

U.S. Health Spending Hit \$2.3 Trillion in 2008

BY MARY ELLEN SCHNEIDER

Health care spending in the United States grew less than 5% in 2008, the slowest rate of growth since the federal government officially began measuring it in 1960, according to a new report from the Centers for Medicare and Medicaid Services.

But the figures show that even though the rate of increase is slower than in previous years, health care spending is still outpacing the gross domestic product (GDP). In 2008, health care spending rose 4.4% to \$2.3 trillion, compared with only a 2.8% increase in the GDP.

And health spending continues to consume a larger portion of the overall GDP, taking up 16.2% of GDP in 2008, compared with 15.9% in 2007 (Health

Affairs 2010;29:147-55). The overall slowdown in health spending growth is reflected in slower rates of increase in hospital spending, physician services spending, retail prescription drug spending, and spending for nursing home and home health services.

For example, spending on physician and clinical services increased 5% in 2008, down from 5.8% in 2007. The deceleration in physician services was

driven by a decrease in patient volume, even as the intensity of services picked up in 2008.

During a teleconference with reporters on Jan. 4, Rick Foster, CMS chief actuary, speculated that this trend was mainly due to the recession. As people lost jobs and health insurance in 2008, they may have opted to seek health care only when their conditions became more serious, and more costly to treat, he said.

While spending rates slowed in many areas, the federal government's share of health spending soared in 2008. The share of federal dollars spent on health care rose from 28% in 2007 to nearly 36% in 2008, according to the CMS. The increase is due in part to the American Recovery and Reinvestment Act of 2009, which retroactively shifted \$7 billion in federal funds to Medicaid to assist budget-challenged states at the end of 2008. ■

CDC's Travel Health Book Is Online Now

The 2010 edition of the Centers for Disease Control and Prevention's "Yellow Book" on health information for international travelers is now available online (www.cdc.gov/travel) and in hard copy. Published by Elsevier, the yellow-covered book includes information on everything from adoptions to vaccines. For more information, go to www.us.elsevierhealth.com. ■

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INTUNIV™ (guanfacine) Extended-Release Tablets

Rx Only

BRIEF SUMMARY: Consult the Full Prescribing Information for complete product information.

INDICATIONS AND USAGE

INTUNIV™ is indicated for the treatment of Attention Deficit Hyperactivity Disorder (ADHD). The efficacy of INTUNIV™ was studied for the treatment of ADHD in two controlled clinical trials (8 and 9 weeks in duration) in children and adolescents ages 6-17 who met DSM-IV® criteria for ADHD (see *Clinical Studies in Full Prescribing Information*). The effectiveness of INTUNIV™ for longer-term use (more than 9 weeks) has not been systematically evaluated in controlled trials.

Maintenance Treatment The effectiveness of INTUNIV™ for longer-term use (more than 9 weeks) has not been systematically evaluated in controlled trials. Therefore the physician electing to use INTUNIV™ for extended periods should periodically re-evaluate the long-term usefulness of the drug for the individual patient.

CONTRAINDICATIONS

Patients with a history of hypersensitivity to INTUNIV™, its inactive ingredients (see *Description in Full Prescribing Information*), or other products containing guanfacine (e.g. TENEX®) should not take INTUNIV™.

WARNINGS AND PRECAUTIONS

Hypotension, Bradycardia, and Syncope Treatment with INTUNIV™ can cause decreases in blood pressure and heart rate. In the pediatric, short-term (8-9 weeks), controlled trials, the maximum mean changes from baseline in systolic blood pressure, diastolic blood pressure, and pulse were -5 mm Hg, -3 mm Hg, and -6 bpm, respectively, for all dose groups combined (generally one week after reaching target doses of 1 mg/day, 2 mg/day, 3 mg/day or 4 mg/day). These changes were dose dependent. Decreases in blood pressure and heart rate were usually modest and asymptomatic; however, hypotension and bradycardia can occur. Hypotension was reported as an adverse event for 6% of the INTUNIV™ group and 4% of the placebo group. Orthostatic hypotension was reported for 1% of the INTUNIV™ group and none in the placebo group. In long-term, open label studies, (mean exposure of approximately 10 months), maximum decreases in systolic and diastolic blood pressure occurred in the first month of therapy. Decreases were less pronounced over time. Syncope occurred in 1% of pediatric subjects in the clinical program. The majority of these cases occurred in the long-term, open-label studies. Measure heart rate and blood pressure prior to initiation of therapy, following dose increases, and periodically while on therapy. Use INTUNIV™ with caution in patients with a history of hypotension, heart block, bradycardia, or cardiovascular disease, because it can decrease blood pressure and heart rate. Use caution in treating patients who have a history of syncope or may have a condition that predisposes them to syncope, such as hypotension, orthostatic hypotension, bradycardia, or dehydration. Use INTUNIV™ with caution in patients treated concomitantly with antihypertensives or other drugs that can reduce blood pressure or heart rate or increase the risk of syncope. Advise patients to avoid becoming dehydrated or overheated.

Sedation and Somnolence Somnolence and sedation were commonly reported adverse reactions in clinical studies (38% for INTUNIV™ vs. 12% for placebo) in children and adolescents with ADHD, especially during initial use (see *Adverse Reactions in Full Prescribing Information*). Before using INTUNIV™ with other centrally active depressants (such as phenothiazines, barbiturates, or benzodiazepines), consider the potential for additive sedative effects. Caution patients against operating heavy equipment or driving until they know how they respond to treatment with INTUNIV™. Advise patients to avoid use with alcohol.

Other Guanfacine-Containing Products Guanfacine, the active ingredient in INTUNIV™, is also approved as an antihypertensive. Do not use INTUNIV™ in patients concomitantly taking other guanfacine-containing products (e.g., Tenex).

ADVERSE REACTIONS

Clinical Trial Experience Two short-term, placebo-controlled, double-blind pivotal studies (Studies 1 and 2) were conducted in children and adolescents with ADHD with a dose range of 1 to 4 mg/day of INTUNIV™. The most commonly reported adverse reactions (occurring in ≥2% of patients) that were considered drug-related and reported in a greater percentage of patients taking INTUNIV™ compared to patients taking placebo were: somnolence, headache, fatigue, upper abdominal pain, nausea, lethargy, dizziness, irritability, hypotension/decreased blood pressure, decreased appetite, dry mouth, and constipation. Less common adverse reactions (<2%) reported in pivotal Studies 1 and 2 that occurred in more than one patient taking INTUNIV™ and were more common than in the placebo group are atrioventricular block, bradycardia, sinus arrhythmia, dyspepsia, asthenia, chest pain, increased alanine aminotransferase, increased blood pressure, increased weight, postural dizziness, increased urinary frequency, enuresis, asthma, orthostatic hypotension, and pallor. In addition, the following less common (<2%) psychiatric disorders occurred in more than one patient receiving INTUNIV™ and were more common than in the placebo group. The relationship to INTUNIV™ could not be determined because these events may also occur as symptoms in pediatric patients

INTUNIV™ (guanfacine) Extended-Release Tablets

with ADHD: agitation, anxiety, depression, emotional lability, nightmares or interrupted sleep. Twelve percent (12%) of patients receiving INTUNIV™ discontinued from the clinical studies due to adverse events, compared to 4% in the placebo group. The most common adverse reactions leading to discontinuation of INTUNIV™-treated patients from the studies were somnolence/sedation (6%) and fatigue (2%). Less common adverse reactions leading to discontinuation (occurring in approximately 1% of patients) included: hypotension/decreased blood pressure, headache, and dizziness. In the controlled long term studies (mean duration of approximately 10 months) with a dose range of 1 to 4 mg/day of INTUNIV™, the most common adverse reactions (≥5%) reported during open label treatment were somnolence, headache, fatigue, upper abdominal pain, hypotension/decreased blood pressure, vomiting, dizziness, nausea, weight increased, and irritability. The most frequent adverse reactions leading to discontinuation (≥2%) were somnolence (3%), syncopal events (2%), increased weight (2%), depression (2%), and fatigue (2%). Other adverse reactions leading to discontinuation in the long-term studies (occurring in approximately 1% of patients) included: hypotension/decreased blood pressure, sedation, headache, and lethargy. In long-term open label studies, serious adverse reactions occurring in more than one patient were syncope (2%) and convulsion (0.4%). Adverse reactions that occurred in <5% of patients but ≥2% in open-label, long-term studies that are considered possibly related to INTUNIV™ include: syncopal events, constipation, stomach discomfort, hypertension/increased blood pressure, decreased appetite, diarrhea, dry mouth, lethargy, and insomnia.

Effects on Height, Weight, and Body Mass Index (BMI) Patients taking INTUNIV™ demonstrated similar growth compared to normative data. Patients taking INTUNIV™ had a mean increase in weight of 1 kg (2 lbs) compared to those receiving placebo over a comparative treatment period. Patients receiving INTUNIV™ for at least 12 months in open-label studies gained an average of 8 kg (17 lbs) in weight and 8 cm (3 in) in height. The height, weight, and BMI percentile remained stable in patients at 12 months in the long-term studies compared to when they began receiving INTUNIV™.

Laboratory Tests In short and long-term studies, no clinically important effects were identified on any laboratory parameters.

Effects on Heart Rate and QT Interval The effect of two dose levels of immediate-release guanfacine (4 mg and 8 mg) on the QT interval was evaluated in a double-blind, randomized, placebo- and active-controlled, cross-over study in healthy adults. A dose-dependent decrease in heart rate was observed during the first 12 hours, at time of maximal concentrations. The mean change in heart rate was -13 bpm at 4 mg and -22 bpm at 8 mg. An apparent increase in mean QTc was observed for both doses. However, guanfacine does not appear to interfere with cardiac repolarization of the form associated with pro-arrhythmic drugs. This finding has no known clinical relevance.

USE IN SPECIFIC POPULATIONS

Pregnancy: *Pregnancy Category B.* There are no adequate and well-controlled studies of guanfacine in pregnant women. This drug should be used during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether guanfacine is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when INTUNIV™ is administered to a nursing woman.

Pediatric Use: The safety and efficacy of INTUNIV™ in pediatric patients less than 6 years of age have not been established.

Geriatric Use: The safety and efficacy of INTUNIV™ in geriatric patients have not been established.

DRUG ABUSE AND DEPENDENCE

INTUNIV™ is not a controlled substance and has no known potential for abuse or dependence.

OVERDOSAGE

Two cases of accidental overdose of INTUNIV™ were reported in clinical trials in pediatric ADHD patients. These reports included adverse reactions of sedation and bradycardia in one patient and somnolence and dizziness in the other patient. Consult with a Certified Poison Control Center for up to date guidance and advice.

Manufactured for Shire US Inc., Wayne, PA 19087.

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