

orthopedic-vascular C-arm markets, precipitated the government's suite.

B. Product Markets

1. Critical Care Monitors

a. *Description of the Market.* The Complaint alleges that patient monitors used to take the vital physiologic measurements of patients requiring critical care are a relevant product market within the meaning of Section 7 of the Clayton Act, 15 U.S.C. 18. Patient monitors are routinely used throughout hospitals and other healthcare facilities to measure and display information about various patient physiologic parameters. The parameters range from basic measurements, such as temperature, noninvasive blood pressure, and electrocardiography, to sophisticated invasive blood pressures (measurements of the blood pressure in various internal organs through the use of catheters). The information allows healthcare providers to monitor the health and stability of patients and is vital to the provision of healthcare.

Patients requiring critical care need more and different parameters monitored than do patients who are in less serious condition. To treat the patients requiring critical care, hospitals and other healthcare facilities must have monitors with the functionality to measure and simultaneously display information about a large number of parameters. Critical care monitors are sophisticated machines that can measure and display information regarding six or more patient parameters. In addition to basic parameters, critical care monitors typically measure cardiac output (the volume of blood pumped by the heart in a specific time period) and multiple invasive blood pressures. Critical care monitors also require significant networking capabilities so that information can be sent to and displayed at a central station.

Critical care monitors are distinct from other products, including monitors used to monitor patients in less serious condition ("low-acuity monitors") and monitors used in the operating room ("OR monitors"). Low-acuity monitors are less complex and significantly less expensive machines that measure fewer parameters. OR monitors used specialized software and technologies not required elsewhere in the hospital. They may be configured for anesthesia machine compatibility, monitor different parameters, such as the level of anesthetic gas in a patient's airway, and tend to be significantly more expensive.

A hospital or other healthcare facility seeking to purchase a critical care

monitor would not consider any other products—including monitor or an OR monitor—to be a realistic substitute. A small but significant increase in the price of a critical care monitor would not cause a sufficient number of hospitals or other healthcare facilities seeking to purchase a critical care monitor to switch to an OR monitor, a low-acuity monitor, or any other type of medical device so as to make such a price increase unprofitable and unsustainable.

The Complaint alleges that the relevant geographic market for the sale of critical care monitors in the United States. Any company seeking to sell a critical care monitor in the United States must register with the Food and Drug Administration ("FDA") and receive approval for its products. To be competitive, a critical care monitor supplier must also establish local distribution, service, and support networks. Thus, in the face of a small but significant increase in the price of critical care monitors, purchasers in the United States cannot turn to any producer of critical care monitors that has not received FDA approval for its products, and are unlikely to turn in substantial numbers to providers that have not established a sales and service presence in the United States.

b. *Harm to Competition as a Consequence of the Acquisition.* Critical care monitors are highly differentiated products, which are distinguished from each other by price, product features, vendor reputation, and customer service. The market for critical care monitors is already highly concentrated. GE, Instrumentarium, and one other firm are the leading suppliers. Based on shares of unit sales, GE has a share of approximately 33 percent of the market, and Instrumentarium has a share of approximately 16 percent. While there are other firms that manufacture critical care monitors, product limitations and other factors, such as their degree of customer acceptance, lessen the ability of these firms to compete for many customers.

GE and Instrumentarium have competed vigorously in the development, manufacture, and sale of critical care monitors. A significant number of customers view GE's and Instrumentarium's monitors as particularly close substitutes and do not view the products of the other vendors as equally close. In individualized negotiations, these customers have benefitted from the rivalry between GE and Instrumentarium, and received lower prices, better quality, or improved service as a result. Hospitals and other healthcare facilities that purchase

critical care monitors have also benefitted generally from competition between GE and Instrumentarium on price, innovation, product features, and service. The proposed transaction would eliminate the competition between GE and Instrumentarium, reduce the number of significant suppliers of critical care monitors from three to two, and substantially increase the likelihood that GE will unilaterally increase the price of critical care monitors to a significant number of customers.

Successful entry or expansion in the development, manufacture, and sale of critical care monitors is difficult, time-consuming, and costly, and is unlikely to defeat an anticompetitive price increase or reduction in product quality in the event that GE acquired Instrumentarium. First, suppliers require FDA approval to begin marketing a critical care monitor or to introduce a new model. The product development and approval process is costly and time-consuming. Second, vendor reputation is an important factor in effectively selling critical care monitors. Hospitals and other healthcare facilities rely on critical care monitors when treating patients that are in serious condition and are reluctant to purchase from suppliers, such as new entrants or fringe firms, whose products are not well known. Third, it takes substantial time and resources to develop the expertise necessary to successfully produce and market critical care monitors. Vendors must also maintain significant ongoing research and development efforts to continue innovations that meet customer demand as well as stringent safety standards. Finally, suppliers of critical care monitors must go through the costly and time-consuming process of establishing extensive sales and service networks. Customers rely on sales representatives to inform them about new products and technologies. Many hospitals and other healthcare facilities also rely on critical care monitor providers for service and are reluctant to purchase from vendors without an established presence and service network in their area.

2. Orthopedic-Vascular C-Arms

a. *Description of the Market.* The Complaint alleges that orthopedic-vascular C-arms are a separate and distinct product market for purposes of Section 7 of the Clayton Act, 15 U.S.C. 18. C-arms are fluoroscopic x-ray devices that offer real-time, continuous images during certain medical and surgical procedures. C-arms may be mobile ("mobile C-arms"), stationary ("fixed C-arms"), or small ("mini C-