer			
	Facility Name	Co	Freq.	Pct.	Facility Name	Co	Freq.	Pct.	Facility Name	Co	Freq.	Pct.
Caroline County	Choptank Community Health Services	C	14,699	22%	Melinda E Butler MD	C	1,693	3%	Univ Of MD Community Medical Group	T	9,449	15%
	Reg Mid-Shore Mental Health Services	C	2,526	4%	Wafik I Zaki	C	1,266	2%	Choptank Community Health Services	C	4,195	7%
Dorchester County	Choptank Community Health Services	C	8,455	12%	Eugene J Newmier DO	D	4,396	6%	Rose Hill Family Physicians	D	4,522	8%
	Ahmed S Abdelgawad	D	2,881	4%	Noman Thanwy	D	2,628	4%	Univ Of MD Community Medical Group	T	4,360	7%
Kent County	Julio A Ramirez	QA	2,324	9%	Helen A Noble MD	QA	624	4%	Drs Shanahan & Ferguson	QA	5,332	11%
	Chestertown Pediatrics	K	2,105	8%	Patrick J Shanahan	QA	106	4%	Univ of MD Community Medical Group	T	3,419	7%
Queen Anne's County	Julio A Ramirez	QA	3,494	8%	Zuleika M Ghodsi	T	2,033	2%	Maryland Primary Care Phys	QA	13,979	11%
	Chestertown Pediatrics	K	1,056	2%	Jorge H Abrego-Garcia MD	T	1,852	2%	Univ Of MD Community Medical Group	T	6,499	5%
Talbot County	Choptank Community Health Services	C	3,570	8%	Eric F Ciganek	T	548	2%	Univ Of MD Community Medical Group	T	9,037	10%
	Silvia A Diaz	T	2,035	4%	Daniel J Konick	QA	309	2%	Anne Arundel Physician Group	T	6,011	7%

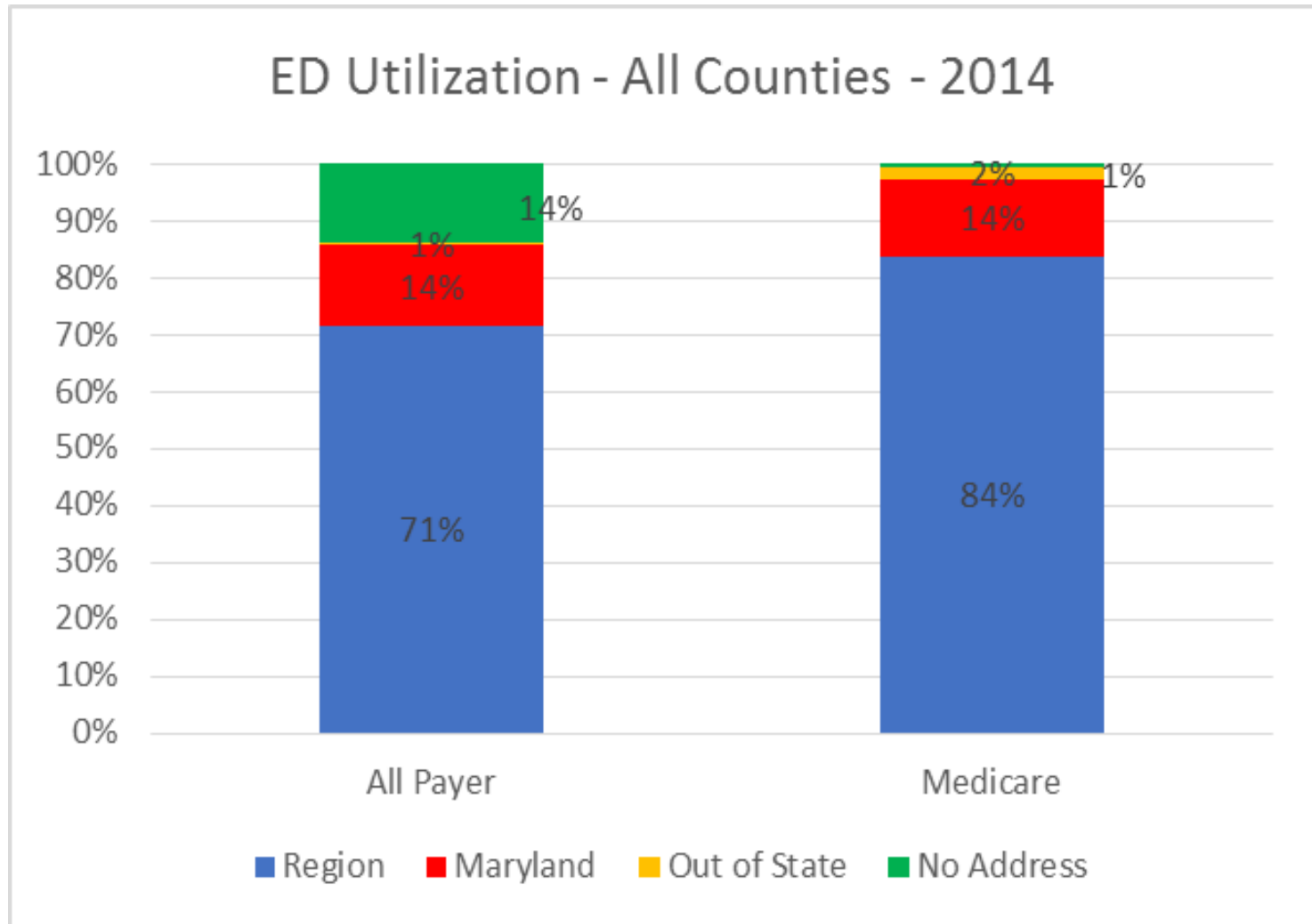C: Caroline; D: Dorchester; K: Kent; QA: Queen Anne's; T: Talbot

ED visits by payer

ED visits (N=75,429)
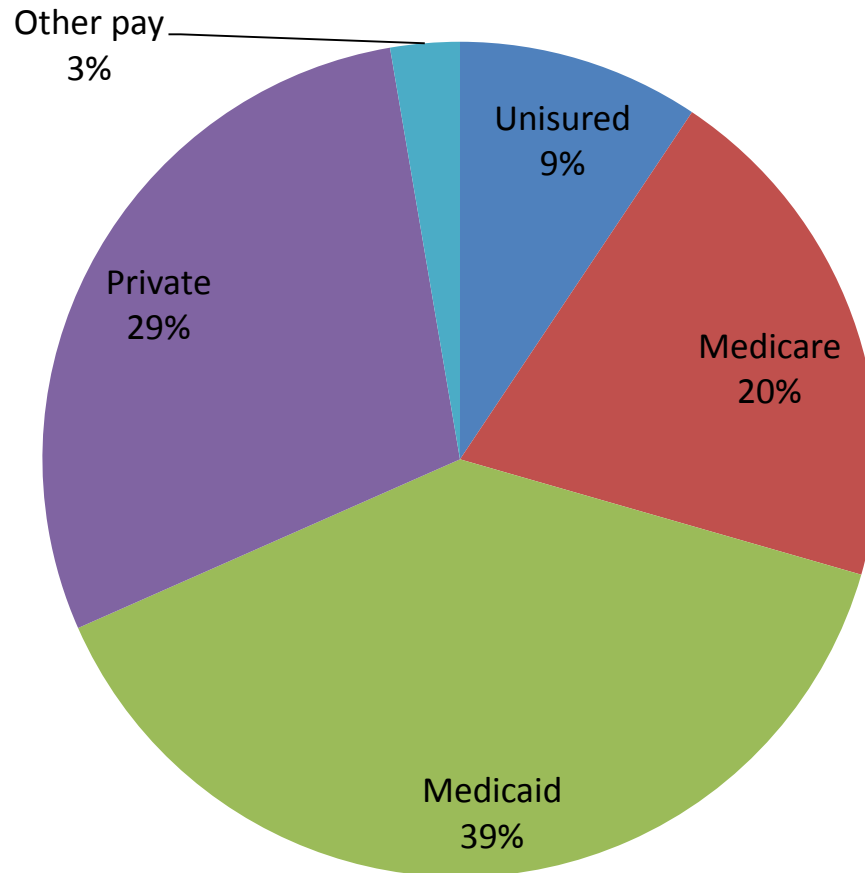
ED visits: In-region, in-state, out-of-state

ED Utilization - All Counties - 2014

All Payer:
- Region: 71%
- Maryland: 14%
- Out of State: 1%
- No Address: 14%

Medicare:
- Region: 84%
- Maryland: 14%
- Out of State: 2%
- No Address: 1%

Legend: ■ Region ■ Maryland ■ Out of State ■ No Address

ED visits top 10 provider seen: 5 counties

Facility name	County	Visits	Pct
UM Shore Medical Center at Easton	Talbot	27608	37%
UM Shore Medical Center at Dorchester	Dorchester	16888	22%
Queens Anne's Freestanding ER	Queen Anne's	13164	17%
UM Shore Medical Center Chestertown	Kent	11097	15%
Anne Arundel Medical Center	Anne Arundel	3449	5%
Peninsula Regional	Wicomico	1291	2%
UM Baltimore Washington Medical Center	Anne Arundel	332	0%
University of Maryland	Baltimore	325	0%
Union of Cecil	Cecil	242	0%
Johns Hopkins	Baltimore	225	0%

ED visits top 10 provider seen by payer

Medicaid				Medicare				Private			
Facility name	Co	Freq.	Pct	Facility name	Co	Freq.	Pct	Facility name	Co	Freq.	Pct
UM Shore Medical Center at Easton	T	10662	36%	UM Shore Medical Center at Easton	T	6029	40%	UM Shore Medical Center at Easton	T	7573	35%
UM Shore Medical Center at Dorchester	D	8369	29%	UM Shore Medical Center at Dorchester	D	3254	21%	Queens Anne's Freestanding ER	D	5575	26%
UM Shore Medical Center Chestertown	K	4491	15%	UM Shore Medical Center Chestertown	K	2711	18%	UM Shore Medical Center at Dorchester	D	3116	14%
Queens Anne's Freestanding ER	QA	4044	14%	Queens Anne's Freestanding ER	QA	2029	13%	UM Shore Medical Center Chestertown	K	2718	12%
Anne Arundel Medical Center	AA	727	2%	Anne Arundel Medical Center	AA	648	4%	Anne Arundel Medical Center	AA	1694	8%
Peninsula Regional	W	403	1%	Peninsula Regional	W	243	2%	Peninsula Regional	W	474	2%
University of Maryland	B	152	1%	University of Maryland	B	44	0%	UM Baltimore Washington Medical Center	AA	105	0%
Johns Hopkins	B	102	0%	Union of Cecil	C	42	0%	University of Maryland	B	90	0%
Union of Cecil	C	98	0%	UM Baltimore Washington Medical Center	AA	33	0%	Johns Hopkins	B	87	0%
UM Baltimore Washington Medical Center	AA	84	0%	Johns Hopkins	B	22	0%	Union of Cecil	C	68	0%

The Walsh Center for Rural Health Analysis

NORC AT THE UNIVERSITY OF CHICAGO

UNIVERSITY OF MARYLAND 1856

SCHOOL OF PUBLIC HEALTH

ED visits top 4 provider seen by county

County	Facility Name	Co	Freq.	Pct	Facility Name	Facility Name	Co	Freq.	Pct
Caroline County	UM Shore Medical Center at Easton	T	9648	71%	Queen Anne's	Queens Anne's Freestanding ER	QA	10155	62%
	Queens Anne's Freestanding ER	QA	1844	14%		Anne Arundel Medical Center	AA	2578	16%
	UM Shore Medical Center Chestertown	K	647	5%		UM Shore Medical Center Chestertown	K	1727	10%
	UM Shore Medical Center at Dorchester	D	556	4%		UM Shore Medical Center at Easton	T	1298	8%
Dorchester County	UM Shore Medical Center at Dorchester	D	15618	75%	Talbot	UM Shore Medical Center at Easton	T	12780	87%
	UM Shore Medical Center at Easton	T	3654	18%		UM Shore Medical Center at Dorchester	D	570	4%
	Peninsula Regional	W	901	4%		Queens Anne's Freestanding ER	QA	546	4%
	University of Maryland	B	105	1%		Anne Arundel Medical Center	AA	277	2%
Kent County	UM Shore Medical Center Chestertown	K	8606	86%					
	Queens Anne's Freestanding ER	QA	528	5%					
	UM Shore Medical Center at Easton	T	228	2%					
	Union of Cecil	C	208	2%					

C: Caroline; D: Dorchester; K: Kent; QA: Queen Anne's; T: Talbot

Inpatient admissions by payer

Inpatient Admisions (N=19,738)
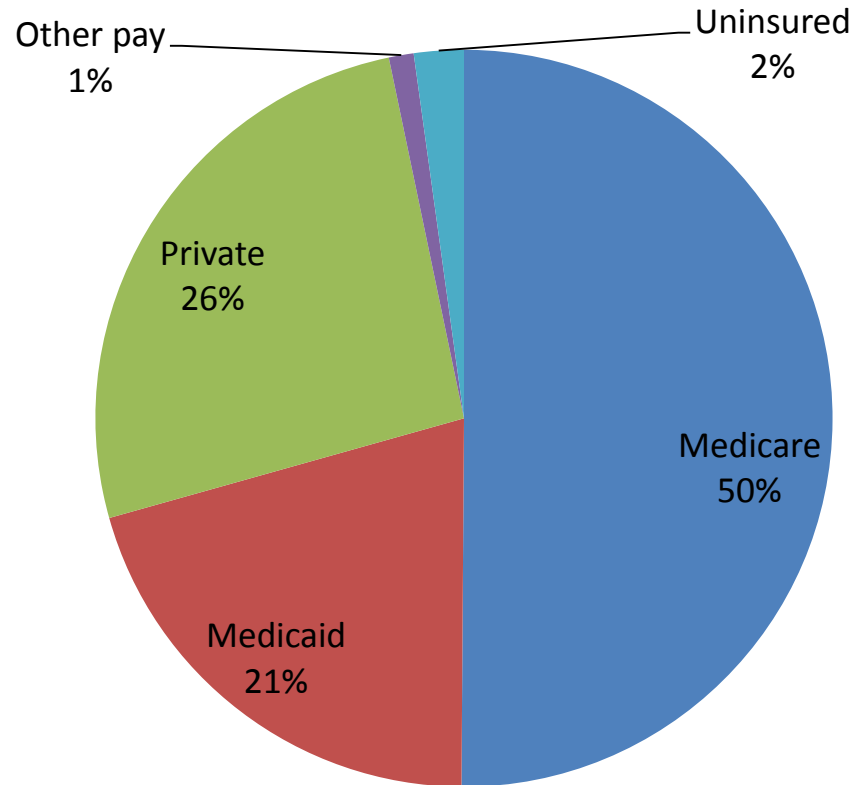
Inpatient admissions top 10 provider seen: 5 counties

Facility Name	County	Freq.	Pct
UM Shore Medical Center at Easton	Easton	8526	43%
Anne Arundel Medical Center	Anne Arundel	3264	17%
UM Shore Medical Center at Dorchester	Dorchester	2203	11%
UM Shore Medical Center Chestertown (Formerly Chester River)	Kent	1815	9%
University of Maryland	Baltimore	1464	7%
Peninsula Regional	Wicomico	657	3%
Johns Hopkins	Baltimore city	640	3%
UM Baltimore Washington Medical Center	Anne Arundel	225	1%
Mercy Medical Center	Baltimore city	144	1%
Union of Cecil	Cecil	127	1%

Inpatient admissions top 10 provider seen by payer

Medicaid				Medicare				Private			
Facility Name	Co	Fre	Pct	Facility Name	Co	Fre	Pct	Facility Name	Co	Freq	Pct
UM Shore Medical Center at Easton	T	1918	47%	UM Shore Medical Center at Easton	T	4406	45%	UM Shore Medical Center at Easton	T	1,974	38%
Anne Arundel Medical Center	AA	596	15%	UM Shore Medical Center Chestertown	K	1345	14%	Anne Arundel Medical Center	AA	1,506	29%
UM Shore Medical Center at Dorchester	D	503	12%	UM Shore Medical Center at Dorchester	D	1273	13%	University of Maryland	B	403	8%
University of Maryland	B	294	7%	Anne Arundel Medical Center	AA	1090	11%	UM Shore Medical Center at Dorchester	D	313	6%
UM Shore Medical Center Chestertown	K	220	5%	University of Maryland	B	702	7%	Johns Hopkins	B	245	5%
Johns Hopkins	B	198	5%	Peninsula Regional	W	345	3%	UM Shore Medical Center Chestertown	K	197	4%
Peninsula Regional	W	93	2%	Johns Hopkins	B	182	2%	Peninsula Regional	W	195	4%
Union of Cecil	C	59	1%	UM Baltimore Washington Medical Center	AA	127	1%	Mercy Medical Center	B	58	1%
UM Baltimore Washington Medical Center	AA	34	1%	Healthsouth Chesapeake Rehab Hospital	W	81	1%	UM Baltimore Washington Medical Center	AA	56	1%
Johns Hopkins Bayview (acute)	B	27	1%	Mercy Medical Center	B	46	0%	Johns Hopkins Bayview (acute)	B	39	1%

Inpatient admissions top 4 provider seen by county

County	Facility Name	Co	Freq.	Pct	Facility Name	Facility Name	Co	Freq.	Pct
Caroline County	UM Shore Medical Center at Easton	T	2,425	66%	Queen Anne's	Anne Arundel Medical Center	AA	2,087	50%
	Anne Arundel Medical Center	AA	314	9%		UM Shore Medical Center at Easton	T	927	22%
	University of Maryland	B	270	7%		UM Shore Medical Center Chestertown	K	298	7%
	UM Shore Medical Center at Dorchester	D	169	5%		University of Maryland	B	274	7%
Dorchester County	UM Shore Medical Center at Dorchester	D	1,763	40%	Talbot	UM Shore Medical Center at Easton	T	2,425	66%
	UM Shore Medical Center at Easton	T	1,511	34%		Anne Arundel Medical Center	AA	314	9%
	Peninsula Regional	W	418	9%		University of Maryland	B	270	7%
	University of Maryland	B	299	7%		UM Shore Medical Center at Dorchester	D	169	5%
Kent County	UM Shore Medical Center Chestertown	K	1,435	53%					
	Anne Arundel Medical Center	AA	460	17%					
	UM Shore Medical Center at Easton	T	231	8%					
	University of Maryland	B	222	8%					

C: Caroline; D: Dorchester; K: Kent; QA: Queen Anne's; T: Talbot

Inpatient admissions by age group and by condition

Age group	
Age 0 to 1	9%
Age 2 to 19	3%
Age 20 to 34	13%
Age 35 to 49	3%
Age 50 to 64	28%
Age 65 to 74	18%
Age75 and up	26%

CCW codes	
Hypertension	53%
Hyperlipidemia	32%
Anemia	27%
Ischemic Heart Disease	23%
Chronic Kidney Disease	21%
COPD and Bronchiectasis	15%
Depression	15%
Acquired Hypothyroidism	11%
Cancer	10%
Asthma	8%
RA/OA	7%
Diabetes	7%
Benign Prostatic Hyperplasia	6%
Heart failure	5%
Stroke / Transient Ischemic Attack	3%
Osteoporosis	3%
Alzheimer / Dementia	2%
Acute Myocardial Infarction	1%
Hip/Pelvic Fracture	1%
Atrial Fibrillation	1%

Inpatient admissions by payer and by county: Preventable Quality Indicator (PQI) and 30-day readmissions

Payer	ALL	Medicare	Medicaid	Private	Uninsured	Other pay
	n=19738	n=9890	n=4052	n=5149	n=431	n=215
PQI overall	14%	18%	10%	8%	16%	5%
PQI acute	5%	7%	3%	3%	4%	1%
PQI chronic	9%	12%	7%	5%	12%	4%

County	PQI overall
Caroline	13%
Dorchester	17%
Kent	15%
Queen Anne's	12%
Talbot	13%

Summary and next steps

- Findings provide insights that could inform regional and county planning

- Technical report provides detailed information by payer, by type of service, by patients and by condition

- EMS data analyses

Alana Knudson, PhD

Email: knudson-alana@norc.org

Phone: 301-634-9326

Rebecca Oran, BA

oran-rebecca@norc.org

301-634-9375

Dushanka Kleinman, DDS, M.Sc.D.

dushanka@umd.edu

301-405-7201

Luisa Franzini, PhD

Franzini@umd.edu

301-405-2470

Special thanks to Robin Bloodworth, Deanna Barath and Hilltop

Thank You!

The Walsh Center
for Rural Health Analysis

NORC AT THE UNIVERSITY OF CHICAGO

SCHOOL OF
PUBLIC HEALTH

UNIVERSITY OF MARYLAND 1856