REPORT OF THE COUNCIL ON SCIENCE AND PUBLIC HEALTH

CSAPH Report 2-I-12

Subject: National Drug Shortages-Update

Presented by: Sandra A. Fryhofer, MD, Chair

Referred to: Reference Committee K

(Michael D. Chafty, MD, Chair)

INTRODUCTION

Recommendation 6 in Council on Science and Public Health Report 7-A-12, adopted as amended, directed the Council to continue to evaluate the drug shortage issue and report back on progress made in addressing drug shortages at the 2012 Interim Meeting of the House of Delegates. Accordingly, this report provides an update on the current status of drug shortages, describes new developments, summarizes relevant American Medical Association (AMA) activities, and updates AMA policy on this issue.

CURRENT DRUG SHORTAGE INFORMATION

As of August 31, 2012, the Drug Shortages Management Resource Center maintained by the American Society of Health-System Pharmacists (ASHP) identified 214 existing drug shortages.² According to the Drug Information Service at the University of Utah, which provides information to the ASHP Resource Center, 123 new drug shortages occurred in 2012 as of August 31. This represents approximately a 33% decrease compared with the same time period in 2011. The Food and Drug Administration (FDA) drug shortages website identified 115 existing shortages of "medically necessary drugs" and 54 resolved drug shortages.³ Existing shortages of medically necessary drugs are down approximately 5% from May 2012. The list maintained by ASHP is more comprehensive than the FDA list in that a "medically necessary" filter is not applied. The primary product category in short supply continues to be generic sterile injectables.

LEGISLATIVE AND REGULATORY ACTIONS

Passed by Congress on June 27th and signed into law by President Obama on July 9, 2012, the Food and Drug Administration Safety and Innovation Act (FDASIA) reauthorized user fees for prescription drugs, biological products, and medical devices and extended this concept to generic drugs for the first time.⁴ User fees account for a majority of the FDA's annual budget. These fees are dedicated to expediting the drug and device development process and FDA review of applications, including post-marketing safety activities.

- FDASIA contained numerous other provisions including Title X-Drug Shortages. Several recommendations previously offered by the Council to address drug shortages were reflected in
- 34 Title X. Provisions intended to address drug shortages included the following:

- 1 Require manufacturers of drugs that are "life-supporting, life-sustaining, and intended for use 2 in the prevention or treatment of a debilitating disease or condition, including those used in 3 emergency medical care or surgery" to notify the FDA 6 months in advance (or as soon as 4 possible) if manufacturing is going to be "interrupted" or discontinued. This provision codifies 5 what has been a voluntary, but helpful, practice in helping the FDA to mitigate drug shortages. 6 This provision is aligned with AMA Policy H-100.956(2) (see Appendix).
 - Give the Secretary authority to expedite establishment inspections and review of supplements and applications (including of biological products) that could help mitigate or prevent a "shortage." This provision is aligned with Policy H-100.956(3).
- 10 Require the Secretary to establish a task force to enhance the Secretary's response to shortages, and create a strategic plan to address stated aspects of shortages. This provision is aligned with 12 Policy H-100.956(4).
 - Require FDA to maintain a drug shortage list and provide patients, providers, and the public with such information in order to prevent, mitigate, and manage drug shortages on the ground. Safeguards are included that would "prevent the release of confidential business information or information that could adversely affect public health." What might constitute information adversely affecting public health was not specified or further explained.
 - Require the Drug Enforcement Administration (DEA) to provide timely approvals or denials of increases in quotas of controlled substances in instances where such an increase could help address a drug shortage. Also, require DEA to report annually on their efforts to address drug shortages based on metrics established by Congress. This provision is aligned with Policy H-100.956(9).
 - Allow hospitals within the same health system to repackage drugs into smaller units to alleviate drug shortages.
 - Authorize the Government Accountability Office to conduct a study to examine the causes of drug shortages and issue recommendations on how to prevent or alleviate a drug shortage. This provision would provide needed data on how the regulatory framework, manufacturing challenges, economic factors, or other factors contribute to drug shortages. This provision is aligned with Policy H-100.956(7).

INDUSTRY INITIATIVES

7

8

9

11

13

14

15

16 17

18

19 20

21

22

23 24

25

26

27

28

29

30

31 32 33

34

35

36 37

38

39

40

41 42 43

44 45

46 47

48

49

50

The Generic Pharmaceutical Association's (GPhA) proposal to address shortages by having generic manufacturers share production information for drugs in short supply with FDA through a third party was endorsed by the Federal Trade Commission.⁵ Under the Accelerated Recovery Initiative, IMS Health will collect information from manufacturers on real time supply and distribution information, as well as projected production and release forecasts. IMS will use this information along with market data, to analyze whether, and to what extent, the anticipated supply of a given drug is likely to fall short of the projected demand over the next several months. IMS will then share this information with the FDA to head off potential drug shortages. The FDA, with input from GPhA, will decide on the initial group of drugs to be addressed through this initiative.

CONGRESSIONAL REPORTS

Committee on Oversight and Government Reform

Just prior to HOD deliberations at A-12, the U.S. House of Representatives Committee on Oversight and Government Reform released a staff report that was critical of the FDA, concluding that the agency's action had contributed significantly to the drug shortage crisis. The report blamed the agency for enforcement and regulatory actions, including a surge in warning letters that shut down a substantial amount of manufacturing capacity and/or placed facilities into remediation. The FDA vigorously defended its activities and in a point-counterpoint fashion rebutted most of the report's findings and conclusions. The Committee's report also concluded that the reimbursement formula for injectable drugs in outpatient settings under Medicare Part B was a significant contributing factor.

U.S. Senate Committee on Commerce, Science, and Transportation

The U.S. Senate Committee on Commerce, Science, and Transportation held a hearing on July 25, 2012, examining the so-called "gray market" drug companies that drive up the cost of short-supply prescription drugs. The hearing and accompanying report explored how and why hospitals and other health care providers sometimes struggle to obtain short-supply prescription drugs they need to treat patients suffering from cancer and other life-threatening conditions. The sale and distribution pedigrees of 5 sample drugs in short supply revealed that such drugs leaked out of authorized distribution channels into the gray market supply chain from pharmacies 69% of the time. On average the drugs passed through 3 to 4 different gray market businesses before finding their way into a hospital pharmacy, with substantial markups at each stop in the distribution chain.

ECONOMIC/REIMBURSEMENT FACTORS

Recommendation 10 in CSAPH Report 7-A-12, offered by the reference committee and adopted by the HOD, urged that Congress amend the 2003 Medicare Modernization Act (MMA) to allow for more reasonable payment rates for prescription drugs. While this act cannot actually be amended, as noted in Policy H-100.956 (10), the intent was to have Congress re-examine the current reimbursement formula for injectable drugs administered on an outpatient basis under Medicare Part B. The MMA substantially reduced payment rates for chemotherapy drugs administered on an outpatient basis starting in January 2005. Currently, Medicare reimburses physicians the average sale price (ASP) plus 6% to cover the cost of administering injectable drugs. Increases are limited to a maximum of 6% every six months.

For the past several years, the AMA along with a number of impacted medical specialties such as oncology, have expressed concern that the ASP + 6 percent formula has resulted in persistent under-reimbursement that impacts small physician practices, in particular. The method for calculating ASP includes discounts and rebates that hospitals, large practices, and group purchasing organizations (but not small practices) are able to negotiate. Accordingly, small practices have to administer some treatments at a loss or refer their patient elsewhere. This undermines continuity of care at a critical time for patients and leads to fragmentation of care which carries increased costs. Ultimately, the foregoing hinders efforts to improve patient outcomes.

These problems have been further exacerbated by the persistent shortages that have emerged since the Part B payment policy change. The vast majority of the drugs in short supply are physician administered generic sterile injectable drugs, including cancer drugs, anesthetics for surgery, drugs for emergency medicine, and electrolytes for intravenous feeding. Although some proposals have suggested the ASP formula contributes to drug shortages, no consensus has emerged that raising the ASP formula (or changing the metric to use average wholesale prices instead) would lessen drug shortages because of other complexities in the drug distribution chain.

An economic analysis conducted by the U.S. Department of Health & Human Services Office of the Assistant Secretary of Planning and Evaluation (ASPE) concluded that increasing the production capacity for generic sterile injectable drugs was the single most important solution to the drug shortage crisis. Between 2006-2010, while the overall market for sterile injectable

oncology drugs increased by 14%, the overall generic sterile injectable market (including both oncology and other products) expanded by 52% fueled, in part, by a large increase in the number of abbreviated new drug applications (>300) that were approved in 2008-2010. While not claiming a direct cause and effect relationship, the report also noted average prices declined annually among oncology drugs that eventually experienced a shortage between 2008 and 2011. The average prices of drugs that never experienced a shortage over this period did not change or increased slightly. A report from IMS noted that a segment of drugs on the shortage list exhibited declining sales in 2010-2011 compared with the base period of 2006-2009; a smaller percentage was stable; and about 20% experienced growing volume sales (over 3-fold since 2006). For those in the declining category, monthly supply fell an average of 47% over the five-year period.

1 2

In contrast to the ASPE report, the IMS report found that the average annual price per standard unit varied significantly across these three segments but not in a consistent way. Finally, a recent analysis of the MMA policy changes that prompted a reduction of Medicare Part B reimbursements for physician administered generic drugs provides some evidence that the policy change may, in fact, be at least one significant contributing factor for shortages of Part B generic drugs. ¹¹ One intermediate solution would be to not include discounts and rebates in the calculation of ASP. Other new payment strategies that are being tested today include a "clinical pathways" approach that rewards oncologists for compliance with predetermined chemotherapy regimens and bundled or episode payment approaches. Both are focused on improving patient outcomes. ^{12,13}

CONCLUSION

Drug shortages continue to exact a toll on clinical practice and patient outcomes; only small gains have been made in the extent of the problem. No quick fix is evident, but recent legislative actions may help foster continued improvements that can be achieved by early notification of problems allowing for expedited solutions. The current shortages will "likely be resolved when new supply sources come on line as the manufacturing industry increases its capacity." In the meantime, voluntary collaborative efforts in the most severely stressed part of the industry (generic sterile injectables) may help to stabilize at least a segment of that market. Some focus on increasing the extent of supply responsiveness in the market also is needed. Further root cause analysis may help inform additional solutions.

RECOMMENDATION

The Council on Science and Public Health recommends that the following statement be adopted and the remainder of the report be filed.

That Policy H-100.956 be amended by insertion and deletion in sections 6 and 10 to read as follows:

6. The Council on Science and Public Health will continue to evaluate the drug shortage issue and report back on progress made in addressing drug shortages at the 2012 Interim Meeting of the House of Delegates as needed 2013 Annual Meeting. (Modify Current HOD Policy)

 10. Our AMA will collaborate with medical specialty partners in identifying and supporting legislative remedies that urges Congress to amend the 2003 Medicare Modernization Act to allow for more reasonable and sustainable payment rates for prescription drugs. (Modify Current HOD Policy)

Fiscal Note: \$1,000

REFERENCES

- 1. Council on Science and Public Health Report 7. Drug Shortages Update. American Medical Association Annual Meeting. June, 2012. Chicago, IL
- 2. American Society of Health-System Pharmacists. Drug Shortages Resource Center. http://www.ashp.org/shortages. Accessed August 31, 2012.
- Food and Drug Administration. Current drug shortages http://www.fda.gov/Drugs/DrugSafety/DrugShortages/ucm050792.htm. Accessed March 17, 2012.
- 4. Food and Drug Administration Safety and Innovation Act. http://www.gpo.gov/fdsys/pkg/BILLS-112s3187enr/pdf/BILLS-112s3187enr.pdf. Accessed August 5, 2012.
- 5. GPhA Receives Positive FTC Advisory Opinion on the Accelerated Recovery Initiative. Press release. http://www.gphaonline.org/media/press-releases/2012/gpha-receives-positive-ftc-advisory-opinion-accelerated-recovery-initiativ.
- U.S. House of Representatives Committee on Oversight and Government Reform. Staff report.
 FDA's contribution to the drug shortage crisis. June 15, 2012. http://oversight.house.gov/wp-content/uploads/2012/06/6-15-2012-Report-FDAs-Contribution-to-the-Drug-Shortage-Crisis.pdf. Accessed July 28, 2012.
- 7. Judith Ireland, Assistant FDA Commissioner. Letter to U.S. House of Representatives Committee on Oversight and Government Reform. July 26, 2012.
- 8. U.S. House of Representatives Committee on Oversight and Government Reform. Staff report. Shining a light on the "gray market." An examination of why hospital are forced to pay exorbitant prices for prescription drugs facing critical shortages. July 25, 2012. http://commerce.senate.gov/public/?a=Files.Serve&File_id=afa98935-2ff5-4004-88dc-be70d1c22b5d. Accessed August 13, 2012.
- 9. ASPE Issue Brief. Economic analysis of the cause of drug shortages. Office of Science and Data Policy, Assistant Secretary for Planning and Evaluation. October 28, 2011. http://aspe.hhs.gov/sp/reports/2011/DrugShortages/ib.pdf. Accessed July 16, 2012.
- 10. IMS Institute for Health Informatics. Drug shortages: a closer look at products, suppliers and volume volatility. November 2011.
- 11. Yurukoglu A. Medicare reimbursements and shortages of sterile injectable pharmaceuticals. http://www.stanford.edu/~ayurukog/shortages.pdf. Accessed August 4, 2012.
- 12. Bach PB, Mirkin JN, Luke JJ. Episode-based payment for cancer care: a proposed pilot for Medicare. *Health Affairs*. 2011;30:500-509.
- 13. Newcomer LN. Changing physician incentives for cancer care to reward better patient outcomes instead of more costly drugs. *Health Affairs*. 2012;31:780-785.

Appendix

Policy H-100.956 — National Drug Shortages

- 1. Our AMA supports the recommendations of the 2010 Drug Shortage Summit convened by the American Society of Health System Pharmacists, American Society of Anesthesiologists, American Society of Clinical Oncology and the Institute for Safe Medication Practices and work in a collaborative fashion with these and other stakeholders to implement these recommendations in an urgent fashion.
- 2. Our AMA supports requiring all manufacturers of Food and Drug Administration approved drugs and, including FDA approved drugs with recognized off-label uses, to give the agency advance notice (at least 6 months prior or otherwise as soon as practicable) of anticipated voluntary or involuntary, permanent or temporary, discontinuance of the manufacture or marketing of such a product.
- 3. Our AMA supports authorizing the Secretary of Health and Human Services to expedite facility inspections, and the review of manufacturing changes, drug applications and supplements that would help mitigate or prevent a drug shortage.
- 4. Our AMA supports the creation of a task force to enhance the HHS Secretary's response to preventing and mitigating drug shortages and to create a strategic plan to: (a) enhance interagency coordination; (b) address drug shortage possibilities when initiating regulatory actions (including the removal of unapproved drug products from the market); (c) communicate with stakeholders; and (d) consider the impact of drug shortages on research and clinical trials.
- 5. Our AMA will advocate that the U.S. Food and Drug Administration and/or Congress require drug manufacturers to establish a plan for continuity of supply of vital and life-sustaining medications and vaccines to avoid production shortages whenever possible. This plan should include establishing the necessary resiliency and redundancy in manufacturing capability to minimize disruptions of supplies in foreseeable circumstances including the possibility of a disaster affecting a plant.
- 6. The Council on Science and Public Health will continue to evaluate the drug shortage issue and report back on progress made in addressing drug shortages at the 2012 Interim Meeting of the House of Delegates.
- 7. Our AMA urges the development of a comprehensive independent report on the root causes of drug shortages. Such an analysis should consider federal actions, the number of manufacturers, economic factors, including federal reimbursement practices, as well as contracting practices by market participants on competition, access to drugs, and pricing.
- 8. Our AMA urges that procedures be put in place: (1) for the FDA to monitor the availability of Schedule II controlled substances; (2) for the FDA to identify the existence of a shortage that is caused or exacerbated by existing production quotas; and, (3) for expedited DEA review of requests to increase aggregate and individual production quotas for such substances.
- 9. Our AMA urges regulatory relief designed to improve the availability of prescription drugs by ensuring that such products are not removed from the market due to compliance issues unless such removal is clearly required for significant and obvious safety reasons.
- 10. Our AMA urges Congress to amend the 2003 Medicare Modernization Act to allow for more reasonable payment rates for prescription drugs. (CSAPH Rep. 2, I-11; Modified: CSAPH Rep. 7, A-12)