

A Comparison of Health Care Resource Utilization and Expenditure Among Attention-deficit Hyperactivity Disorder Patients Treated With Stimulants Versus Non-stimulants

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ADHD Background

- ▶ What is ADHD
 - Attention-Deficit/Hyperactivity Disorder is one of the most common mental disorders in children.
 - There is impaired functioning in multiple settings, including home, school, and in relationships with peers.
 - If untreated, it can have long-term adverse effects into adolescence and adulthood
 - National Institute of Mental Health, US
- ▶ What are the symptoms?
 - Impaired levels of hyperactivity, inattentiveness, and impulsivity
- ▶ What are the treatment options?
 - Behavioral therapy and medications (stimulants & non-stimulants)

Objectives

- ▶ Compare resource utilization in newly treated ADHD patients receiving an initial prescription of stimulants or non-stimulants
- ▶ Examine the association between resource utilization and the presence of an additional mental health diagnosis in the above 2 treatment groups

Study Design

- ▶ Retrospective claims data review examining health care resource utilization among newly treated subjects with ADHD (July 1, 2003 through September 30, 2007) in a geographically representative US managed care organization
- ▶ Definitions
 - Identification period: January 1, 2004 to September 30, 2006
 - Index date: fill date for the first prescription for an ADHD medication
 - Index year: year of the index date
 - Follow-up period: 365 days post-index prescription fill
- ▶ Resource Utilization
 - Count of
 - ambulatory visits (outpatient and office visits)
 - emergency department visits
 - inpatient hospital admissions
 - occupational/speech/physical therapy visits
 - Length of inpatient hospital stay

Study Criteria

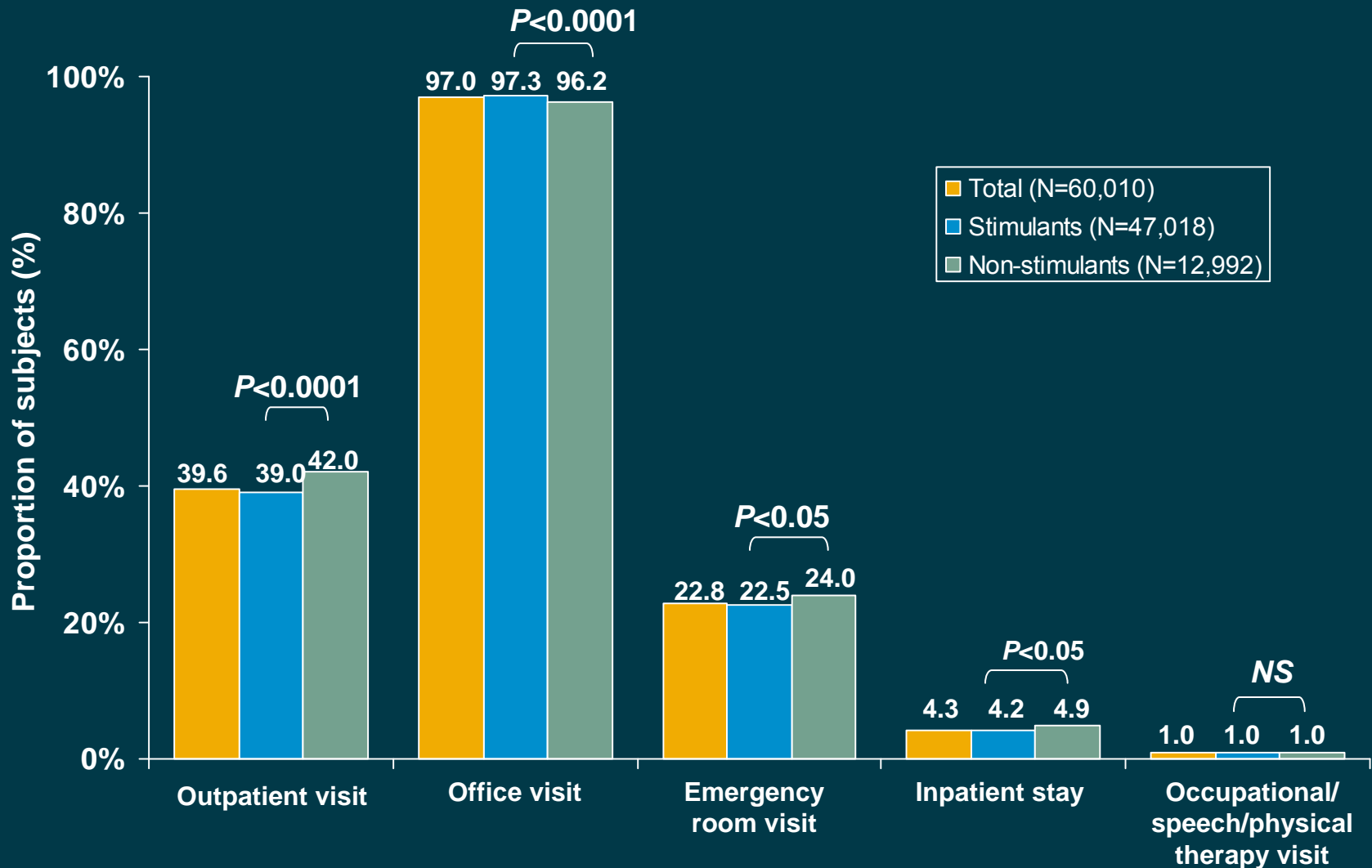
▶ Inclusion

- ICD-9-CM ADHD diagnosis during identification period
- ≥ 1 prescription filled for an ADHD medication during the identification period
- Continuous health plan eligibility with medical and pharmacy benefits for 6 months before and 1 year after the index date
- Aged ≥ 6 years as of the index year

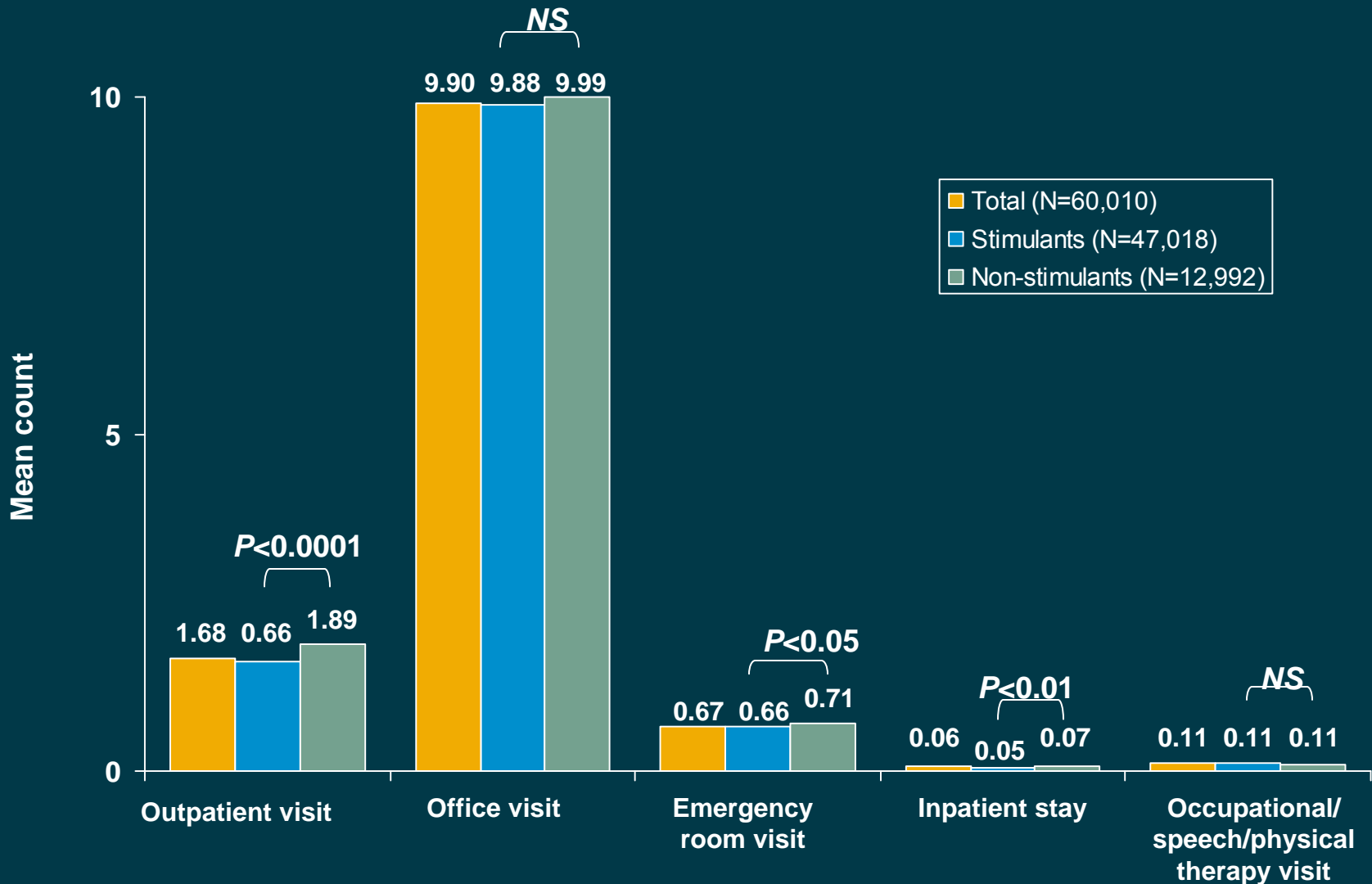
▶ Exclusion

- Prescriptions filled for ADHD medications for the 6 months before the index date
- More than 1 ADHD medication prescription filled on index date

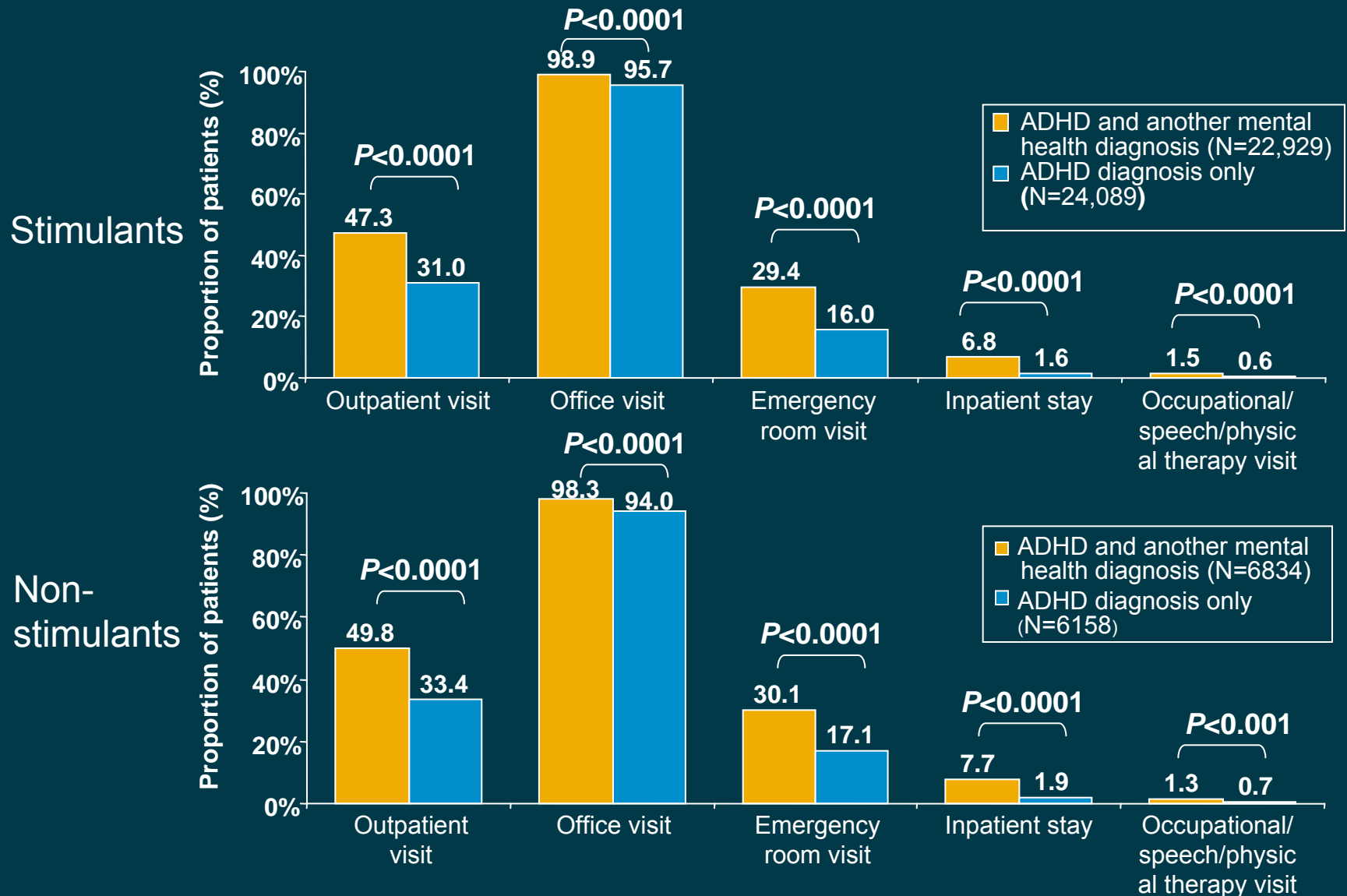
Utilization Frequency



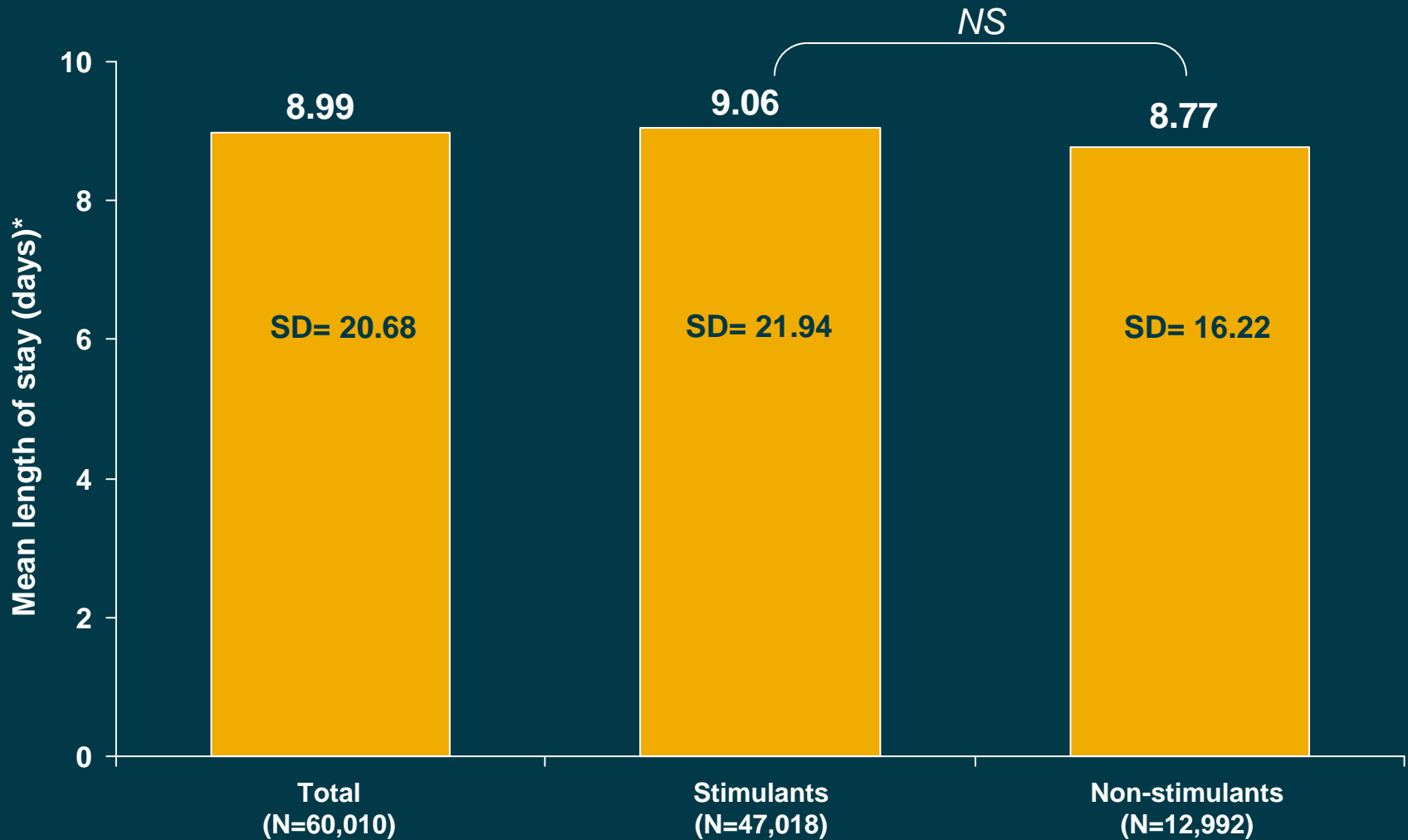
Mean Utilization Count



Utilization Frequency by Mental Health Diagnosis



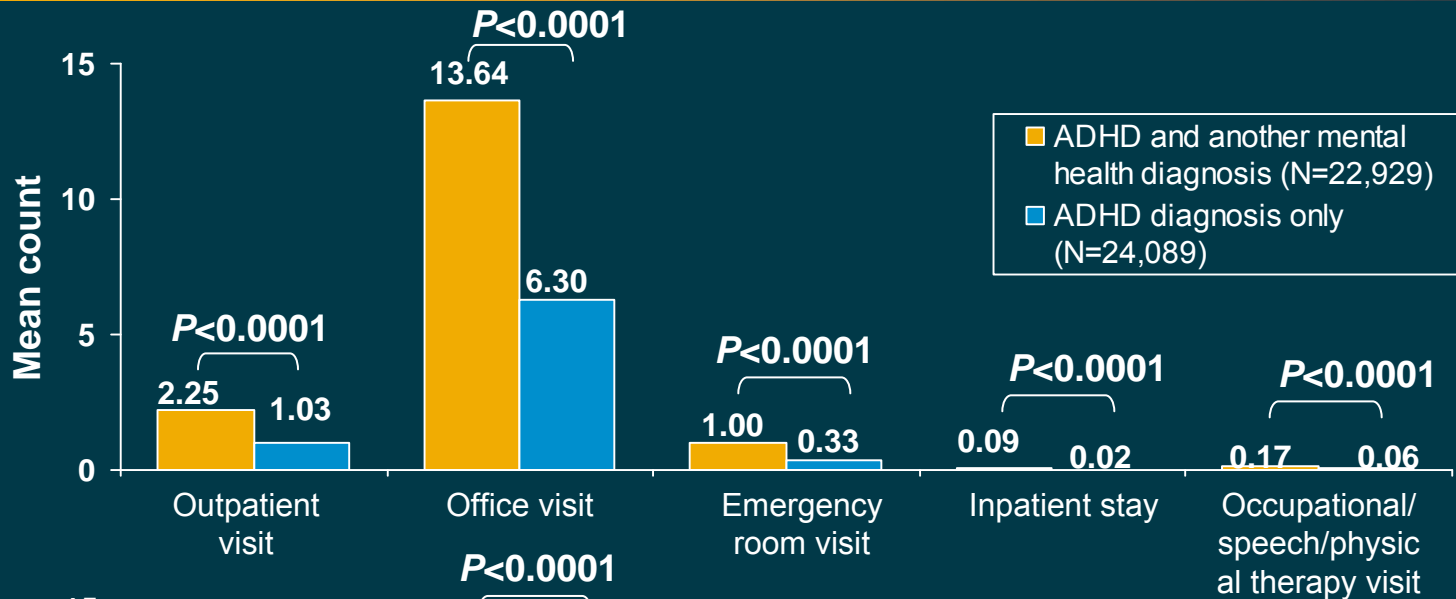
Mean Length of Inpatient Stay



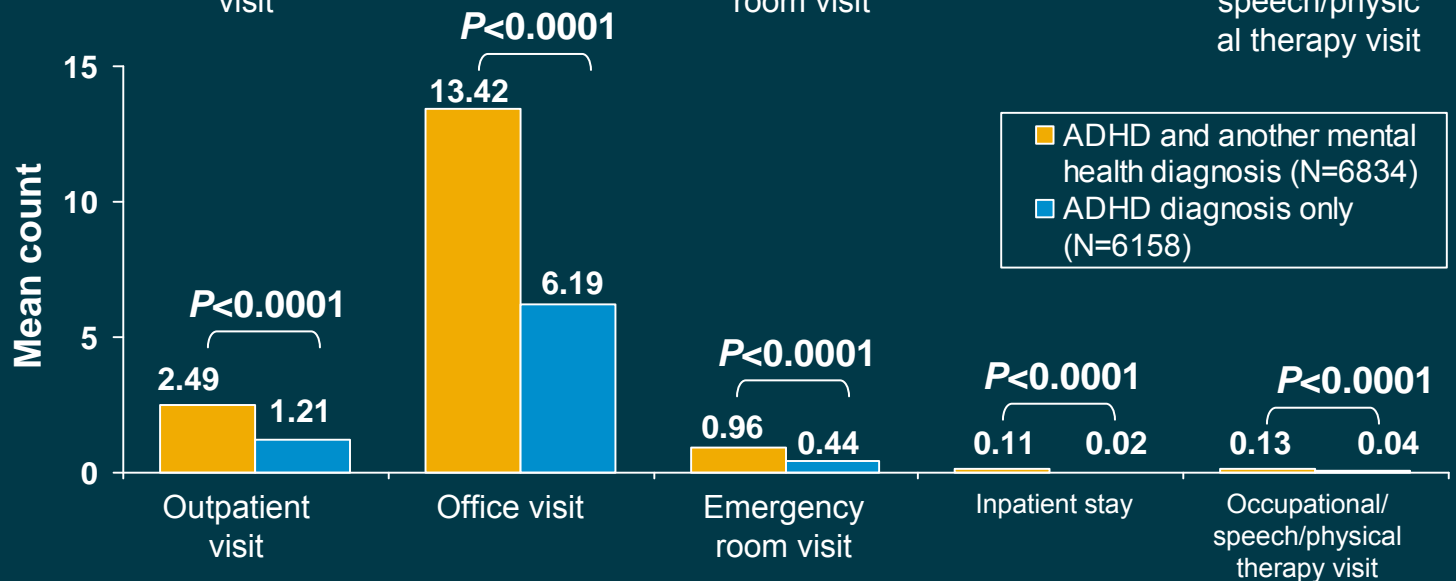
*Mean length of stay calculated among those patients with an inpatient stay

Utilization Counts by Mental Health Diagnosis

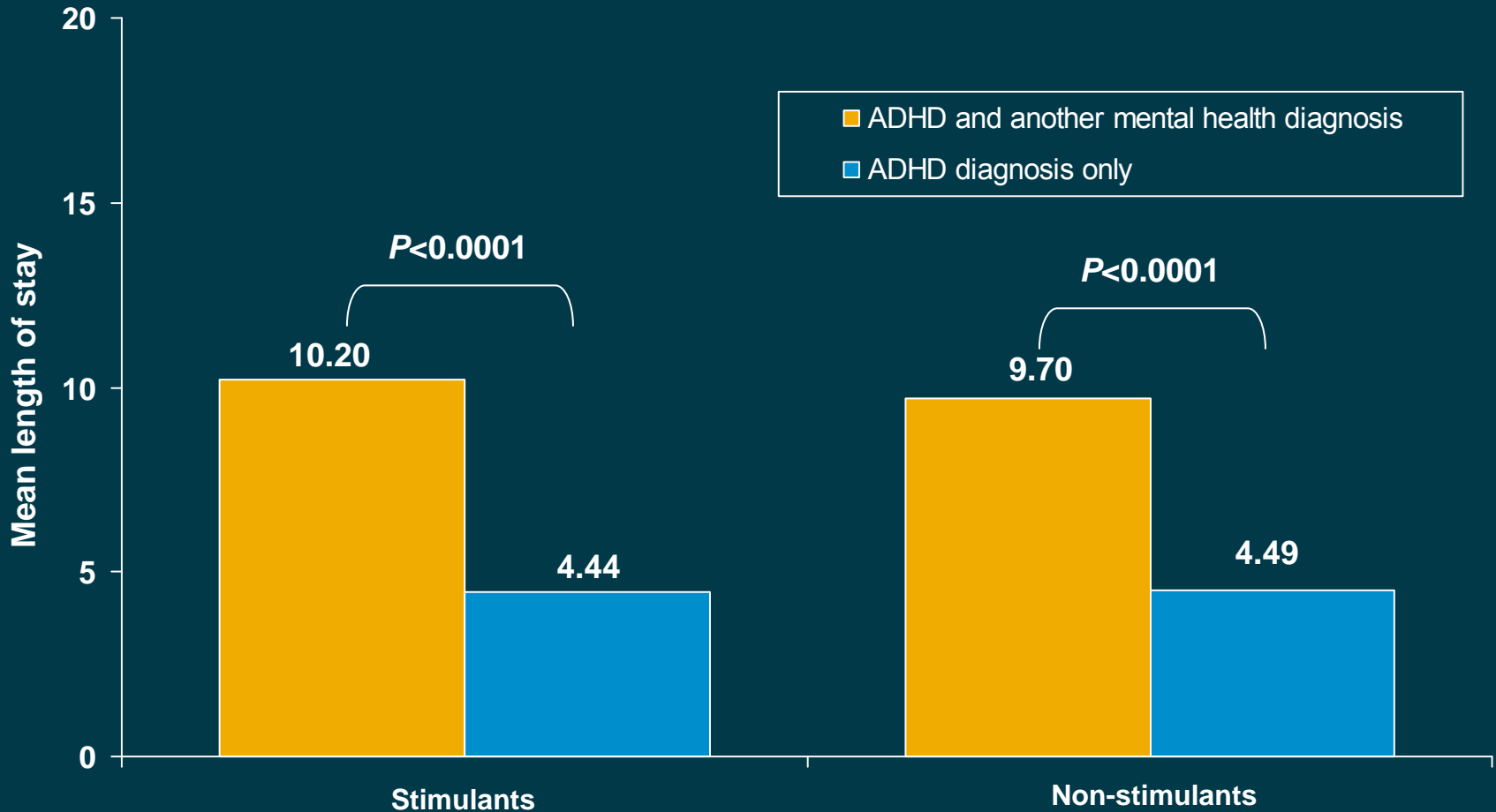
Stimulants



Non-stimulants



Mean Length of Inpatient Stay by Mental Health Diagnosis



Summary

- ▶ Patients newly treated with nonstimulants were significantly more likely to use outpatient visits, ER visits, or hospital stays, but differences between groups were small
- ▶ Patients newly treated with stimulants were more likely to use office visits but no significant difference observed between groups
- ▶ ADHD patients treated with stimulants and nonstimulants were equally likely to use occupational, speech, or physical therapy (differences between groups in the mean number of visits were not significant)
- ▶ For all health service categories examined and in both types of ADHD patients, diagnosis with both, ADHD and another psychiatric condition, was associated with greater use of health care resources than diagnosis with ADHD alone

Contributors

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