Long-Term Meds Get 'Lost' in Hospital Shuffle

BY MARY ANN MOON

FROM JAMA

VITALS

Major Finding: Rates of unintentional discontinuation of long-term medications for chronic diseases were significantly higher in hospitalized than in nonhospitalized patients, at 19.4% for antiplatelet/anticoagulants, 13.6% for statins, 12.9% for gastric acid suppressors, 12.3% for levothyroxine, and 4.5% respiratory inhalers.

Data Source: A population-based cohort study of 369,036 elderly patients in Ontario, including 160,568 who were hospitalized and 16,474 admitted to an ICU between 1997 and 2009.

Disclosures: Some researchers reported ties to Merck Frosst Canada, AstraZeneca, Sanofi-Aventis, Johnson & Johnson, and the Centre for Medical Technology Policy.

Hospitalization raises the risk that patients' long-term medications for chronic diseases will be discontinued unintentionally, a study has shown.

That risk is further heightened with ICU care, which suggests that the more patients are transitioned from site to site and from clinician to clinician, the greater the chance that their long-term medications (statins, antiplatelet or anticoagulant agents, levothyroxine, respiratory inhalers, and gastric acid-suppressing drugs) will get lost in the shuffle.

Discontinuing these necessary medications appears to raise patients' risk of death, further hospitalization, and ED visits for up to 1 year after discharge, said Dr. Chaim M. Bell of St. Michael's Hospital, Toronto, and his associates.

"These findings emphasize the importance of a systematic approach to transitions in health care to ensure medication continuity," they noted.

The investigators conducted a population-based cohort study of all hospitalizations of patients aged 66 years and older in Ontario between 1997 and 2009 to examine medication continuity. They reviewed the records of 396,036 patients who had been taking any of the five types of medications for chronic disease listed above for at least 1 year.

In all, 160,568 of these study subjects were hospitalized during the study period, including 16,474 who were admitted to the ICU; the remaining 208,468 who were not hospitalized served as control subjects. The rate of patients who failed to refill prescriptions of the five categories of medication within 90 days of discharge was calculated.

The investigators excluded cases in which patients developed complications or contraindications to their medications, or otherwise had a clear reason for discontinuing a drug. They also controlled for confounding factors that could influence stopping a medication, such as comorbid disease burden and the number of physician contacts during the year preceding hospitalization.

Drugs in all five medication categories were significantly more likely to be discontinued after hospitalization than in the controls. Rates of unintentional discontinuation were highest for antiplatelet/anticoagulants (19.4%), followed by statins (13.6%), gastric acid suppressors (12.9%), levothyroxine (12.3%), and respiratory inhalers (4.5%). The rates for control subjects were 11.8%, 10.7%, 9.4%, 11%, and 3%, respectively.

Rates of unintentional discontinuation were even higher among ICU patients in four of the five medication categories (22.8% for antiplatelet/anticoagulants, 15.4% for gastric acid suppressors, 15% for levothyroxine, and 14.6% for statins).

In a secondary analysis, the unintentional discontinuation of antiplatelet/anticoagulants and of statins was associated with higher risk of the combined outcome of death, further hospitalization, or emergency admission for up to 1 year after hospital discharge. "This underscores the widespread prevalence of potential errors of omission and the risk for long-term harm following hospitalization," Dr. Bell and his colleagues said (JAMA 2011;306:840-7).

Studies suggest that miscommunication during transitions of care is not the only contributor to unintentional dropping of medications, they said. Some medications are purposely discontinued during a critical illness, but restarting them is overlooked after the acute event resolves.

Dr. Bell and colleagues said the findings of their study "are likely generalizable to the general population."

The study was funded by the Canadian Institutes of Health Research, the Institute for Clinical and Evaluative Sciences, and the Ontario Ministry of Health and Long-Term Care. ■

VIEW ON THE NEWS

Scope and Scale of Problem Is Concerning

The major limitation of this study is that it cannot measure whether discontinuation of long-term medications was really unintentional, said Dr. Jeremy M. Kahn and Dr. Derek C. Angus.

Dr. Bell and his colleagues minimized this problem by excluding patients who developed known contraindications or complications, and by adjusting for legitimate reasons to discontinue the drugs. They studied patients who had been taking the medications for at least 1 year, to rule out the chance that physicians were simply rethinking the use of the drug or that patients were choosing to stop because of side effects.

"Given the high incidence of medication discontinuation in this study, even if some of [it] was intentional, the remaining unintentional discontinuation is of concerning scope and scale," they noted.

DR. KAHN and DR. ANGUS are at the clinical research, investigation, and systems modeling of acute illness center in the department of critical care medicine, and in the department of health policy management, at the University of Pittsburgh. Dr. Angus is a contributing editor for JAMA. They reported no financial conflicts of interest. Dr. Kahn is supported by a career development award from the National Institutes of Health. These remarks were adapted from their editorial accompanying Dr. Bell's report (JAMA 2011;306:878-9).

Profiteers Capitalize on Drug Shortages

BY MARY ELLEN SCHNEIDER

FROM AN ANALYSIS BY PREMIER HEALTHCARE ALLIANCE

A gray market of secondary pharmaceutical suppliers is driving up the price of lifesaving drugs that are in short supply, with markups ranging from 100% to more than 4,500%.

On average, drugs are being marked up 650% on the gray market, according to Premier Healthcare Alliance, which analyzed 636 unsolicited sales offers received by acute care facilities in its network. The drugs were either back-ordered or unavailable through the manufacturer. The top 10 highest markups, seen in cardiology, sedation, critical care, and oncology drugs, were more than 1,000% over base contract prices: labetalol (4,533%); cytarabine (3,980%); dexamethasone 4- mg injection (3,857%); leucovorin (3,170%); propofol (3,161%); papaverine (2,979%); protamine sulfate (2,752%); levophed (2,642%); sodium chloride concentrate (2,350%); and furosemide injection (1,721%).

Gray market vendors generally advertise drugs through e-mails and faxes that tout the shortage of the products, Premier officials said, with language such as "we only have 20 [units] of this drug left and quantities are going fast."

The reported price gouging comes as the country faces an unprecedented shortage of drugs. By the end of 2011, there could be more than 360 drugs in short supply, according to projections by Premier.

Hospitals and pharmacies must beware when purchasing drugs on the gray market, not just because of the inflated price, but also because of safety risks, Premier officials warned. Products sold on the gray market may have been mishandled, rendering them ineffective or harmful; they also could be counterfeit or diluted.

Stolen, counterfeit, and mishandled drugs are also difficult to recognize. Even the original manufacturers may not be able to spot fake drugs, according to analysts for Premier. And hospitals that try to avoid gray market vendors may encounter problems because these vendors have sophisticated methods of impersonating legitimate, licensed distributors, according to Premier.

Drug shortages are also getting increased attention in Washington, where a bipartisan group of senators has been urging the Food and Drug Administration to do more to address these shortages. The FDA will hold a public meeting on the issue on Sept. 26. ■

Part D Premiums Will Decrease in 2012

BY FRANCES CORREA

FROM A PRESS BRIEFING BY THE HEALTH AND HUMAN SERVICES DEPARTMENT

Medicare beneficiaries with prescription drug coverage under Part D will pay about $1 less in monthly premiums next year for a basic plan, according to the Health and Human Services Department. The projected premium drop is based on bids submitted by Part D plans for 2012.

Further, about 900,000 beneficiaries have hit the Part D coverage gap or "doughnut hole" this year and have become eligible for a 50% discount on covered brand-name drugs. As of June, that discount – a provision of the Affordable Care Act – has saved Medicare beneficiaries about $462 million, HHS Secretary Kathleen Sebelius said at a press briefing. Under ACA, the administration aims to close the doughnut hole by 2020.

"There [are] still critical gaps in coverage, especially for prescription drugs," Ms. Sebelius said, adding that 25% of seniors report skipping medicines or not filling prescriptions because of high costs.

Although lawmakers have passed an agreement to raise the nation's debt limit, Medicare remains vulnerable to cuts. HHS officials would not comment on how beneficiaries could be affected.

The Joint Select Committee on Deficit Reduction has until Nov. 23 to decide where to trim more than $1 trillion. ■