plant donors in addition to performing angiograms. After all, a typical renal scan costs between $300 and $500, which adds little to the cost of an angiogram averaging $1,500 to $2,000. However, the utilization of renal scans varies from hospital to hospital. Most perform renal scans on transplant recipients to evaluate the functioning of the new kidney. The evaluation of transplant *donors* with renal scans, on the other hand, isn't standard practice at many hospitals.

For example, surgeons at Sharp Memorial perform 65 to 70 kidney transplants and an estimated 250 renal scans a year. Although nuclear physicians routinely give renal scans to transplant recipients, they almost never perform them on donors. "The Curlees's case was one of the few times I've ever performed a nuclear renal scan on a donor," Carter said. The protocol for doing nuclear renal scans depends solely on the practicing techniques at individual hospitals. Unlike Sharp Memorial, Emory University Hospital routinely administers an angiogram and a nuclear renal scan to all kidney donors. "The scan tells us a lot about the functioning of the kidney," said Taylor. "It can show if one kidney has a lower level of functioning than the other or if there is a problem that would impede transplantation."

After she had the original renal scan, Ingram received another scan the day of the transplant to monitor blood flow in the renal arteries. Originally scheduled for October 12, 1994, the transplant was finally performed successfully on November 9. Without the results of the nuclear scans, Curlee's transplant would have been delayed for at least a month or more, said Robert Mendez, MD, renal transplantation director at Sharp Memorial.

Since the transplant, Curlee has received periodic nuclear scans, which all indicate his new kidney is working properly. Curlee said he now feels great, has energy and is able to look forward to a healthier future. He has even volunteered to enter an islet cell transplant study to see if the experimental treatment can reduce the severity of his diabetes. As for Ingram, she is thankful she was able to give her husband the wedding present of life and is looking forward to future prospects. She's participated in several television and newspaper interviews, and she may be immortalized on the silver screen. "Disney has approached us about buying the rights to our story!"

Stacey Silver

COMMENTARY — Part 2

THE NUCLEAR MEDICINE INDUSTRY: STRATEGIES FOR SURVIVAL

Peter C. Vermeeren

IN ORDER TO SURVIVE, THE radiopharmaceutical industry must make some fundamental changes during the remaining half of this decade. The road to change will be difficult since there are no simple solutions to the fundamental economic problems we're facing. However, with some innovative thinking, we should be able to strengthen the industry's prospects. The following six strategies may serve as a useful starting point for assuring the survival of the nuclear medicine industry through the 1990s and into the next century:

1. Innovative products, not volume: We need to focus on the profitable sale of innovative, proprietary products—not on increasing the sales volume of low margin or unprofitable generic products. This strategy cannot be achieved through marketing efforts alone: It requires continued, prudent investments in research and development activities; accelerated regulatory approval processes to reduce overall cost-to-market; a product focus that concentrates on effective therapeutics and patient management improvements; and close cooperation between companies and scientists in academia.

2. A unified vision: All the players in the industry—both physicians and scientists as well as manufacturers and suppliers—must work toward a common vision of nuclear medicine's role in health care. In order to create this vision and communicate it effectively, all the players must be willing to participate in open and honest discussions. For example, it's essential that brilliant scientific ideas are challenged by people with aggressive business instincts. It's also vital for equipment companies and radiopharmaceutical suppliers to harmonize their development activities in order to ensure that equipment and software will be available when new imaging products are introduced.

3. Cost/benefit studies: These studies must be undertaken to prove that nuclear medicine procedures are both more useful and more cost-effective than other modalities. Similarly, studies must be conducted to show that nuclear medicine procedures reduce costs by permitting early diagnoses thereby avoiding the need for invasive exploratory surgery. In addition, the industry should fund studies to prove the cost/benefit

Novel Networks Edge up Profits

Struggling to remain competitive in these tough economic times, some radiopharmaceutical companies have decided to form unique partnerships with radiopharmacies. Last month, Medi-Physics, Inc., the U.S. health care arm of the British company, Amersham International announced that it had established a distributorship network with Mallinckrodt Medical, Inc. and Geodax Technologies, Inc. Medi-Physics will distribute its product lines from Mallinckrodt's 35 radiopharmacies and Geodax's 5 radiopharmacies in addition to its own 23 sites. (The network is one way: Mallinckrodt and Geodax won't use Medi-Physics' pharmacies to distribute their products.)

"We hope this will make us more competitive in the marketplace by making more radiopharmacies available to hospitals throughout the country," said William Ehmig, vice president for professional affairs at Medi-Physics, Inc., in Arlington Heights, IL. Medi-Physics will be distributing eight of its proprietary products at the new sites, including Metastron®, Ceretec®, and Indiclor™.

Cost and efficacy are the main advantages to setting up a distributorship over building new radiopharmacies. "With a distributorship," said Ehmig, "we have access to more sites without having to lease space, hire radiopharmacists and get the proper licenses." Many nuclear physicians who normally order their prescriptions directly from Medi-Physics can benefit from the new network. With the 40 new sites, Medi-Physics will have a local pharmacy in most major cities. Instead of having to wait a day for an order to be filled, physicians can receive their prescriptions within a few hours, according to Ehmig.

As the competition grows fiercer, more radiopharmaceutical companies may begin to establish similar networks. In fact, Medi-Physics wasn't the first to enter into a distributorship agreement. Syncor International Corporation and Dupont Merck Pharmaceutical Company created such an agreement seven years ago and recently expanded it to include bulk as well as proprietary products.

effect of reducing hospital stays and shifting care to the outpatient setting. If the studies do not demonstrate these economic benefits, then clearly some procedures will have no chance of survival.

4. Quicker reimbursement: Reimbursement policies must be addressed much earlier in the product development process so that new products and techniques can be introduced with fewer administrative delays.

5. Generic pricing: When generic products are able to demonstrate their cost/benefit performance, they should be priced to provide an acceptable profit margin for their manufacturers.

6. LLW disposal: Cooperative steps must be taken to resolve common industry issues, such as radioactive waste disposal and dependable supplies of strategic materials (e.g. ^{99}Mo). In tackling these six strategic initiatives, those of us involved in nuclear medicine must recognize that manufacturers and suppliers place profit and return on investment at the top of their list of priorities. To ensure the growth of the nuclear medicine field, companies must give earning targets equal weight with medical efficacy and cost containment.

Some difficult challenges lie ahead for all the players in this industry. If we consolidate our efforts and focus on a handful of strategic goals, we can make progress and enable the nuclear medicine industry to survive. Together, we can build a stronger future and continue to deliver nuclear medicine's diagnostic and therapeutic benefits to patients.

Peter C. Vermeeren

Mr. Vermeeren is the Chairperson of the Corporate Committee of the American College of Nuclear Physicians and is the Senior Vice President at Mallinckrodt Medical Incorporated.

News Briefs

Nuclear Medicine Company Merger

On December 19, 1994, two nuclear medicine companies, Sopha Medical of France and Summit Nuclear, the parent company of Summit World Trade in Ohio, formally announced their merger to form a new nuclear medicine corporation. The new, as of yet unnamed, conglomerate hopes to expand upon the 20 percent market share already controlled by the two parent companies and increase revenue beyond their combined 1994 sales of $100 million.

The merger will place the new company among the ten largest nuclear medicine companies that control the lionshare of the world market. The conglomerate will continue to market existing product lines which include 1400 gamma cameras and 2500 nuclear medicine computers. It will also focus on the production of new single-and-dual-head detector technologies and ring gantry cameras which the two parent companies have developed individually in the past six months, according to Lonnie Mixon, Director of Marketing for Sopha Medical. André Debionne, currently the general manager of Innolion, a capital venture of the French bank Credit Lyonnais, has been named Chairman and CEO of the new company. Aside from his responsibilities at Innolion, Debionne has been responsible for the operation of Sopha Medical's American subsidiary in Columbia, MD. ■

NMTCB Improves Testing Strategy

The Nuclear Medicine Technology Certification Board (NMTCB) has been certifying nuclear medicine technologists since 1977. To increase access to the examination and provide quicker test results, the NMTCB recently decided to pursue computer-based testing and plans to implement it in 1996. This new system will open up more test sites for the examination since many universities and private businesses have extensive computer labs which can be used for professional testing services. Examinees will be able to take the test on the day of their choosing and will receive results within one to two weeks rather than the current four to six weeks.

The exam will implement computer-adaptive testing, which varies the length