

The Centers for Medicare & Medicaid Services (CMS) strives to make information available to all. Nevertheless, portions of our files including charts, tables, and graphics may be difficult to read using assistive technology. Persons with disabilities experiencing problems accessing portions of any file should contact CMS through email at HOS@cms.hhs.gov.

Methods and Advantages of Combining HOS and Your Organization's Data to Improve Quality and Performance

Medicare Advantage Quality Measurement &
Performance Assessment Training Conference

Baltimore MD

April 8 – 9, 2008

Richard D. Hector, MA, MPH, PhD
Health Services Advisory Group

Goal

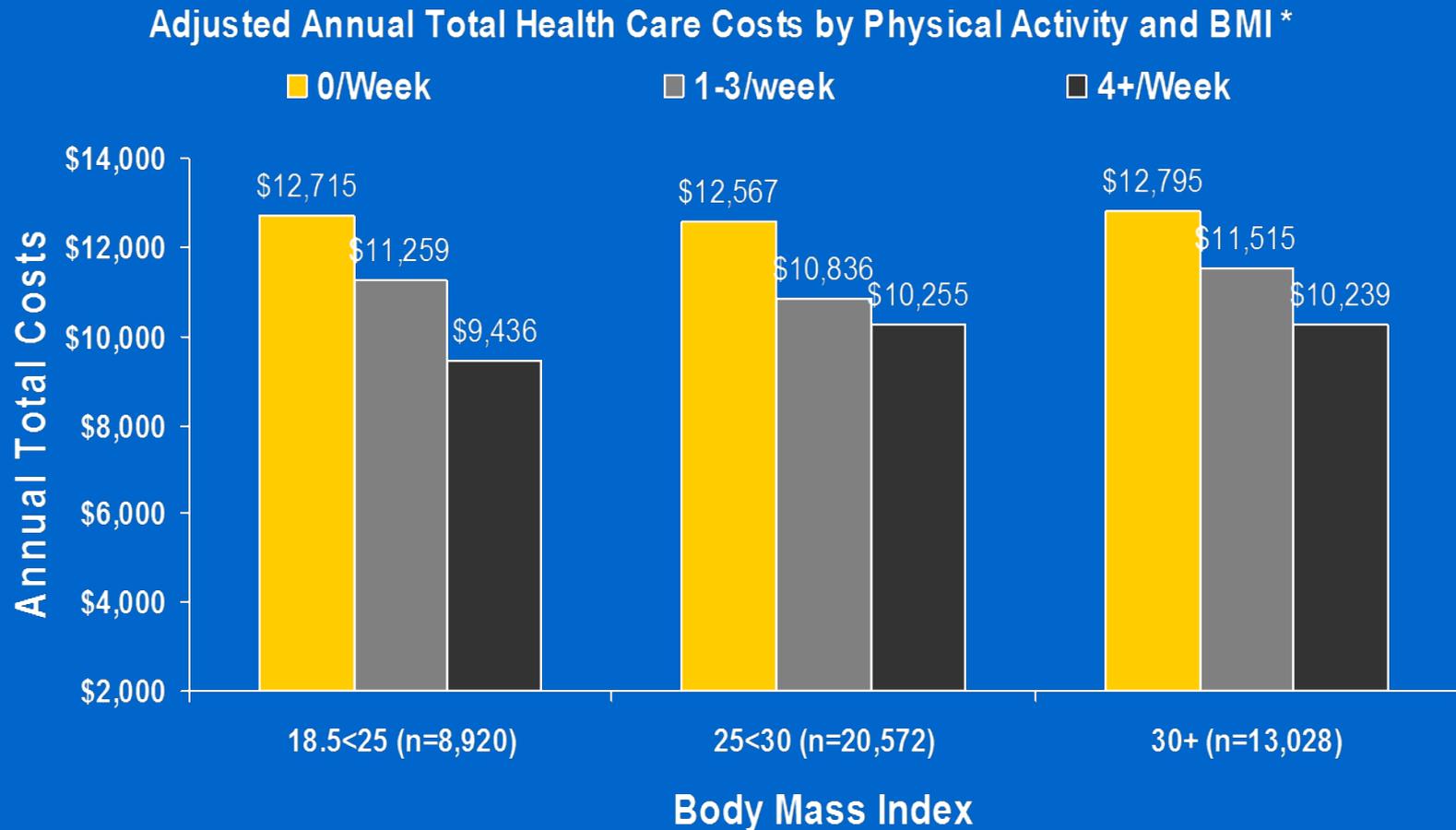
Demonstrate the advantages of linking HOS and Medicare Advantage Organization data to identify quality and performance results that support improvements in health-related quality of life

This could happen to you...

- On a great Monday morning after a wonderful weekend, you're at your desk and ready to start a project that you had on the back burner.
- Your boss returns from a conference and is very excited about some results that were presented.
- Your boss wants you to replicate the results with your in-house data.

BMI, Physical Activity, and Health Care Utilization/Costs among Medicare Retirees

Wang et al. Obesity Research, 2005, 13(8) Fig. 1



* Controlled: gender, age, major diseases, chronic diseases, overall health risks

Link HOS to Plan Data

Health Plan Data (Including claims paid)										
HICNUM	SSN	PATID	Lastname	Firstname	Street	City	State	Zip	Total Cost	...
00123456	123456789	12345	Shakespeare	William	12 Piper Ln	Baltimore	MD	12345	\$ 7,845.00	...
00654321	987654321	54321	Hemingway	Ernest	34 Fulton St	Brooklyn	NY	11222	\$ 12,345.00	...
.
.

Plan



Use HIC or SS numbers to merge data sets

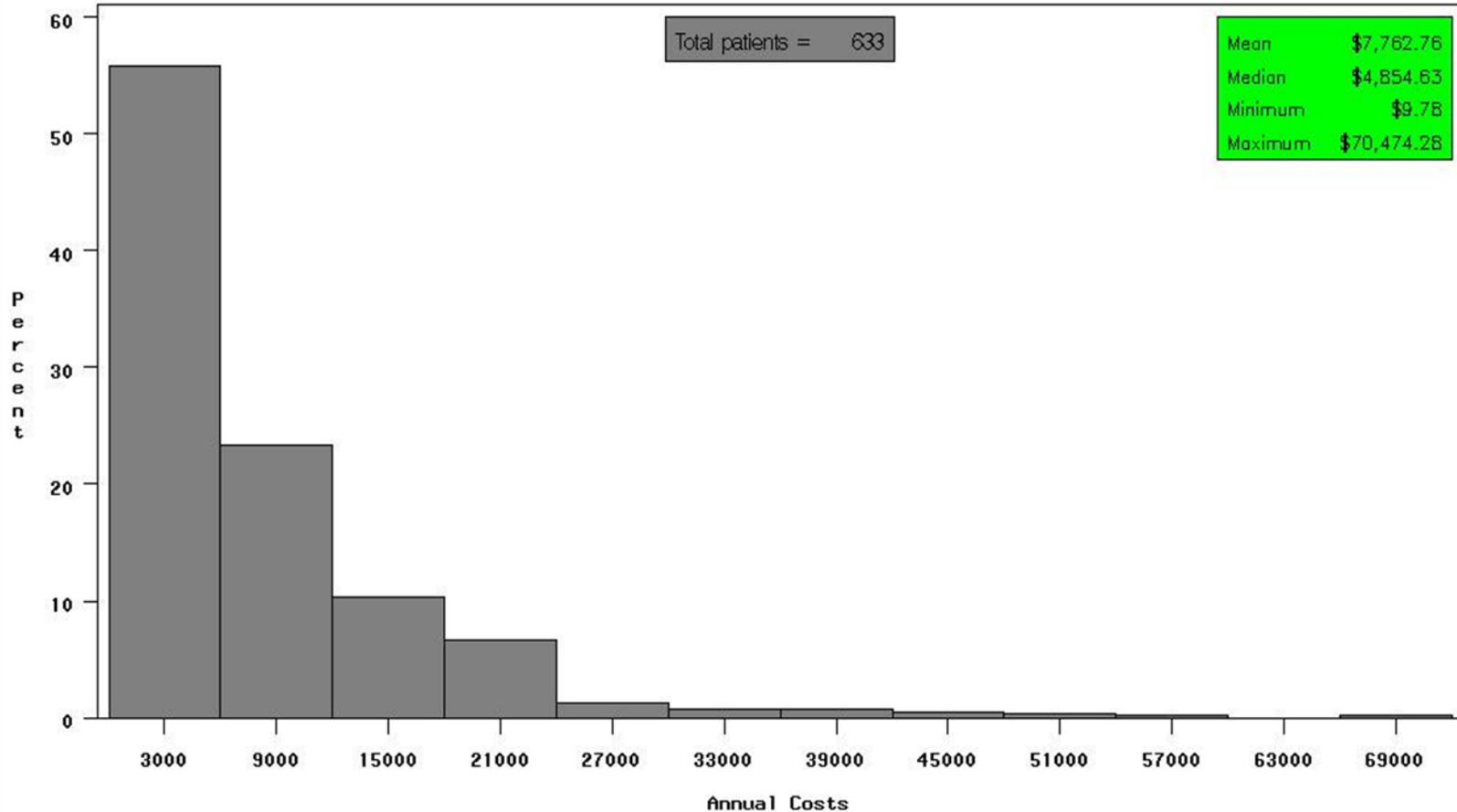
Health Outcomes Survey Data Table										
HICNUM	SSN	PATID	Lastname	Firstname	Street	City	State	Zip	PCS	...
00123456	123456789	12345	Shakespeare	William	12 Piper Ln	Baltimore	MD	12345	45	...
00654321	987654321	54321	Hemingway	Ernest	34 Fulton St	Brooklyn	NY	11222	30	...
.
.
.

HOS

Data are simulated

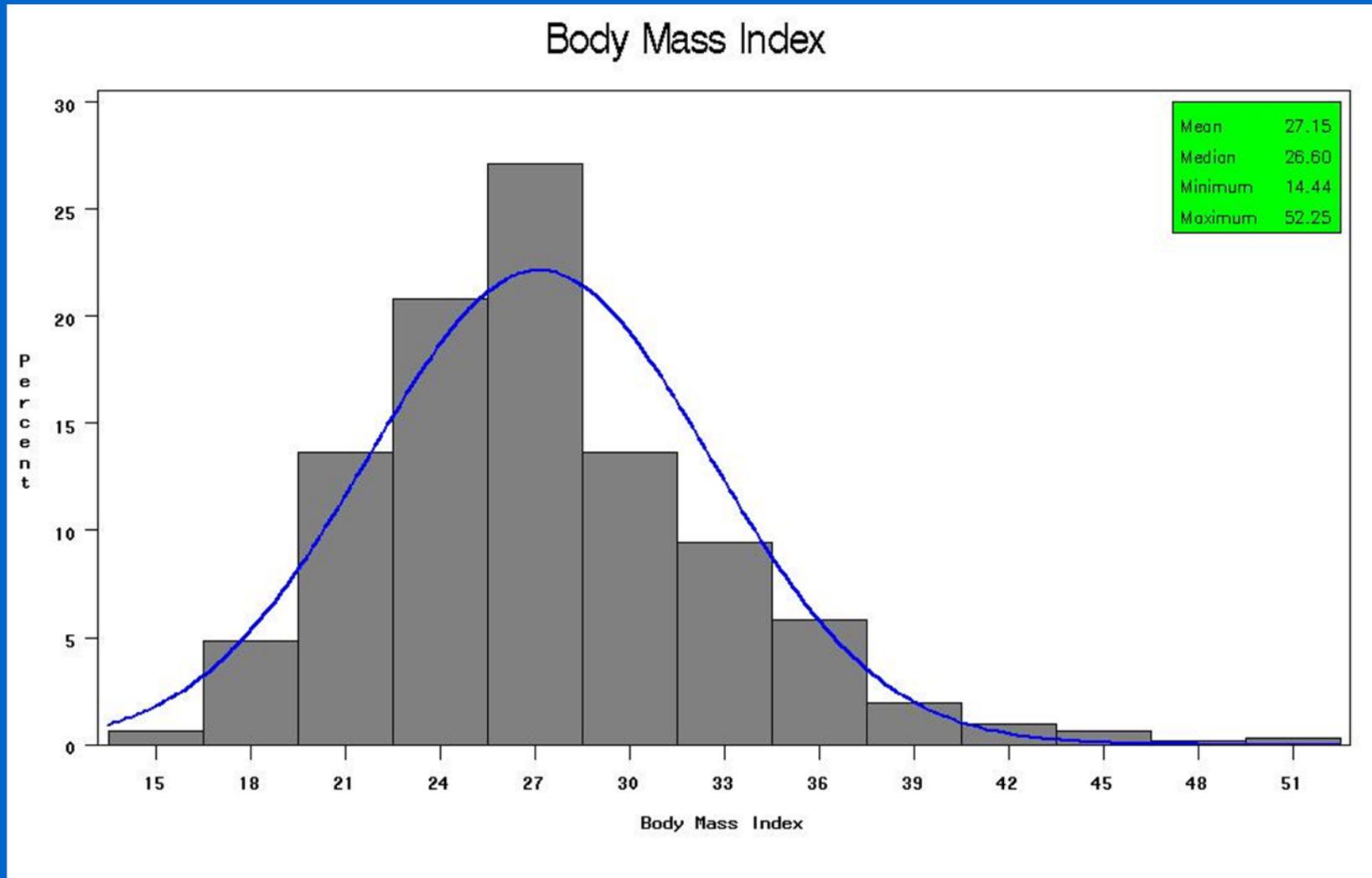
Cardinal Health Plan

Simulated Total Annual Costs



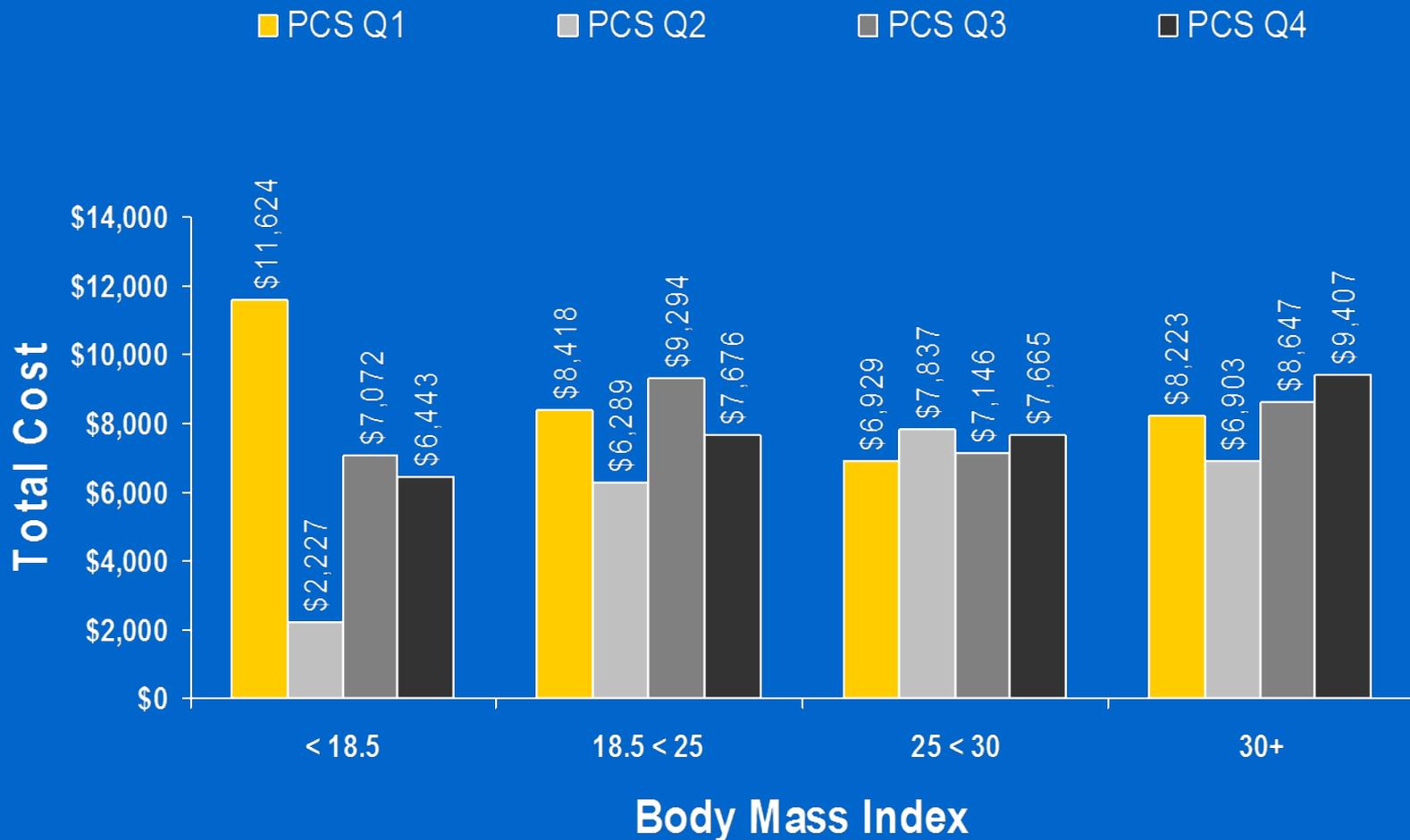
Data are simulated

Cardinal Health Plan



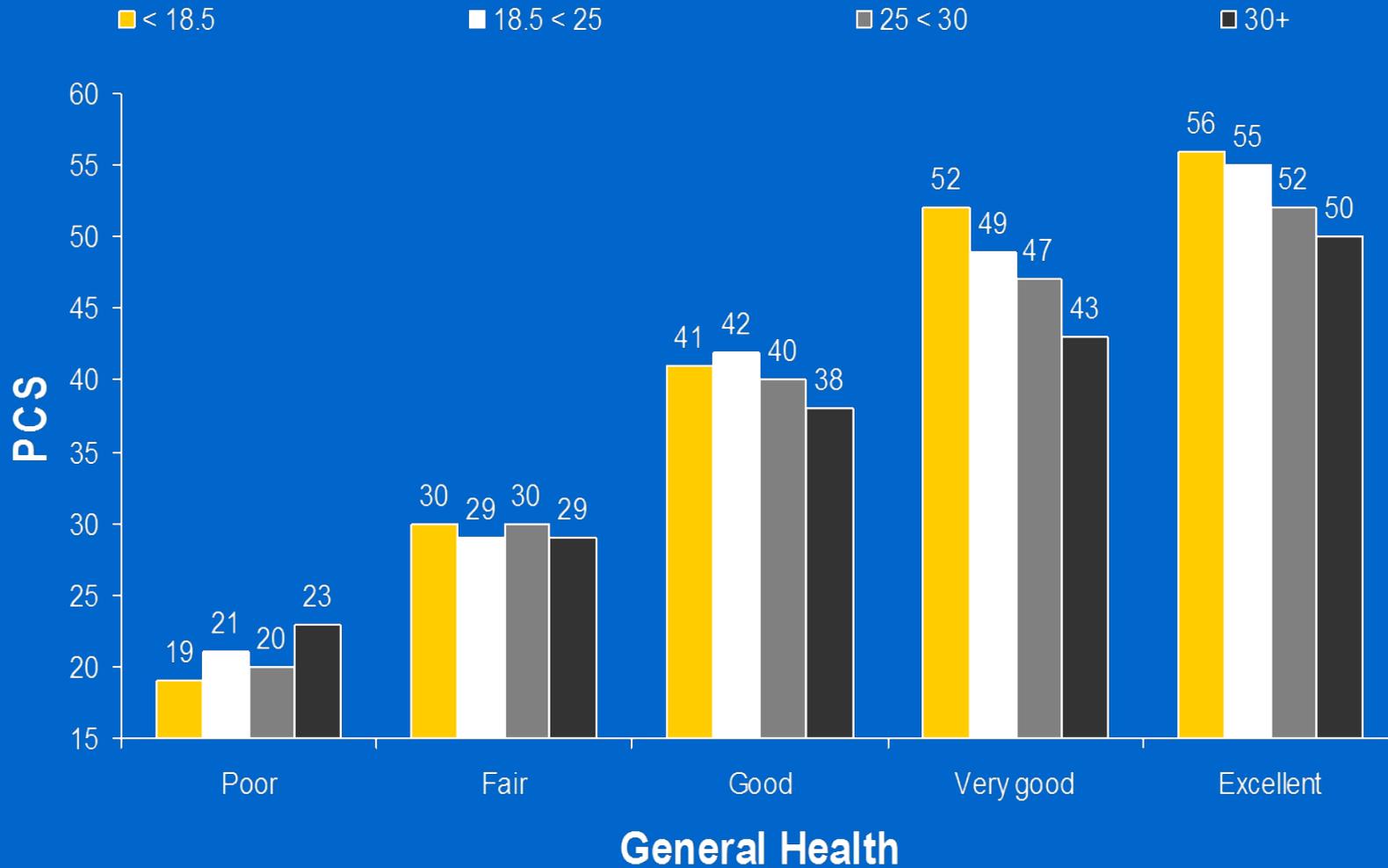
Data are simulated

Total Cost (simulated) by BMI and PCS



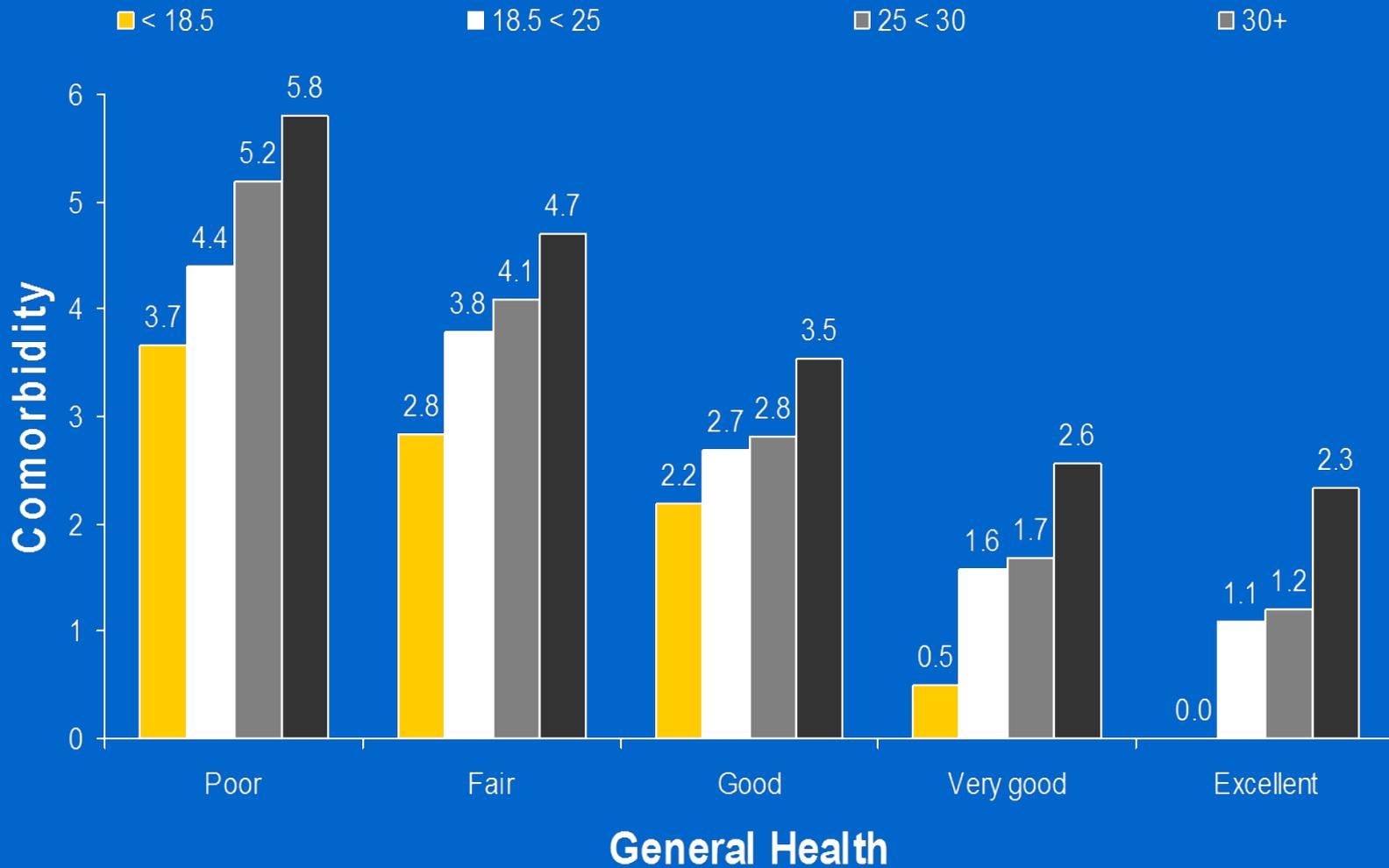
Data are simulated

PCS by BMI and General Health



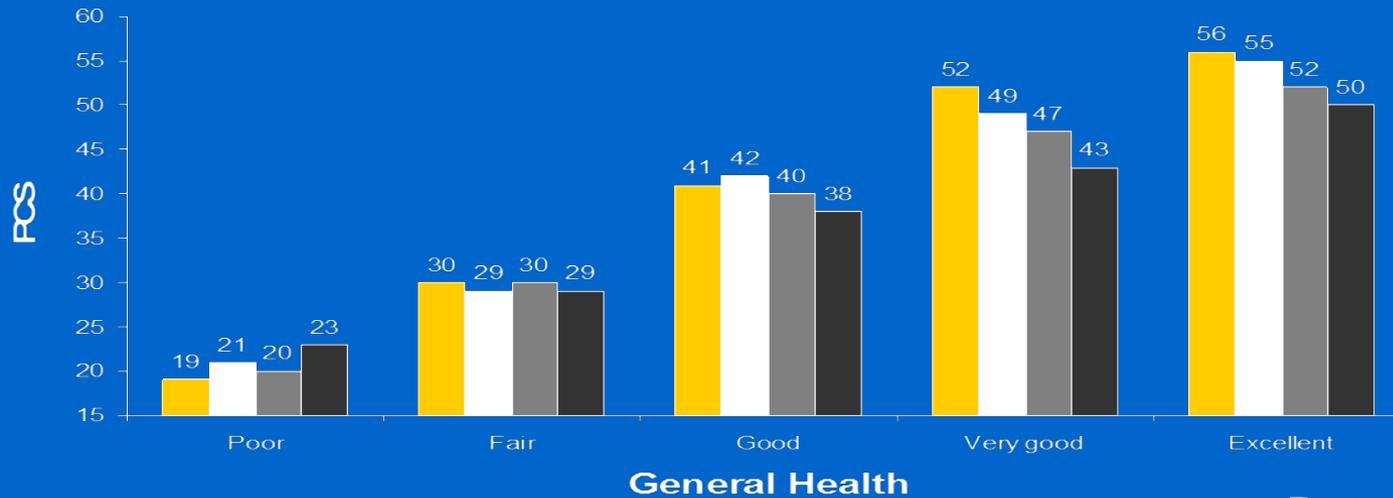
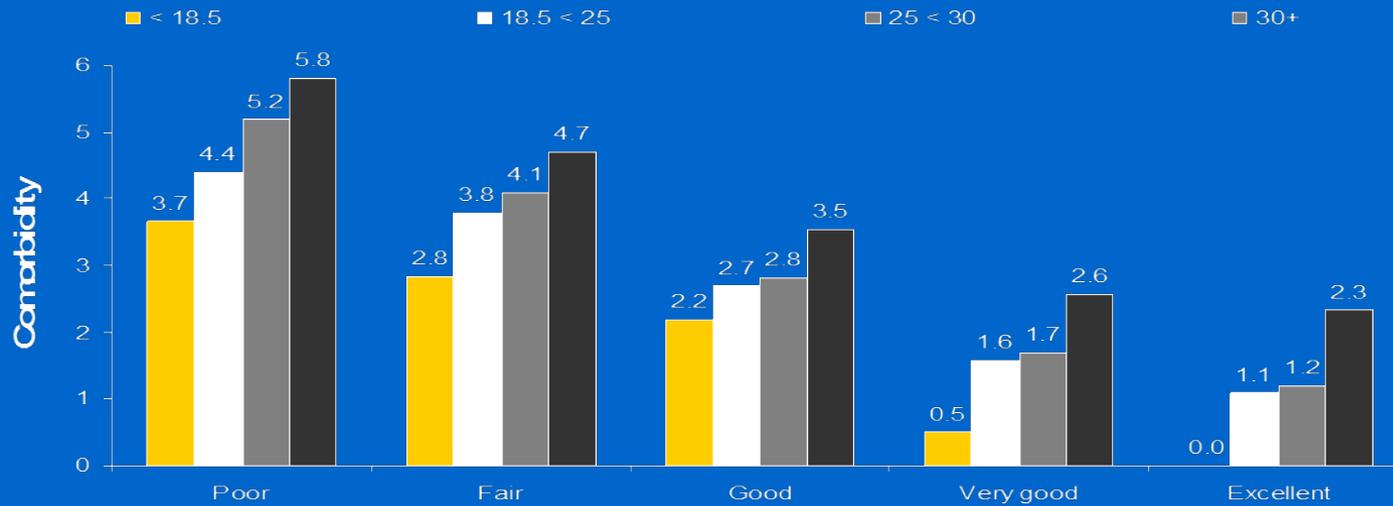
Data are simulated

Comorbidity by BMI and General Health



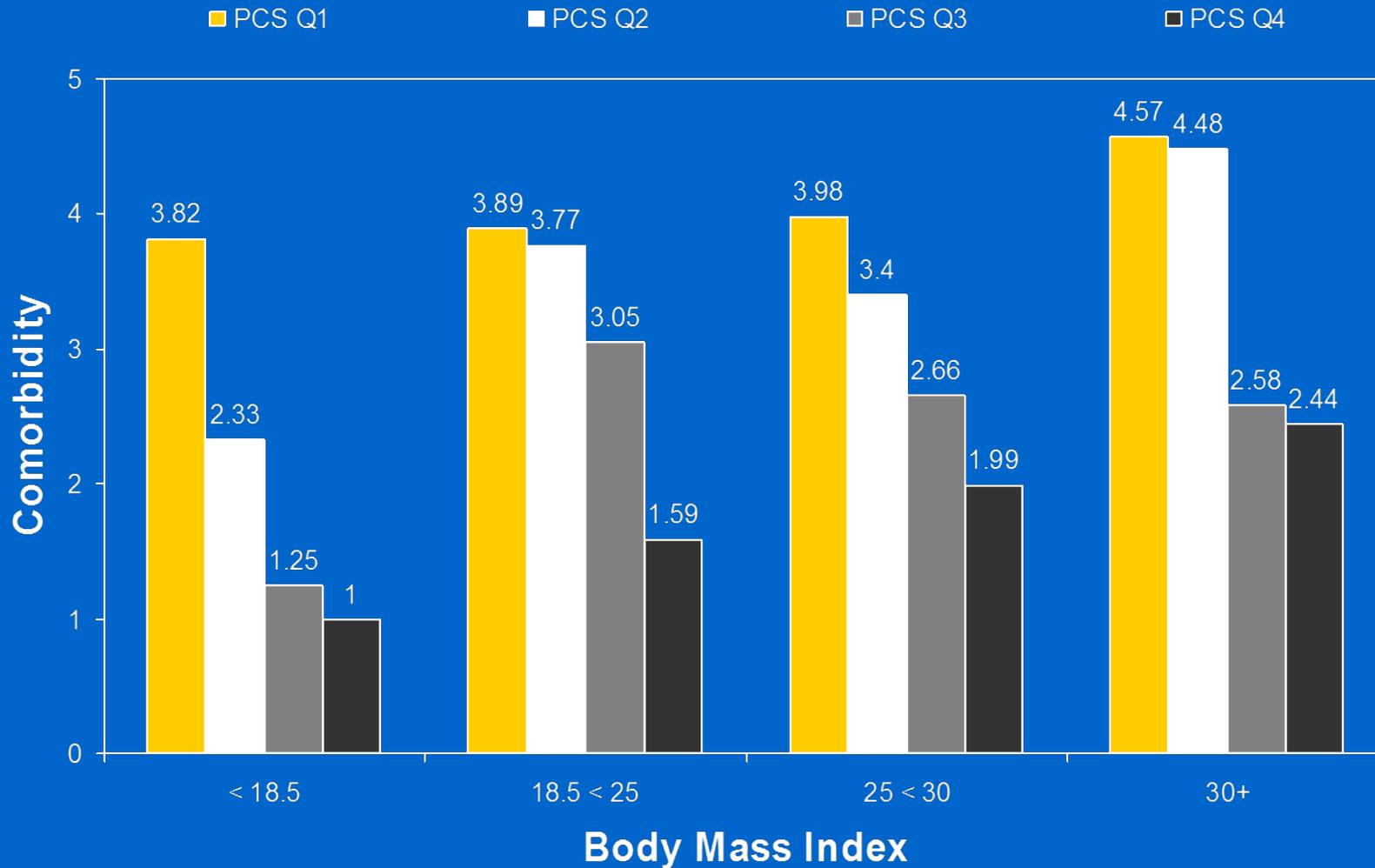
Data are simulated

Comorbidity, PCS and General Health



Data are simulated

Comorbidity, PCS and BMI



Data are simulated

Advantages of HOS Data

- HOS unique identifier for linking to in-house data
- Outcomes are calculated
- Well-being items validated

- * PCS
- * MCS
- * Healthy Days
- * General Health
- * Chronic Diseases
- * Urinary Incontinence

More Advantages of HOS Data

- Trained interviewers
- Established sampling protocol
- Generalize to population of plan
- Check results against other States (e.g. public use files)
- Collaboration with persons outside of your organization without jeopardizing confidentiality
- Large sample size (power)

HOS Program Timeline – HOSonline.org

- Annual baseline sample
- Two-year follow-up of baseline

Year 1

- **January – March:** Prepare survey, select sample, prepare interviewers
- **April – July:** Field survey for baseline & follow-up cohorts
- **August – December:** Clean, validate & score data

Year 2

- **January – March:** Manage and analyze data
- **April – August:** Prepare and disseminate data files, reports and data user guides

Quality Improvement Rationalizations (part 1)

Boat et al., February 6, 2008 JAMA 299 (5) p. 570

- Too busy to do anything more
- Cannot afford it
- Different approach already in place
- Already in the top quartile or top 10%
- Need more and better people
- Do not get paid for quality

Quality Improvement Rationalizations (part 2)

Boat et al., February 6, 2008 JAMA 299 (5) p. 570

- Quality improvement ideas cannot be applied to medicine because patients are heterogeneous
- Medical care is relational work requiring reflective professional practice
- Lack of knowledge about how to make changes in system
- Medical center is a teaching hospital
- Medical center is not a teaching hospital

Feedback from MA Plans (part 1)

- Data is outdated
 - Without a change in processes, beneficiaries experience similar outcomes
 - The period (interview to data dissemination) encourages focus on process rather than variation due to special causes
 - In-house project would have a similar duration (without the advantages)

Feedback from MA Plans (part 2)

- Your beneficiaries are sicker or different than patients in the survey
 - Link to your in-house data and customize the data to your beneficiaries
- Issues to consider with providers
 - Providers witness the bad effects of processes
 - Beneficial effects become part of the background
 - Data-driven processes will have credibility with providers

Summary

The HOS is a rich data set. It can be used to show how quality and performance of care affect the health-related quality of life of patients enrolled in Medicare Advantage Organizations. HOS data files are available to any researcher through de-identified public use files.

However, when linked to in-house data, they can be a valuable resource. Plans can measure not only the effect of quality and performance on the health-related quality of life of patients, but also determine their effect on expenditures.

Since patients interviewed are a representative sample, policies to improve quality and performance can be evaluated knowing they affect all patients

Technical Queries

Health Services Advisory Group

For inquiries, please contact the
Medicare Health Outcomes Survey (HOS)
Information and Technical Support
Telephone Line at (888) 880-0077 or
E-mail Address (hos@azqio.sdps.org).

CMS HOS Website:
<http://www.hosonline.org>

Presentation Queries

Richard D. Hector, MA, MPH, PhD
Health Services Advisory Group

Phone: (602) 665 – 6133

Email: rhector@azqio.sdps.org

Thank you for your attention

Please ask QUESTIONS

Please share your COMMENTS