Lessons FROM THE Masters

Daring to Innovate

How this small-town surgeon has used new technologies and innovations to grow a world-class practice.

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FOURTH IN A SERIES

My good friend, Charles Kelman, M.D., has a saying about innovations and new technology: If you tell people you've got something new, they'll tell you it won't work. If you show them it works, they'll say it's no good. If you prove it's good, they'll say it's not new.

There's some truth in this statement. Many surgeons see innovations and new technology as a threat.

More than ever, it's time to put this antiquated view behind us. Never before have we had so much to offer our patients. Technology is growing exponentially, and we owe it to our patients to take advantage of it.

I've spent my entire career embracing new ideas and employing them in every aspect of my practice. It's helped me across the board, with both patient care and the bottom line. What I'd like to do here is explain how an acceptance of fresh ideas can benefit you as it's benefited me.

Managing Risk

First, I'll discuss risk, because it's one of main reasons that surgeons shy away from trying new techniques. I'm certainly no wild man; I don't leap on every passing bandwagon. It's important that you make sure that whatever you decide to do me these criteria:

■ *Is it rational?* It has to look like something that's go to benefit patients. For example, I had the opportunity a f years ago to be involved in the study of a monoclonal antib of lens epithelial cells. It was hoped the antibody would h prevent posterior lens opacification. I was excited about t project until I discovered the study wouldn't employ folda intraocular lenses (IOLs). I had already switched to small-in sion cataract surgery and didn't wish to deprive my patients the advantages of small incisions for the sake of a study. S turned down the opportunity.

■ *Is there a way to get out if things go awry?* With pha if you run into trouble, you can always switch to extrac Small-incision cataract surgery also has a panic button — y can switch to a larger incision.

Steven B. Siepser, M.D., developed the radial transve incision. This is a brilliant idea, but I saw that there was no e way out of the procedure, and therefore I didn't participate

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experiments on this approach.

■ *Does it employ good scientific method?* I've participat in about 30 FDA-monitored studies, and they've been a ter ic boon to my practice; my patients were given access to exc lent new drugs, lenses and techniques before much of the r

Dr. Fine with some of his phaco machines.

of the country. However, I'll refuse to participate in a study if I don't believe the science is sound.

For example, I was invited to study a new viscoelastic. The study was to measure the efficacy of the new viscoelastic when compared to the use of air. The benefits of viscoelastic over air had already been relatively well established, and so I declined to participate in the study. It would have been better science to compare the viscoelastic to other viscoelastics that were available at that time.

Being a surgeon entails risk . . . Learn to minimize risk and maximize patient care.

■ *If you spend money, will you make money?* You're probably interested in improving your bottom line. If you concentrate on what constitutes the best possible care for your patients, your practice will grow.

In the early 1980s, I became interested in the concept of foldable IOLs. To me, they represented a chance to eliminate one of the oldest problems associated with cataract surgery — surgically induced astigmatism caused by large wounds. I was so committed to foldable lenses that I participated in the foldable lens core studies, even though they wound up costing me a lot of money. The smaller-incision lenses cost me $350 each. At that time in Eugene, Ore., where I practice, insurers were reimbursing outpatient surgery centers only $200. So each surgery cost me $150. In the end, participating in the small-incision lens study cost me $59,000.

But I was the only surgeon in the Northwest using foldable lenses. This was a tremendous shot in the arm to my practice, and in the long run it greatly enlarged my patient base. Other ophthalmologists knew what I was doing, and if they came across a patient they feared would suffer from too much surgically induced astigmatism, they sent the patient to me.

Being a surgeon will always entail risk. If you wanted to eliminate risk, you wouldn't operate on eyes at all. The trick is to learn to minimize risk and maximize patient care. Fear of risk should not prevent you from trying new things.

Stay Positive

Sometimes we're too quick to tear something down. We find some minor problem with a new piece of equipment and right away we want to publish a paper on it or send off a scathing letter to the editor. Instead, you might want to try these approaches:

■ *Work with the manufacturer.* When I find a problem while investigating a product, I bring it to the manufacturer's attention. We work together to improve the technology. Often the problem has nothing to do with the quality of the technology itself, and it's easily fixed.

It's important to have a real partnership with manufacturers. They have the same goals that we do: to help patients. Avoid antagonistic relationships with them. I try never to make unfavorable comparisons between manufacturers, or to downgrade a product.

As a result, I have excellent relationships, especially with my instrument manufacturers. Again, this benefits my practice. For years, I've helped phaco manufacturers test their products, and now my patients have access to the some of the best phaco equipment ever invented, all at no cost to me.

■ ***Don't obsess over criticism.*** Take criticism with a grain of salt. Every new technique has its naysayers.

Years ago, when I pioneered outpatient cataract surgery in my part of the country, many of my colleagues thought the concept of outpatient eye surgery was wildly reckless. I knew I was taking a chance, because if I got into trouble, every ophthalmologist in Oregon would swear in court that what I had done was malpractice.

The accomplishment of which I'm most proud is my work with clear corneal incisions. In the early 1990s, when clear corneal incisions were undergoing testing, studies appeared, many done on cadavers, calling clear corneals inefficient and dangerous. Gradually, the benefits of clear corneal incisions came to light, and now some 60% of surgeons around the world use them regularly.

■ ***Support your staff.*** If you want to be on the cutting edge of technology, you'll need a well-trained support staff. We're committed to the careers of our staff members, and we insist that everyone continually study to the highest level of certification possible. We provide all the educational materials necessary: books, classes, travel, exams, lodging and dues for professional organizations.

And we explain to our staff what's going on in the practice. At monthly meetings, we discuss new technology and what it will mean to our patients.

Each of our clinical staff members has one investigational study that's his or her primary concern. My administrator, who's a certified ophthalmic medical technologist, oversees all the studies.

In the operating room, our nurses don't complain about the change every time we try something new. We have some nurses who understand more about phaco technology than most surgeons do.

Fostering this kind of supportive atmosphere has proven to be beneficial for us. Remember, you can't tackle new challenges alone.

■ ***Be persistent.*** Change doesn't always come easy. Sometimes it takes more effort than you can imagine.

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I used to perform surgery at a hospital. When Nd:YAG lasers became available, I realized they would be a major improvement over the way we'd been treating posterior opacification — that is, scratching the posterior capsule in the office. I suggested that the hospital purchase a YAG, but it refused, telling me that the technology was untested. Eventually we bought our own YAG, but the experience gave me pause.

I told the hospital officials that if they weren't willing to work with me to stay at the forefront of new technology, I would apply for a certificate of need for an ambulatory surgical center (ASC).

My associates and I applied for the certificate, and the hospital applied as an intervener, which meant it planned to oppose our application.

The Oregon Department of Health, Planning and Development denied the application. We appealed, and an independent hearings officer reviewed our case. He discovered that the hospital had secretly met with officials of the department and plotted strategies to defeat our application. This violated the rules of becoming an intervener; that is, no two parties can meet outside of the presence of the third. The same rule dictated that my practice couldn't meet with the department without the hospital being present.

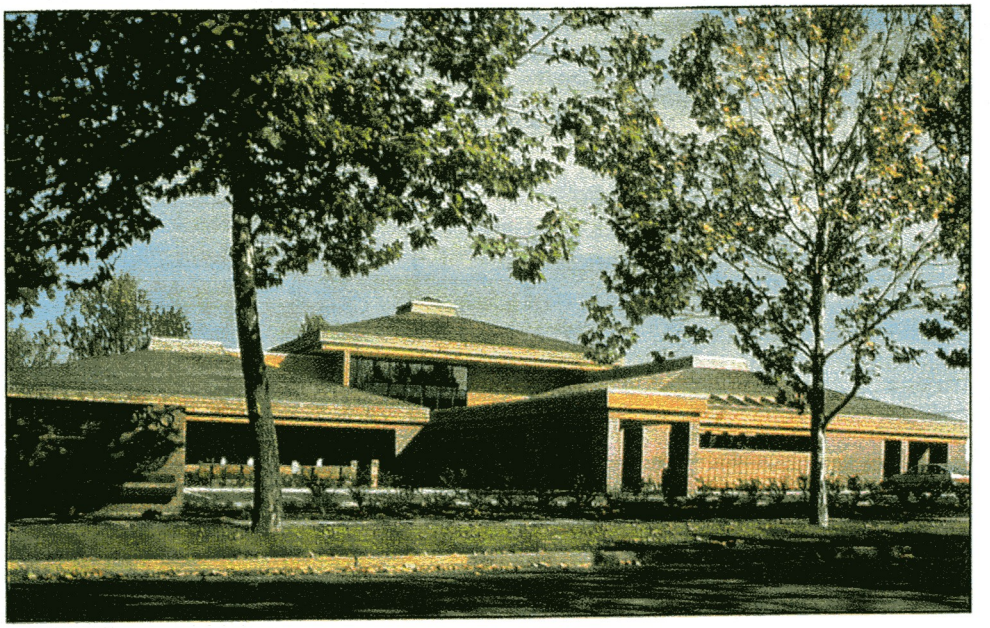
The hearings officer ruled in our favor. Unfortunately, his decisions could be overruled by the director of the Department of Health, Planning and Development, and that's exactly what the director did here.

So we took our case to the Oregon Supreme Court, which

Taking on Hard Cases

A talented surgeon in southern Oregon sent me a patient 15 years ago who was the national skeet shooting champion. The patient presented with minimal cataracts, but the surgeon didn't want to operate because even the slightest astigmatism would end this patient's shooting career. We operated on him with investigational foldable IOLs, and within 6 months he successfully defended his championship.

Patients like this come to us from all over the world. With a little effort on your part, they could be coming to see you.



Dr. Fine's practice in Eugene, Ore.

declined to review it. Finally, we approached the state legislature and successfully lobbied to pass a law allowing for the establishment of a freestanding ASC without a certificate of need for surgeons who only plan to perform ocular surgery.

This whole process took several years and cost me and my associates about $400,000. But now we have our own ASC and we are the masters of our own destiny. I no longer have to beg a hospital every time I want to buy a new piece of equipment to help my patients.

Few people would have had the persistence to keep going in a situation like that. But I had a clear vision of what I wanted for my career and my practice and I stuck to it. In the end, it paid off.

■ *Teach!* I've found that teaching is often as educational for the teacher as it is for the student. I spend about 3 months a year teaching around the world, and I've found it's worth every minute of my time.

Every time I teach, I learn from others on the faculty and from the surgeons in attendance.

Yesterday's Experiment, Today's Standard of Care

Even a few years ago, power modulations during phaco would have been seen as ludicrous. Back then, the object was to get as much power into the eye as possible. Now we know that lower ultrasound power can be less invasive, give better results and allow for techniques such as chopping, instead of using so much energy to groove and crack the nucleus.

■ *Practice where you'd like to live.* When I finished my training, I had an excellent opportunity to work in Boston. I chose Eugene, however, because I liked the small-town atmosphere, and I also thought that it would be a good place in which to raise my children.

You don't have to live in a major city to be at the forefront of innovation and technology. One reason you can do it my way is the widespread videotaping of procedures. Before the practice of videotaping through a microscope became so popular, you had to travel to other locations if you wanted to witness a new surgical technique in person. Now the process has become as easy as popping a tape in a VCR.

I've built a practice that uses some of the most cutting-edge technology in the world while living in a town with a population of 120,000 people.

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A golden age

We've never had so much to offer our patients and so many opportunities to improve their eye health.

We all should take advantage of everything that today's — and tomorrow's — technology can do for us. It's easy to overlook our full potential when the government and insurance companies are devaluing our services, but I believe we're living in the Golden Age of Ophthalmology. Follow my advice, and your patients will think so, too. **OM**

Dr. I. Howard Fine, of Eugene, Ore., is one of the best-known ophthalmologists in the nation. His staff of 15 people offers some of the world's most innovative technology. He's currently conducting studies on a new device called the capsular tension ring, which helps to stabilize the cataract in the presence of compromised zonules.