



*Advising the Congress on Medicare issues*

# Potentially preventable hospital admissions and emergency department visits

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# Admission and ED visit rates

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- Potentially preventable admission rates and ED visit rates are population-level quality measures
  - Measure of the quality of the ambulatory care infrastructure and overall system to meet patients needs
  - Measure of outcome, rather than process

# Prevention quality indicators (PQIs)

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- PQIs identify conditions for which hospital admission can often be avoided with appropriate primary care
  - Consist of 14 ambulatory sensitive conditions (e.g., diabetes, CHF, COPD, dehydration, UTI)
- Not all admissions for PQI conditions are avoidable; the relative rate is important
- PQIs are a NQF-endorsed population measure to identify unmet community needs

# Methods in analyzing rate of PQIs

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- Definition of community
  - By Hospital Referral Regions (HRRs) in this analysis
  - Other definitions possible
- Risk adjustment
  - Hierarchical Condition Categories (HCCs)

# Rate of PQIs across communities

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Percent of stays that are PQIs,  
adjusted by HCC score

National Average	17.4%
Top quartile	21.8
Second quartile	18.4
Third quartile	16.3
Bottom quartile	12.9

Reference: Data from Medicare Chronic Condition Warehouse. Numbers reported are for FFS full-year Medicare beneficiaries in 2008.

Note: HCC is hierarchical condition categories. Values are the mean of the quartiles.

# Rate of PQIs across communities, expressed per 100,000 beneficiaries

	PQI rate	PQI rate, adjusted by HCC score
National Average	6,311	6,311
Top quartile	8,139	7,991
Second quartile	6,509	6,525
Third quartile	5,489	5,623
Bottom quartile	3,981	4,273
Maximum (Monroe, LA)	11,633	10,820
Minimum (Salem, OR)	2,135	2,439

Reference: Data from Chronic Condition Warehouse. Numbers reported are for FFS full-year Medicare beneficiaries in 2008.

Note: HCC is hierarchical condition categories. Values are the mean of the quartiles.

# Minorities tend to live in areas with higher PQI rates

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- AHRQ analysis finds that
  - African Americans have more than twice the rate of admissions for PQIs than whites
  - Hispanics were higher than whites, but a smaller gap
- Looking across HRRs, MedPAC finds those with the highest admissions rates had the highest percentage of African American beneficiaries
- Research finds greater variation across HRRs for PQI-like admissions than by race within a given region

# Next steps

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- More refined population definition
  - Consider Hospital Service Areas
- Explore 3M's measure of potentially preventable admissions
  - 3M starts with PQIs, adds some and excludes a few
  - Uses CRGs for risk-adjustment
- Separate MedPAC work looks at improving the HCCs

# Next steps (continued)

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- Consider additional conditions that affect beneficiaries in nursing facilities
  - Could include sepsis, pressure ulcers, falls
  - Number of studies indicate high rates of avoidable admissions from SNFs, nursing facilities

# Concerns about potentially avoidable ED visits

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- Lack of continuity and follow-up for beneficiaries
- Detracts from EDs' primary mission of providing emergency and lifesaving care
- Hospital EDs are generally more costly to patients and Medicare than other ambulatory care settings

# Potentially avoidable ED visits

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- Non-emergent
- Emergent but primary care treatable
- Emergent but the urgency of the visit could have been avoided with appropriate primary care

# 2009 National Hospital Ambulatory Discharge Survey

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- Sponsored by the National Center for Health Statistics
- National sample of visits to hospital EDs
- Several measures to look at whether ED visits were potentially avoidable
  - How medical personnel assessed visit's urgency
  - Whether ED visit was preceded by another ED visit or hospital discharge
  - Whether the ED visit occurred during office hours

# Analysis of 2009 national survey of ED visits

	Medicare	Private insurance	Medicaid	Uninsured
All ED visits (in thousands)	23,076	52,528	39,860	26,048
% of all ED visits:				
Nonurgent	5%	7%	10%	9%
Preceded by an ED visit	5	4	5	5
Preceded by a hospital discharge	5	3	4	4
Occurred during office hours	34	28	28	29
Nonurgent visits as a % of ED visits that occurred during office hours	5	8	10	8

Data are preliminary and subject to change.

Source: MedPAC analysis of the 2009 National Hospital Ambulatory Discharge Survey and 2009 data from the U.S. Census Bureau.

# Next steps for ED analysis

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- Explore 3M's measure of potentially avoidable ED visits
  - Identify conditions that could be treated in a primary care setting and ambulatory care sensitive conditions
  - Limit analysis to patients who were not admitted
  - Use CRGs for risk adjustment
  - Examine variability across beneficiary groups and regions

# For discussion

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- Use of potentially avoidable hospital admissions and ED visits as population-based quality measures
- Questions on the data
- Feedback on our research plans