Mandated report: Quality of care in rural areas

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Mandated rural report, due June 2012

- Access to services—February 2011
- Payment adjustments—September 2011
- Quality of care—Today
- Adequacy of rural payments—Future presentation

Today's presentation outline

- Introduction
- Quality of care overview
- Performance on quality measures
  - Patient satisfaction with their physicians and overall healthcare experience
  - Quality in post-acute and dialysis settings
  - Hospital quality
- Strategies to improve quality in rural areas

Objective: Examine quality of care in different rural areas

- There are four urban/rural categories
  - Urban counties (cluster of over 50,000)
  - Rural Micropolitan (cluster of 10,000 to 50,000)
  - Rural counties adjacent to urban areas without a city of 10,000 people
  - Rural counties that are not adjacent to urban areas and do not have a city of 10,000 people
- Frontier counties (≤6 people per sq. mile)

How we measure quality of care

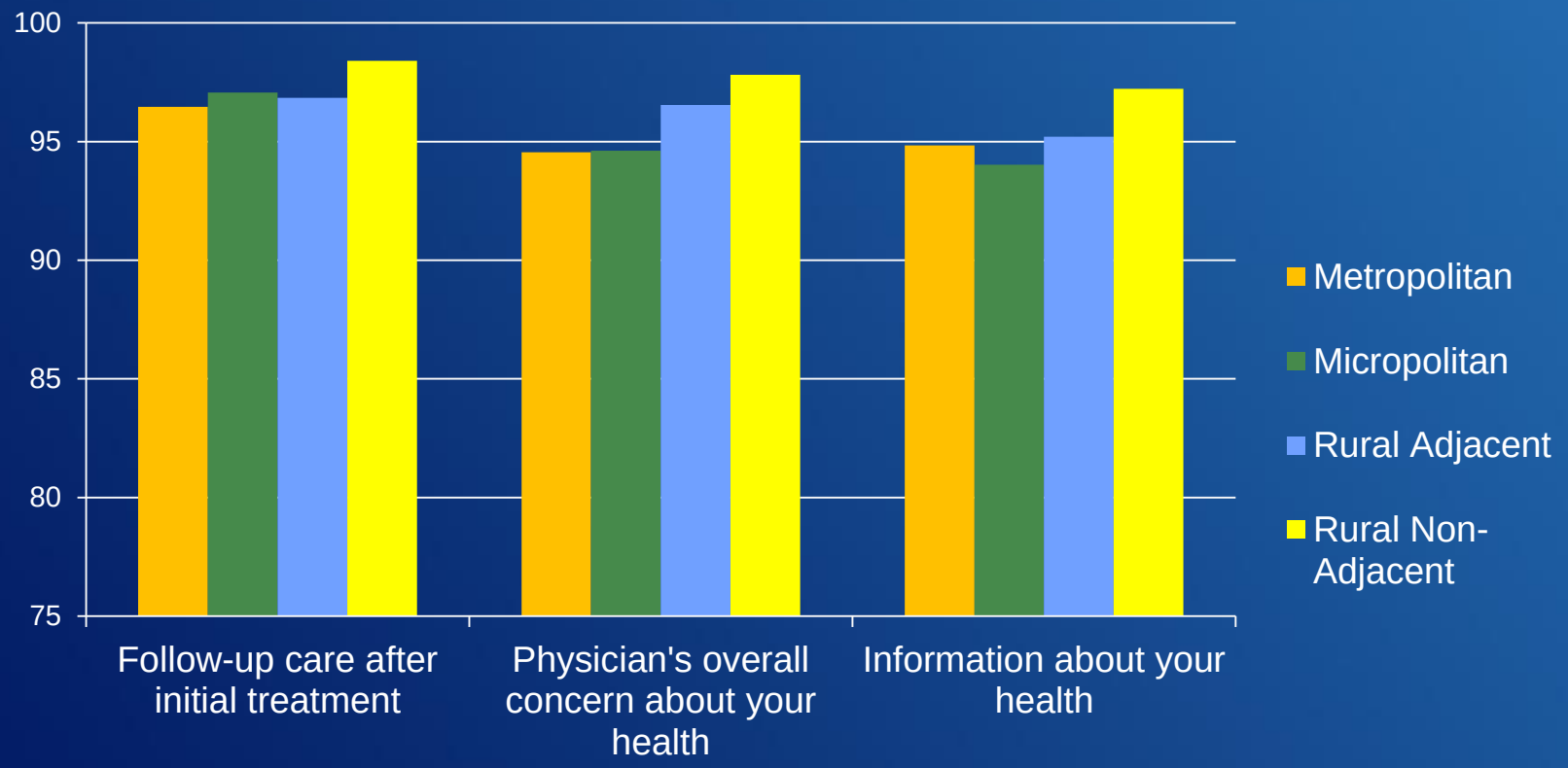
- Patient satisfaction: *How patients feel about the care they received* (Hospital Compare, MCBS)
- Process of care measures: *Clinically relevant, evidence-based activities associated with good care* (Hospital Compare)
- Outcomes of care: *The end results of care after an episode* (Hospital Compare, MedPAR, DataPro, OASIS)

Patient satisfaction levels are similar across rural/urban hospitals

	Metro-politan	Micro-politan	Rural Adjacent	Rural Non-Adjacent	Frontier
Number of hospitals	2,764	825	534	489	201
Rate their hospital highly (9-10)*	67%	66%	68%	69%	67%
Definitely recommend their hospital	70	67	68	69	68

Note: * = not statistically significant between all rural and metropolitan. Data from Hospital Compare, accessed August 5, 2011

Patient satisfaction with physician and overall care is similar across rural/urban areas



Medicare Current Beneficiary Survey, 2008

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Quality is similar in post-acute and dialysis facilities across rural/urban areas

- Skilled nursing facilities
  - Discharges to community, potentially avoidable hospitalizations
- Home health agencies
  - Discharge rates to hospitals
- End-state renal disease dialysis outcomes
  - Hospitalizations per year, dialysis adequacy, the presence of a catheter

Hospital inpatient process measures show rural/urban differences

	Metropolitan	Rural Micropolitan	Rural Adjacent	Rural Non-Adjacent	Frontier
Pneumonia					
Initial ED blood culture prior to first hospital antibiotic	95%	95%	91%	90%	88%
Heart Failure					
Evaluation of LVS function	97	93	81	74	65
Heart Attack (AMI)					
Given aspirin at arrival	97	95	93	88	91
Surgical Care					
Treatments to prevent blood clots	92	89	81	83	79

Data from Hospital Compare downloaded August 5. All measures are statistically significant between metropolitan and all rural areas. ED = emergency department; LVS= left ventricular systolic function; AMI = acute myocardial infarction

Hospital outpatient process measures show rural/urban differences

	Metropolitan	Rural Micropolitan	Rural Adjacent	Rural Non-Adjacent	Frontier
Mean minutes to fibrinolysis (blood clots)	41	34	40	38	44
Mean minutes for chest pain patients' transfer	92	106	128	127	*
Mean minutes for chest pain patients' ECG	14	10	11	12	16
Aspirin w/in 24 hours of arrival for chest pain	94%	95%	93%	94%	96%
Antibiotic w/in 1 hour before surgery	90	87	76	78	82
Surgery patients who got correct antibiotic	93	92	87	88	*

Note: Smaller numbers for measures above the dotted line reflect better performance. All rural vs urban differences are statistically significant. Asterisks are marked when less than 30 hospitals reported. ECG = electrocardiogram.

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Hospital outcomes

- Readmissions roughly equal in rural and urban areas
- Mortality (30-day) rates tend to be higher in rural areas
- Two methods of examining mortality
  - AHRQ – IQI method is preferred for our question
  - CMS – Hospital Compare is designed for individual hospitals not groups

Hospital 30-day mortality rates are higher in rural hospitals

	Heart failure		Pneumonia	
	Rural	Urban	Rural	Urban
AHRQ IQI method	12.2%	10.2%	12.5%	10.7%
CMS method	11.5	10.8	11.8	11.2

Source: AHRQ IQI method reflects MedPAC analysis of 2010 inpatient claims using the AHRQ risk adjustment methods used in their inpatient quality indicators software. The CMS method reflects Hospital Compare mortality data available as of July 2011. All values are medians.

Hospital volumes partially explain rural/urban mortality differences

	Heart Failure		Pneumonia	
Total discharges	Rural	Urban	Rural	Urban
1001-2000	13.8%	11.8%	13.7%	12.3%
2001-4000	12.8	11.8	12.4	10.9
4001-8000	12.0	10.9	11.3	10.7
Over 8000	10.9	10.4	11.0	9.9

Note: Because few PPS hospitals have less than 1000 discharges, we have omitted that category.
Source: MedPAC analysis of 2010 PPS hospital inpatient claims using AHRQ IQI risk adjustment methods.

Strategies for rural hospitals to improve quality for patients

- Increase participation in quality activities and reporting outcomes (e.g., mortality rates)
- Adopt, collect and report scores on measures most relevant for rural patients
  - Availability of physicians and pharmacists
  - Timely communication for transferred patients
- Target rural adjusters to address the volume-outcomes relationship

Potential guiding principles

1. Medicare beneficiaries who live in rural areas should get the best quality of care their local providers can deliver given the circumstances of the particular community.
   - *Quality of care in rural and urban areas should be equal for for non-emergency services rural providers choose to deliver*
   - *Quality of emergency care may differ between rural and urban areas due to limitations of small rural hospitals and the necessity to treat the patient at the rural facility*
2. All providers should be evaluated on the services they provide, and the data should be publicly reported.

Discussion topics

- Mandatory reporting of quality data
- Developing rural-specific quality measures
- Addressing the volume/outcomes relationship