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# How are Rural Hospitals Using Hospitalists?

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# Background and Objectives

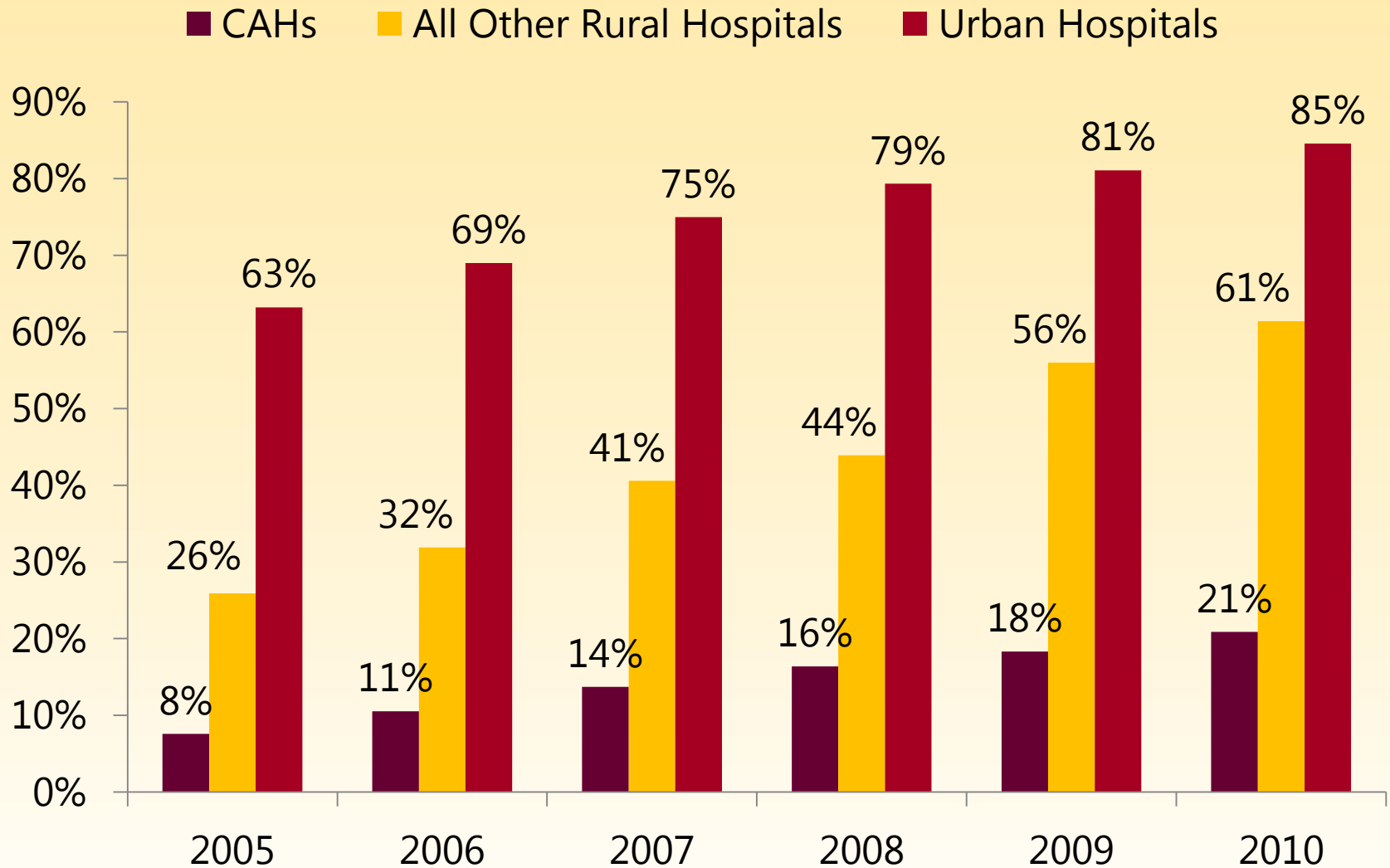
- Paucity of research with rural context
  - Hospitalists may be part-time with additional responsibilities
  - Unclear whether prior research findings are generalizable to smaller rural facilities
- Study objectives were to examine:
  - Trends in hospitalist use by rural hospitals
  - Impacts of hospitalist use in rural hospitals



# Methods: Data

- Primary data from a national phone survey of rural hospitals May-August 2011
  - *Survey sample*: CAHs and other rural hospitals with <100 beds using hospitalists in 2008 AHA survey
  - *Respondents*: CEOs (2/3) & staff (1/3)
  - *Response rate*: 86.4% (N=402)
  - Statistical analysis of quantitative survey data and qualitative analysis of open-ended responses
- Secondary data from American Hospital Association Annual Surveys FY 2005-2010

# Trends in Hospitalist Use 2005-2010

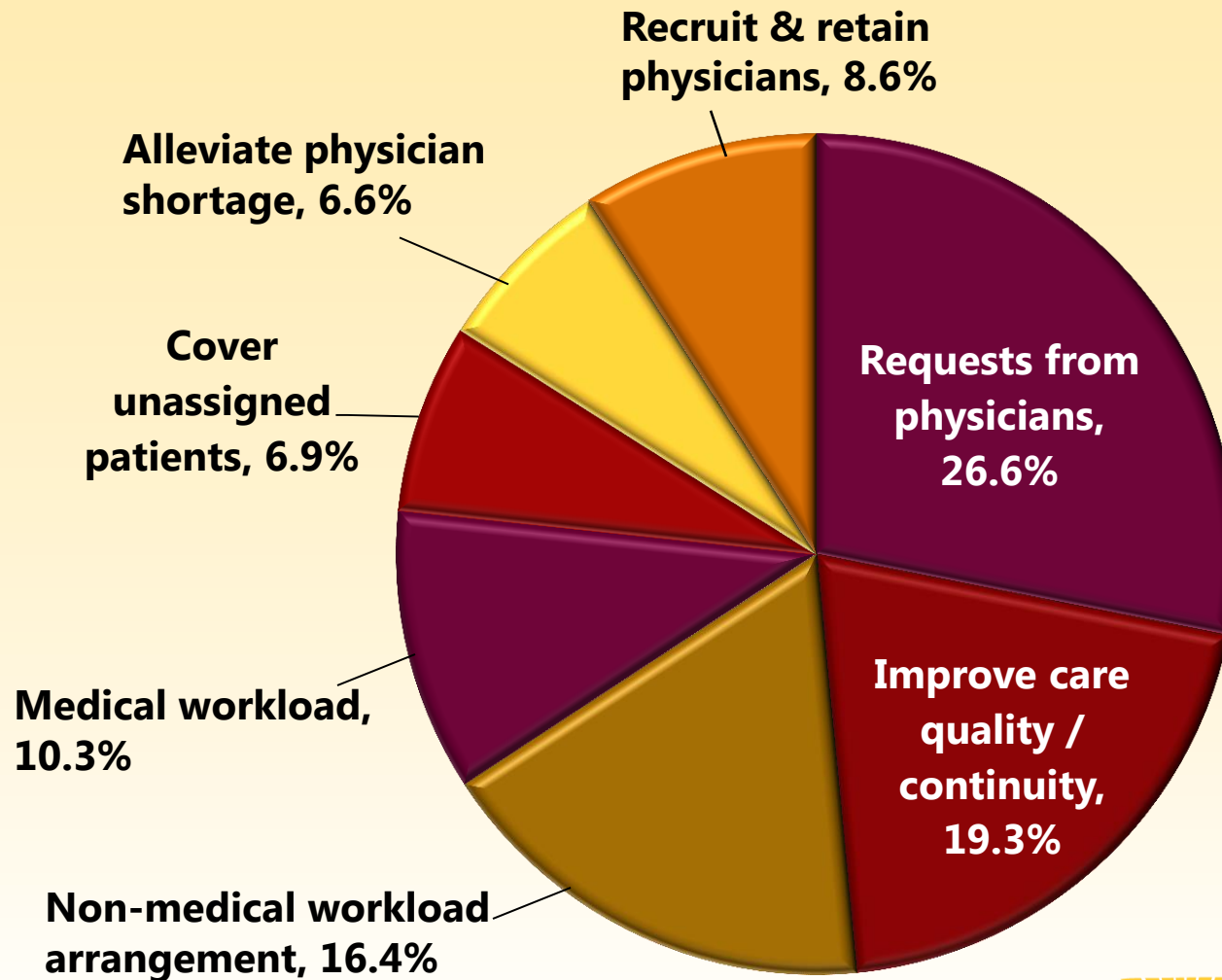


Data Source: AHA Annual Surveys

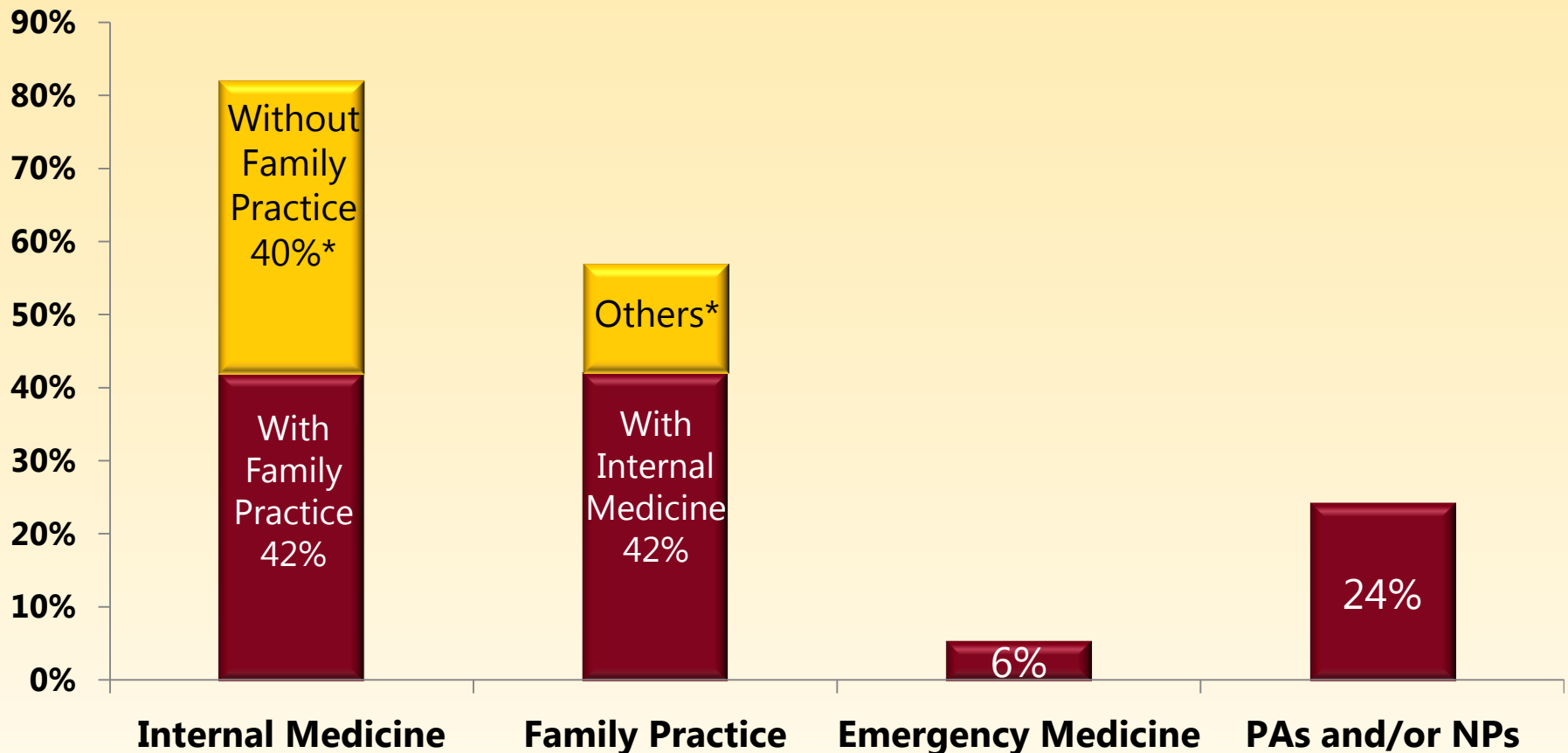
# Survey Respondents

- 329 respondents
  - 42.6% represent hospitals with 25 or fewer beds
  - 69.6% represent private, not-for-profit hospitals
  - Distribution across four census regions
- 52 non-respondents
  - Nearly half (25) represent facilities with 51-100 beds
  - Majority (35) from the south census region

# Primary Reasons for Using Hospitalists



# Hospitalist Specialties



\*May include PAs, NPs, and/or other specialties



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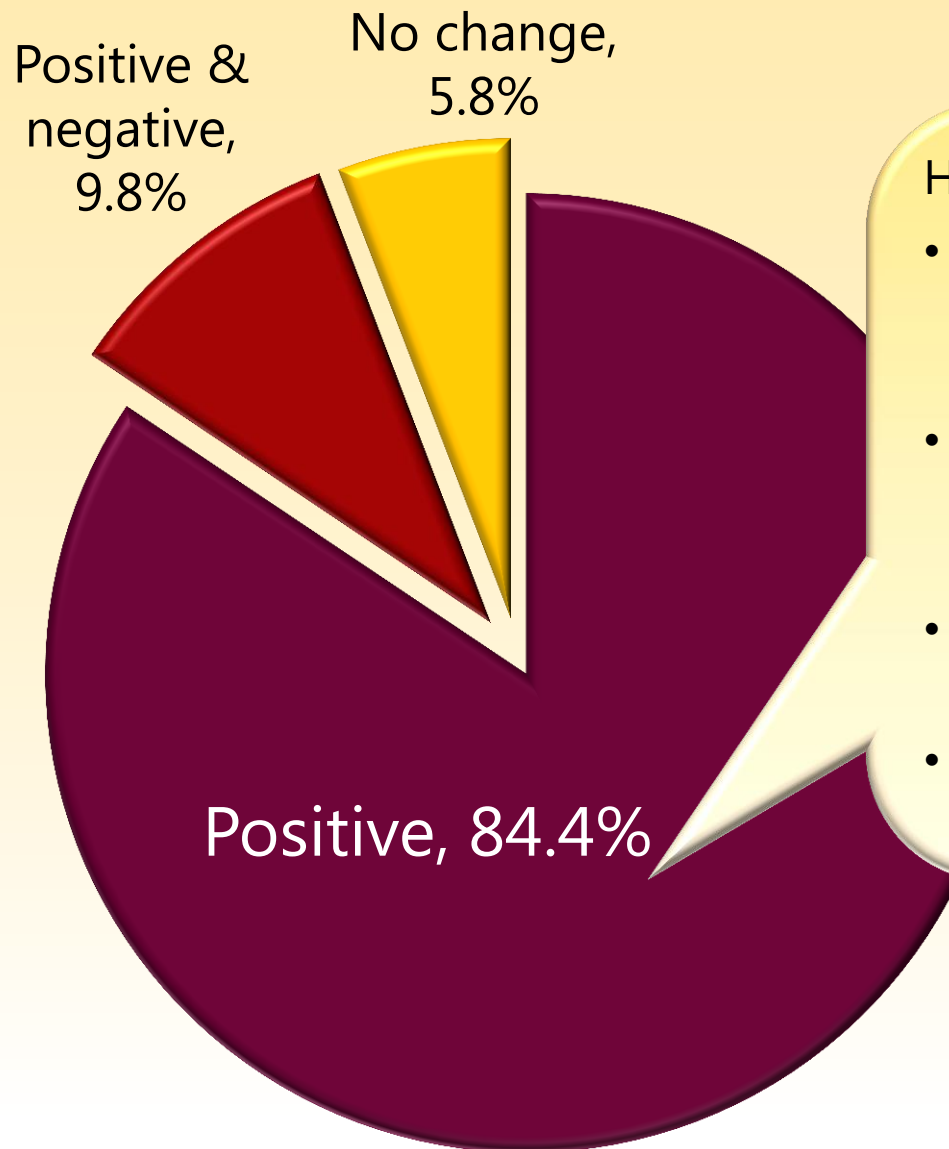
# Use of Hospitalists

- Hospitalists care for adult medical patients in 100% of surveyed hospitals; most also care for surgical patients.
- Fewer (39%) have hospitalists caring for newborns or OB patients; some rural hospitals don't provide those services.
- Hospitalists in rural hospitals frequently play multiple roles – providing outpatient, emergency, and/or primary care.





# Perceived Quality Impacts



## Hospitalists:

- Are available when needed & quick to respond, spend more time with patients
- Improve quality, patient safety measures, communication with nurses, teamwork
- Possess expertise, ability to handle more acute patients
- Provide consistent, standardized care; use evidence-based medicine



# Perceived Financial Impacts

No change, 5.8%

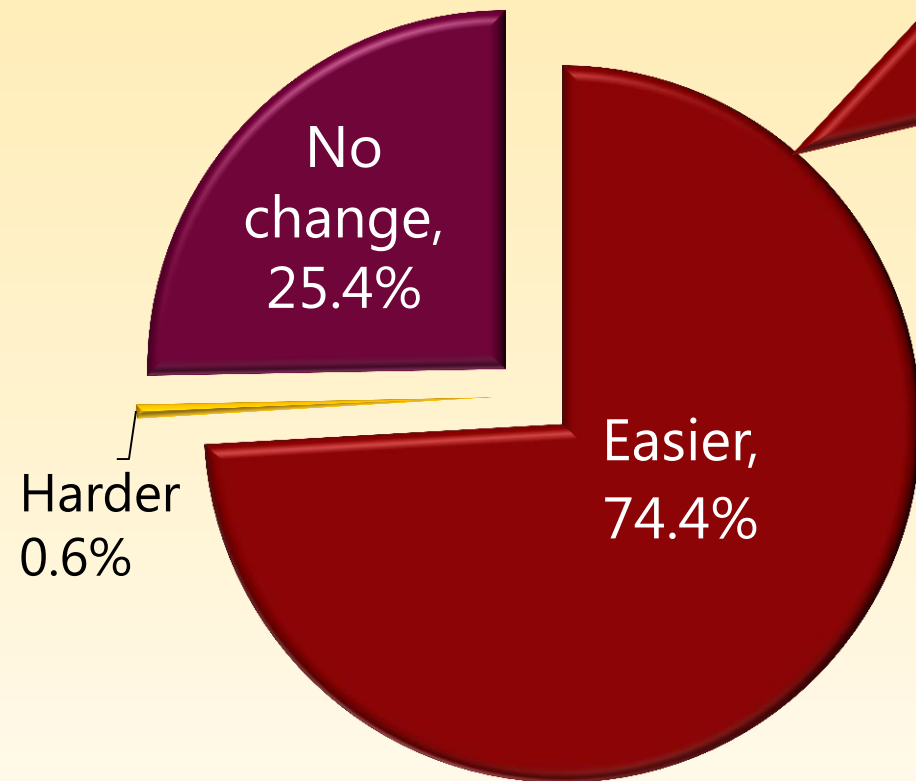
- Costs more than revenue generated
- Hospital has to subsidize hospitalist program
- High costs of hospitalists' salaries or contracts

Both positive & negative, 16.9%

- Increased admissions
- Improved primary care physician productivity, ability to treat higher-acuity patients
- Reduction in patient complications, avg. length of stay, transfers



# Perceived Recruitment / Retention Impacts

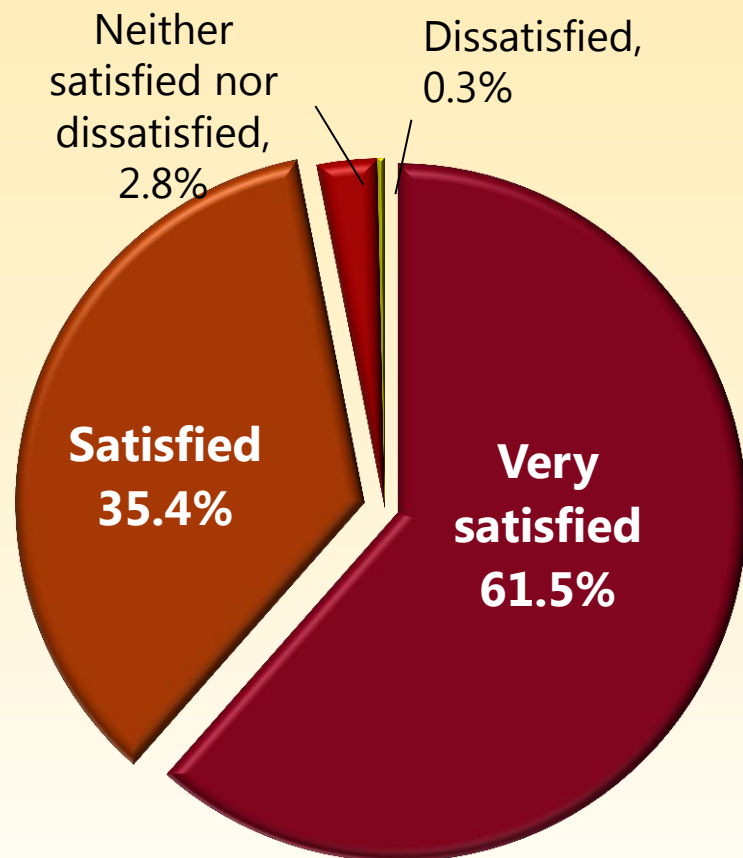


- PCPs don't want to do inpatient care or want flexibility in doing it
- Reduced call, more work/life balance for PCPs
- New candidates are only interested in places with hospitalists

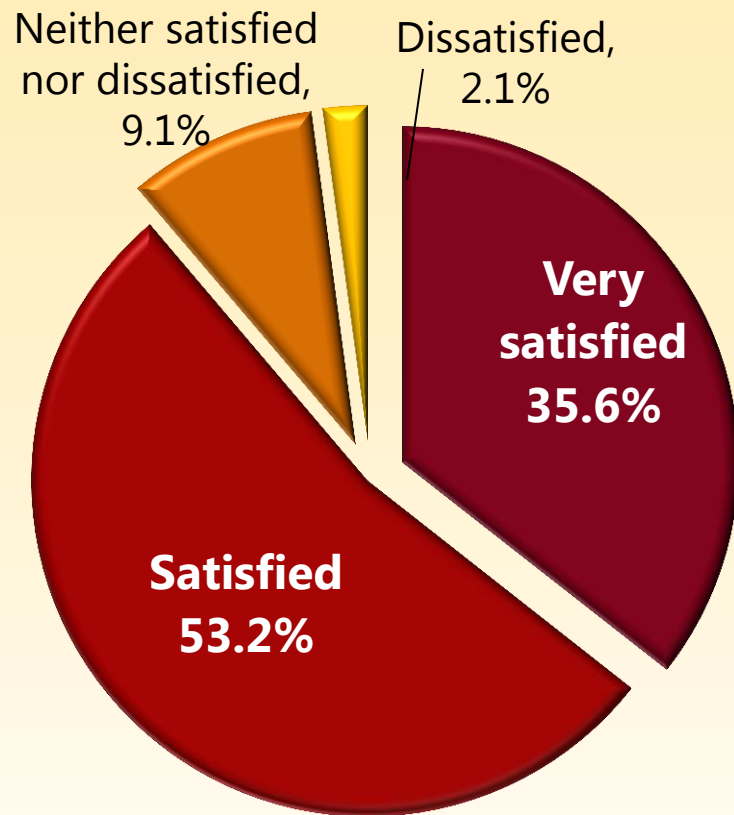


# Survey Respondents' Assessment with Hospitalist Use

## Physician Satisfaction



## Patient Satisfaction



# Methods: Logistic Regression

- What facilities are using hospitalists?
  - Outcome: Binary hospitalist use variable
  - Explanatory variables: inpatient days, Medicare payment classification, ownership, total primary care physicians, system membership, census division
- Multivariate logistic regression model calculated probabilities of hospitalist use given hospital characteristics

# Probability of Hospitalist Use by Small Rural Hospitals

Medicare Payment Classification [Reference = Rural PPS]	Est.	Std. Err.	P-value
Critical Access Hospital (CAH)	-9.2%	3.7%	0.012
Medicare Dependent Hospital (MDH)	-8.6%	4.4%	0.054
Sole Community Hospital (SCH)	-3.7%	3.8%	0.331
Rural Referral Center (RRC)	5.0%	4.6%	0.271

# Conclusions

- Hospitalist use by rural hospitals increased threefold, 2005-2010
- Multiple hospitalist models are being used in rural facilities
- In most rural hospitals that use them, hospitalists care for more than half of adult inpatients
- Survey respondents report strong positive impacts of hospital use on quality, recruitment & retention, and patient & physician satisfaction; financial results are more mixed.
- Medicare payment classification and inpatient volume are significantly related to the likelihood of hospitalist use.



# Implications

- Rural hospitals may benefit from using hospitalists
- Situation is more complex than cost vs. revenue:
  - Financial impact of some benefits can be difficult to quantify
  - Use of hospitalists can enhance recruitment, retention, and efficiency of PCPs
  - Hospitalists can provide inpatient care for unassigned and uninsured patients







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