



Advising the Congress on Medicare issues

Mandated report: Effects of the Hospital Readmissions Reduction Program

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Background

- 2008: MedPAC recommended publicly reporting readmission rates and reducing payments to hospitals with relatively high readmission rates
- 2009: CMS publicly reported rates
- 2010: The Hospital Readmissions Reduction Program (HRRP) is enacted
- 2013: Payment rates are reduced for hospitals with high readmission rates during 2010 to 2012

Literature finds readmission rates declined after passage of the HRRP

- Hospital administrators reported increasing their efforts to reduce unnecessary readmissions
- Readmissions declined on a raw and risk-adjusted basis
- Readmissions declined faster for conditions covered by the program (e.g., pneumonia, HF, AMI) than for other conditions
- Readmissions declined faster for hospitals covered by the program (PPS hospitals) than for critical access hospitals that are not covered by the program

Questions raised by the literature

- Were the reductions real, or were patients just being classified as observation stays rather than being admitted?
 - Did observation stays increase because of the HRRP?
 - Did emergency department visits increase because of the HRRP?
- Was the reduction in risk-adjusted readmissions primarily due to more intensive coding and higher risk scores?
- Did the program result in higher mortality?

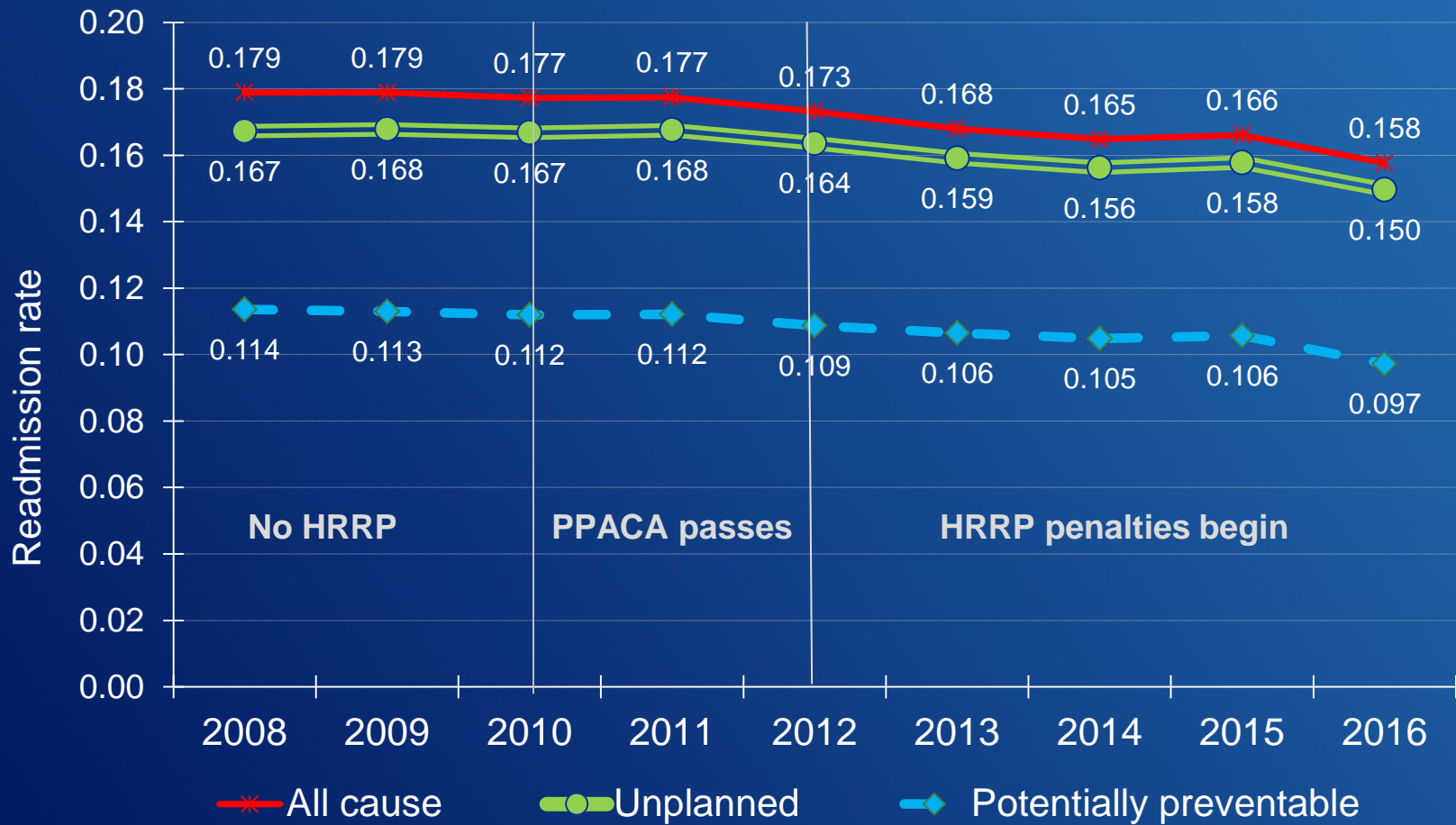
The 21st Century Cures Act mandated readmissions study

- Mandated study question: Are reduced readmissions “related to changes in outpatient and emergency services”?
- This report examines relationships between changes in readmissions and
 - Observation stays
 - Emergency department visits
 - Mortality

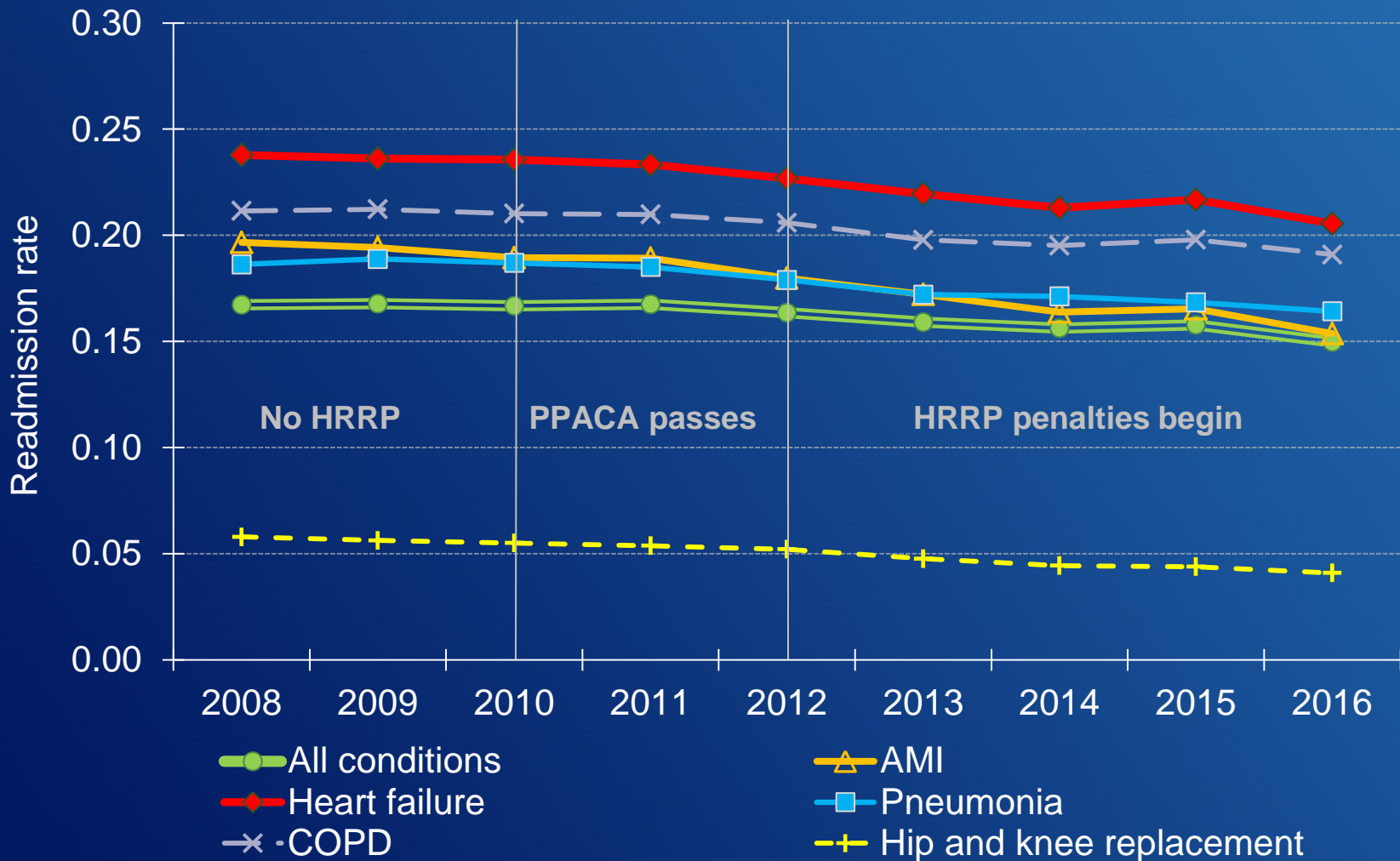
Methods

- Examine cases covered under the HRRP
 - FFS beneficiaries age 65 or older
 - Use same inclusion and exclusion criteria applied to readmission reduction program as of fiscal year 2016
 - Unplanned readmissions
- Risk-adjust readmission trends
 - Use three years of data for risk-adjustment (2010-2012)
 - Use clinical categorical models for risk-adjustment
 - Also show trends in raw non-risk-adjusted trends
- Examine correlations between changes in readmissions and changes in other variables

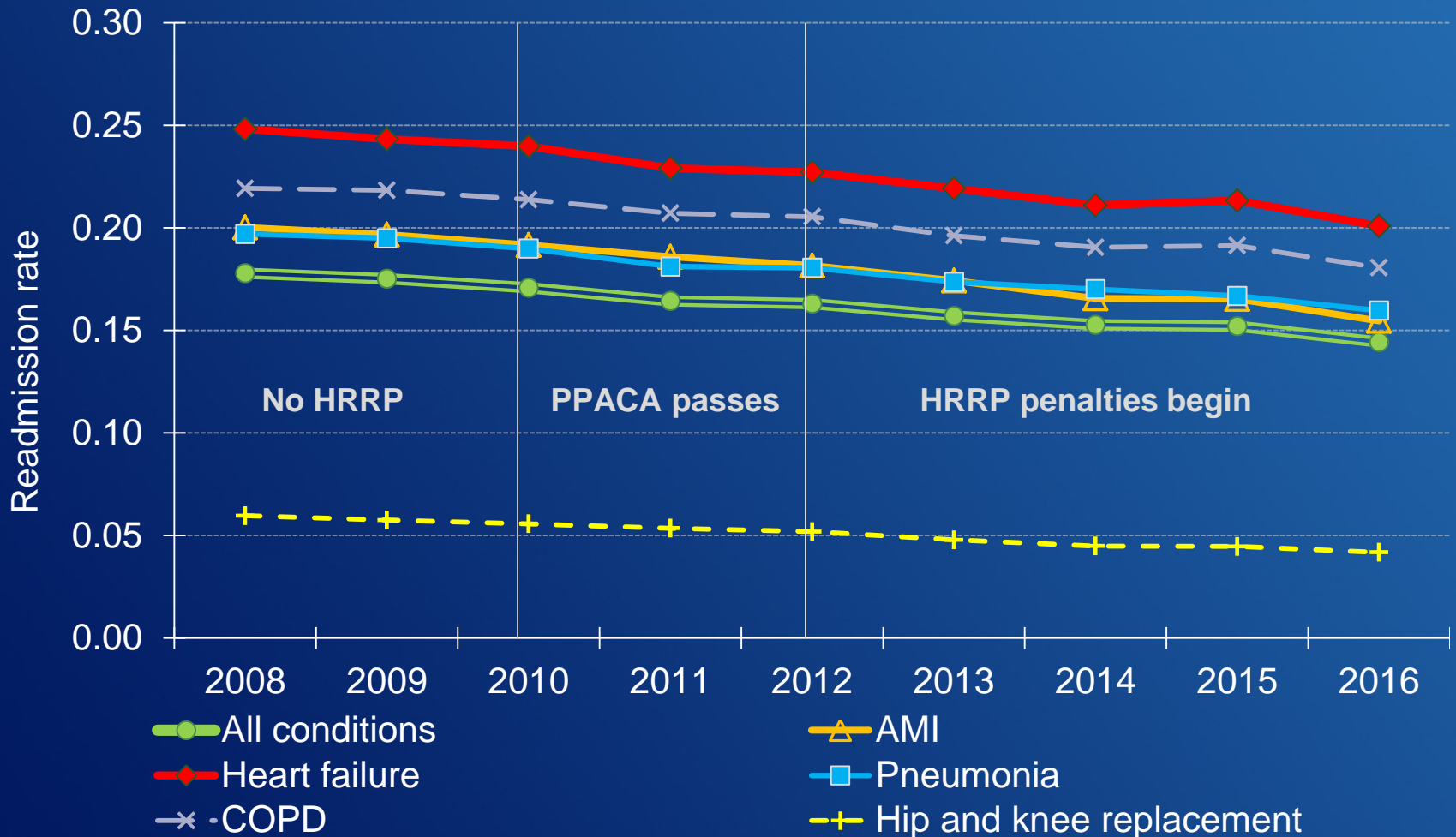
Raw readmission rates declined for all three readmission measures



Raw readmission rates declined for each condition covered by HRRP



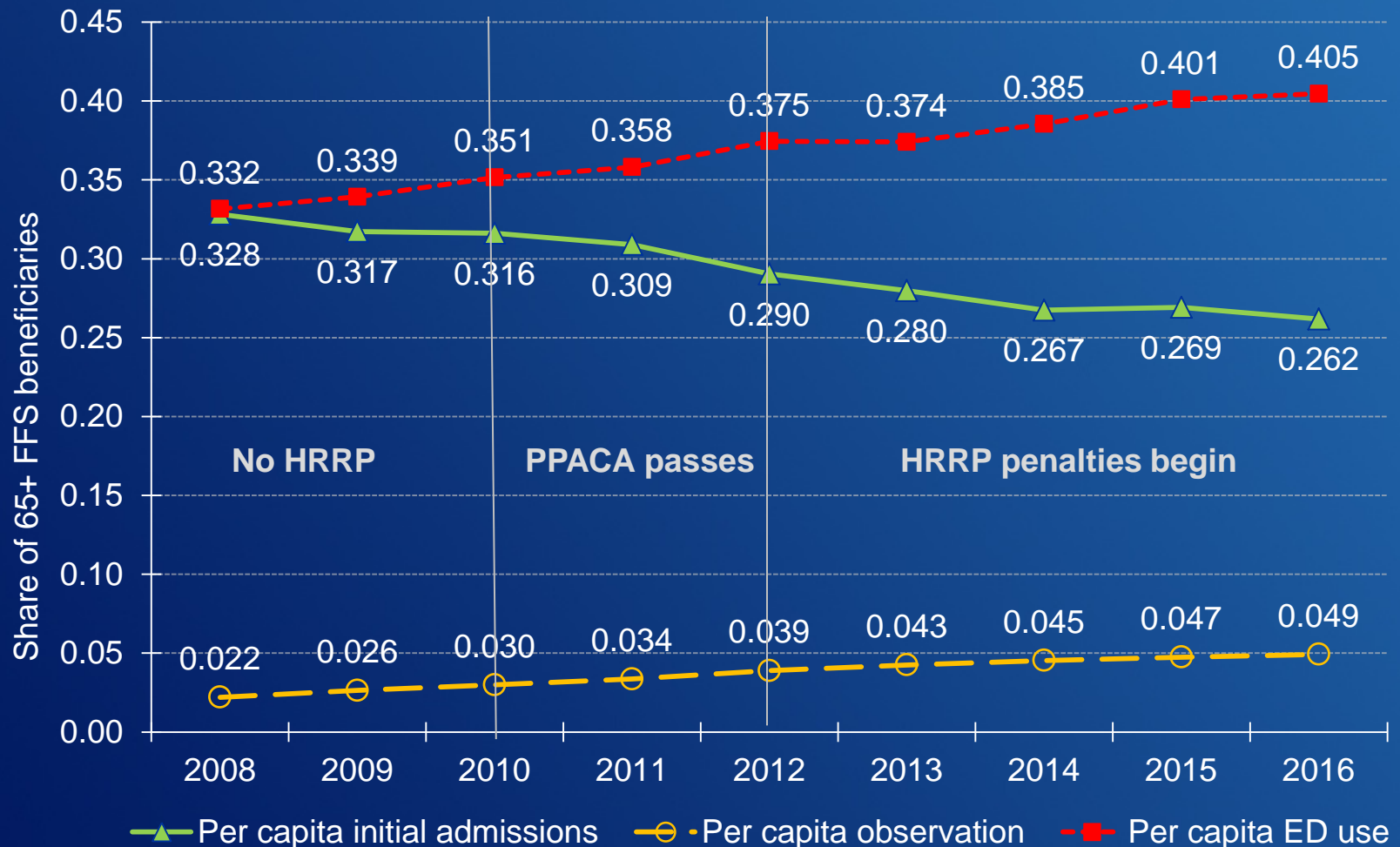
Risk-adjusted readmission rates declined even more for conditions covered by the HRRP



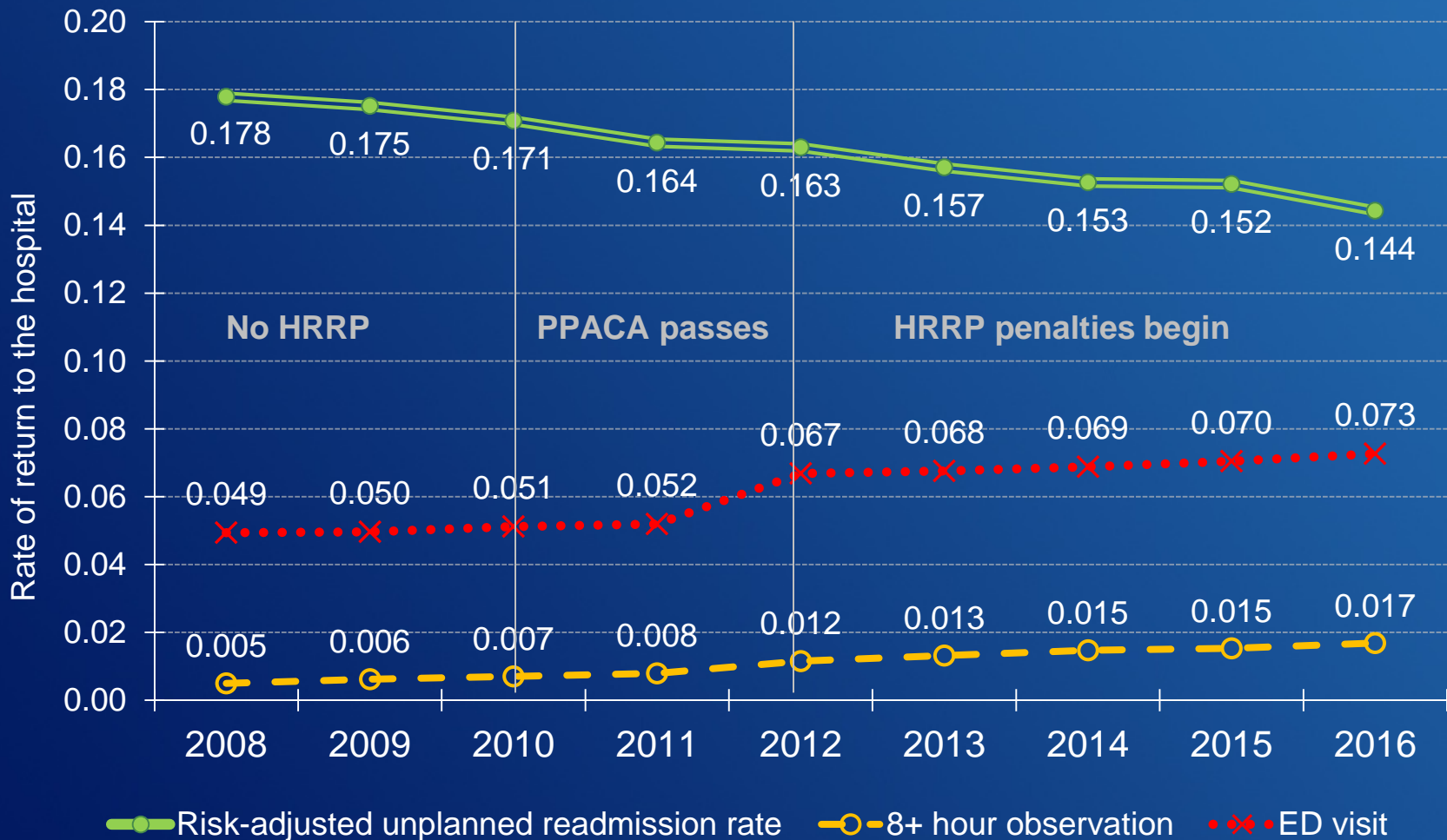
Decline in risk-adjusted readmissions is largely real, not explained by coding

- There was a 17 percent decrease in admissions per capita from 2010 to 2016
 - We expect that some easier cases shifted to an outpatient setting
 - We observe a reduction in the share of cases that were one-day stays
 - The reduction in short-stay cases is consistent with incentives in the Recovery Audit Contractor (RAC) program and for ACOs
- While much of the increase in patient complexity likely is real, some may also be coding

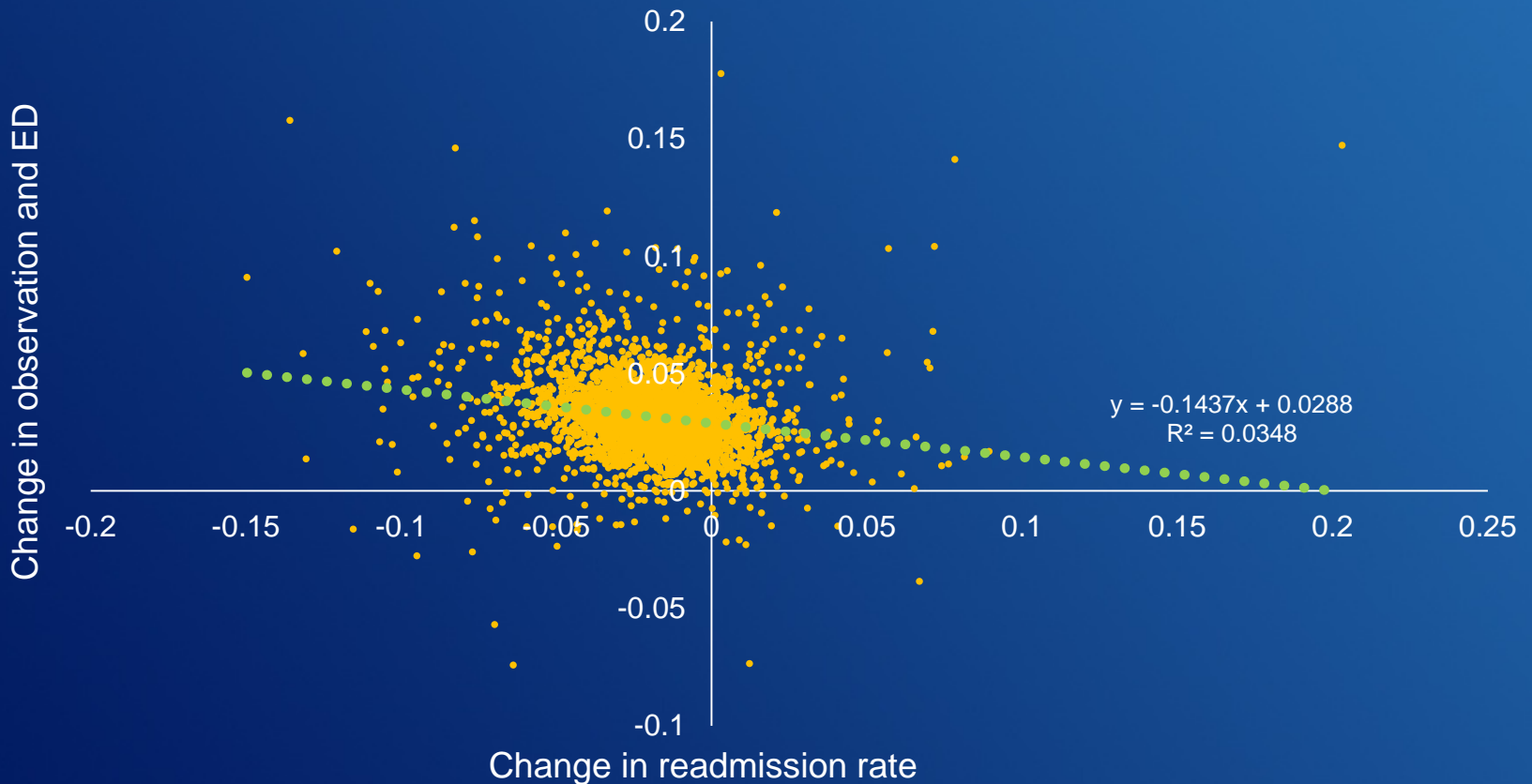
While inpatient use has fallen, observation and ED use has climbed steadily



Post-discharge readmissions decline, observation and ED visits increase

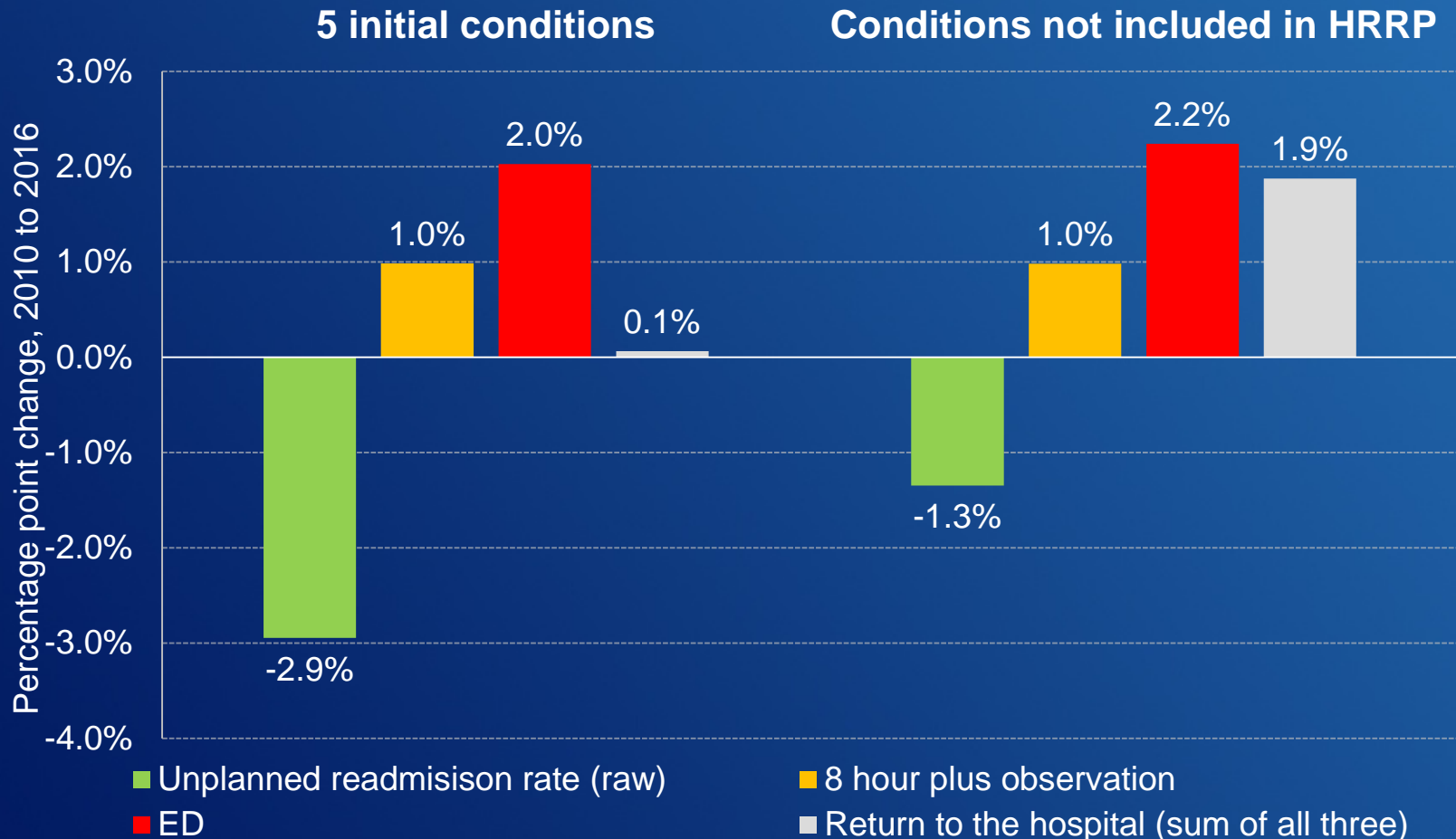


Lower readmission rates are only slightly correlated with higher observation stays and ED visits

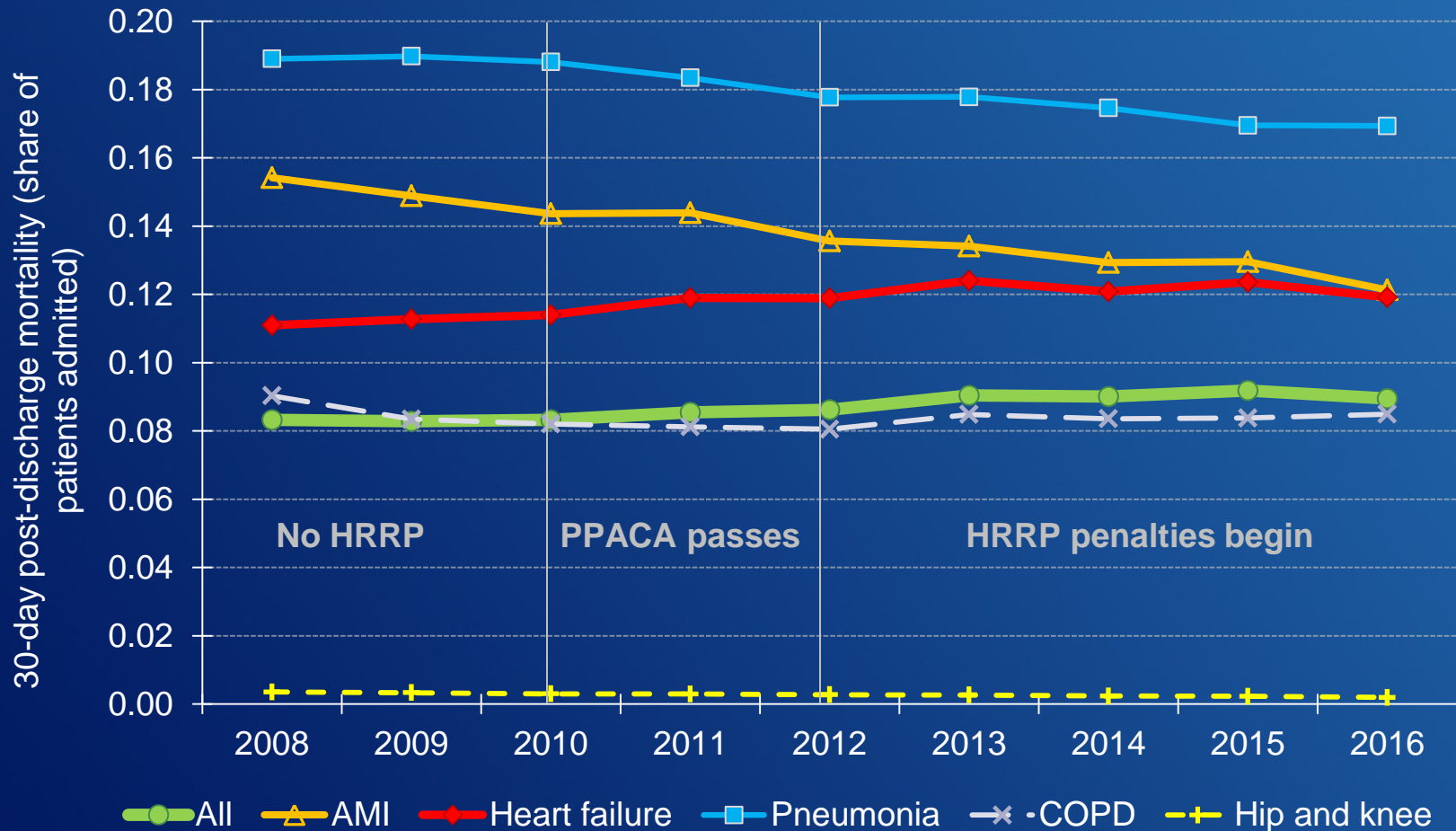


Results are preliminary and subject to change

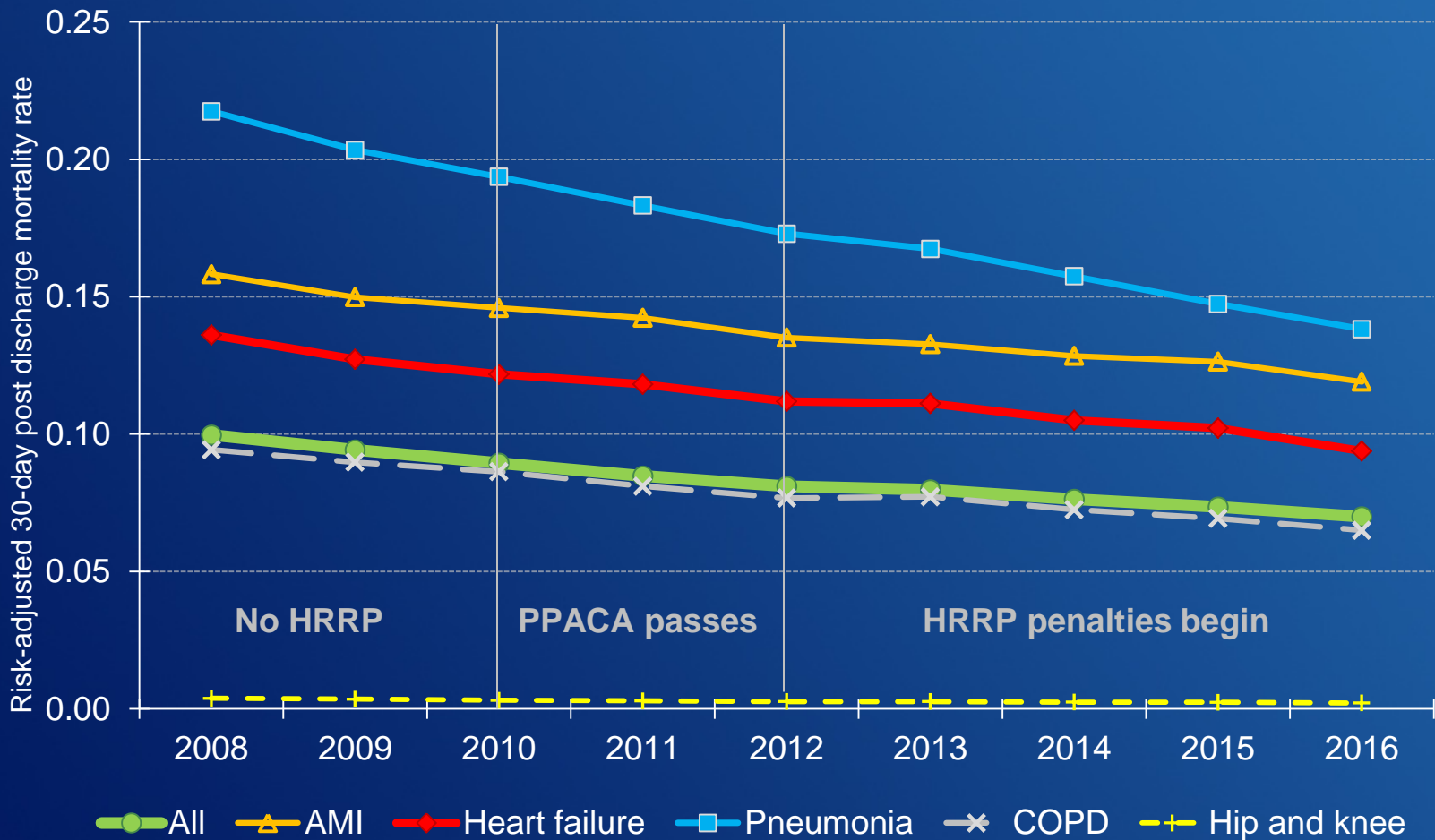
Use of observation and ED grew the same for conditions covered and not covered by the HRRP



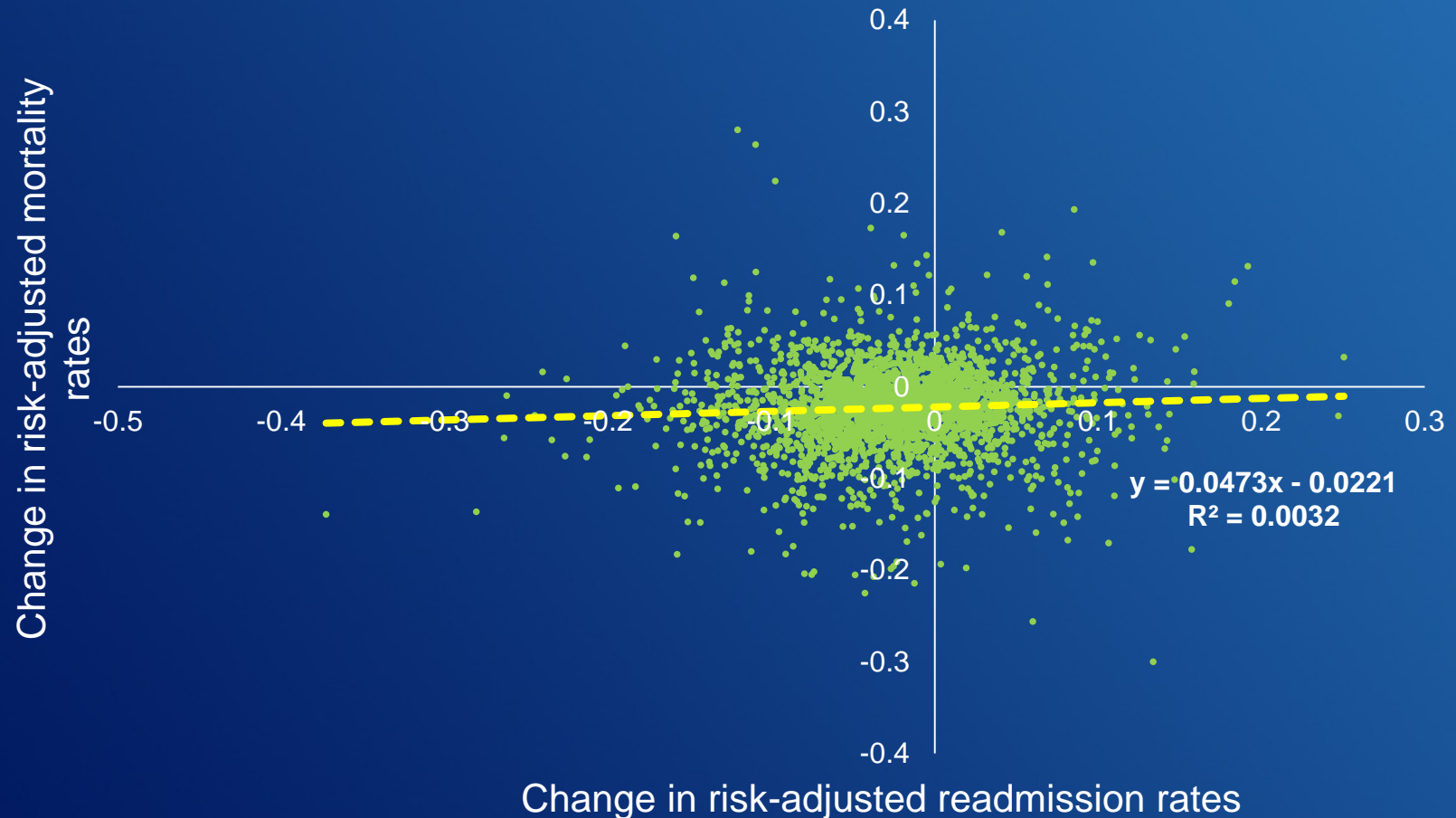
Raw mortality rates 2008 to 2016



Risk-adjusted mortality rates declined from 2008 to 2016



Little relationship between changes in readmission rates and mortality rates for heart failure patients



Effect of lower readmission rates on Medicare payments from 2010 to 2016

Type of care (post-discharge)	Change in payments (in billions)
Readmissions	\$ -2.28
Observation stays	0.17
ED visits	<u>0.07</u>
Annual change in spending	-2.04

Note: Change in the annual payments for readmissions, observation stays, and ED visits post-discharge includes the cost of all changes, even if they did not stem from the HRRP. The \$2 billion in reduced trust fund expenditures does not include reductions due to the penalties.

Summary

- The HRRP created an incentive to reduce readmissions
- Readmissions declined
- Observation increased, but not enough to offset the decline in readmissions
- Emergency visits increased, but may be largely due to reasons other than the HRRP
- HRRP did not appear to negatively effect mortality rates

Policy implications

- Positive impacts of the program
 - The HRRP has reduced readmissions that the patient must endure
 - It has generated savings for the Part A trust fund
- Potential improvements
 - Could refine the penalty formula
 - Could expand to all conditions to pay for fixing the penalty formula
 - Will discuss these in the spring