

 THE FOUNDATION  
OF THE AMERICAN ACADEMY  
OF OPHTHALMOLOGY

# Buyer's Guide

Purchasing **Ophthalmic Equipment**

in Economically

Developing Nations



## **Objective**

This guide was developed to assist purchasers of medical equipment in the international market (mainly hospitals and clinics in economically developing nations). The strategies and suggestions outlined on the following pages are meant to help consumers work with equipment manufacturers in a way that is mutually beneficial and ultimately leads to enhanced medical care. With the help of modern and well maintained equipment, doctors can more easily provide the best care available today.

## **Acknowledgement**

The Academy Foundation gratefully acknowledges the contributions of Mr. Alan Levenson, who is primarily responsible for the authorship of the Buyer's Guide.

Eye exams in Ethiopia.  
Provided courtesy of  
Larry Schwab, MD©



A child in Bosnia  
is examined.  
Provided courtesy  
of Robert Butner, MD



Cataract surgery in  
the bedroom of a home  
in Guatemala. Provided  
courtesy of James  
Standefer, MD

Cover photo:

Measuring vision in Kenya.  
Provided courtesy of Larry Schwab, MD©

## **Introduction**

There are many fine, highly reputable equipment manufacturers who market their products internationally. These companies have adopted wise methods of doing business; they see their role as one of partnership with purchasers because they know that their long-term success (and therefore profitability) is dependent on the reputation they develop and maintain in every marketplace in which they conduct their business. If firms manufacture quality products and support them well afterward, then customers will continue to demand their products. This creates a long lasting and beneficial situation for the manufacturer and the purchaser. While the company profits from long-term business, the customer continually benefits from good product quality through the availability of service and parts.

In mature free-market zones, manufacturers, their distributors and local sales and service firms have worked hard to develop high standards of practice which protect the interests of their customers as well as their own. However, in emerging economies, those same standards have yet to be developed, universally. And, while reputable firms bring their own high standards of practice to those markets, they often find themselves competing with small, transient, “fly-by-night” firms who import and sell their wares for immediate short-term gain. These companies, knowing that technology is in great demand by the medical practitioners in these economies, will sell any medical equipment—new, used or refurbished—that the market will bear and without regard to the needs of the customer after the deal has closed.

This manual is primarily concerned with how to deal with these equipment sellers so that you can maximize your rights and options as a buyer. You can change a potentially adversarial relationship with a vendor into one of teamwork, through a complete understanding of the major requirements, specifications and potential problems involved in your purchase *before* you buy equipment.

This mutual understanding constitutes the basis of a purchase agreement which is your promise to pay in exchange for all those goods and services delivered by the vendor. In mature free market economies, the practice of delivering and installing medical equipment “on credit” is wide-spread.

For a mutually agreed upon period following the installation, the buyer and seller resolve any technical difficulties that may arise after which the payment is due. In emerging countries, since the usual form of exchange is cash only, it is wise to document all details of the transaction in a written form. This form, the purchase order (P.O.), formalizes the agreement between you and the seller. It is discussed in great detail, below.

Even though you may be working in a “cash-only” market, it is wise to consider including a clause in the agreement that allows you to withhold a percentage of the total purchase price until all the conditions of the sale are met to your satisfaction. Of course, this will not always be necessary or possible and will depend on many factors:

- Standard purchasing practices in your country or city
- Legal purchasing/selling requirements in your country or city
- Willingness on behalf of the vendor to wait for his/her money following delivery of the hardware
- Your past buying practices (from this vendor)
- Your perceived influence over other potential buyers in your area

Once you are satisfied that all conditions of the sale are met you should authorize payment of the remaining portion of the invoice. Understand, however, that once full payment is made on a sale, a vendor’s incentive to support your equipment is strictly based upon: a desire to keep you as a customer in the future, and a desire to build a reputation as a vendor of quality.

If you are dealing with a seller whose sole motivation is to derive immediate profit, then you cannot expect him/her to support your equipment once he/she has been paid unless your purchase agreement obligates the seller to perform. The degree to which a signed purchase agreement is enforceable depends on your country’s legal code. In any case, you are more likely to be pleased, satisfied and receive everything you expect after you have made payment in full if all the terms of the purchase order were understood and agreed upon before the sale was made.

## **I. The Purchase Order**

No matter which vendor you choose, it is important that you establish a clear understanding between you and the vendor exactly what is expected by each party *before the sale is completed*. The normal format for this agreement is the purchase order.

Generally, a purchase order is written by the hospital's purchasing department. A purchase order, in the simplest sense, is a document clearly stating everything you wish to purchase from a particular vendor and it represents an agreement between you and the vendor, of the terms of that purchase. In some cases, the P.O. may be generated by a central purchasing group or government agency. It is important to inform this purchasing agent of all the items that should be added to the P.O.

**NOTE** **On some occasions, the vendor may present you with a standard purchase agreement for use as an example for your P.O. You should read this document carefully, but unless it includes all the provisions that you consider necessary, you should strongly consider revising this or writing your own P.O. This ensures that it will contain all the provisions you wish.**

Below, we cover the items that you may wish to include in your purchase order to maximize your satisfaction. You should weigh each carefully and be prepared to explain their inclusion to a salesperson who may not understand the need for your special clauses.

The first and most important requirement is that the P.O. contains complete detailed pricing information. Your purchase order should not merely show a make, model number and a price unless all other items (discussed below) are included in this one price package. If the device you are buying contains assemblies, handpieces, foot switches or other accessories that are not included in the basic machine price, you should list each item separately. You should do the same for every other article you expect to receive when your purchase is delivered; this includes disposables, service parts, manuals or any of the items we cover below.

NOTE You may ask how one should know what to list on the P.O. The answer is that the purchase of a significant piece of equipment requires sufficient pre-purchase investigation and evaluation on your part, so that you may become familiar with every aspect of the device (including disposables, service and necessary site preparation) you are buying. Only then will you be prepared to act knowledgeably and incorporate all the items on the purchase order to ensure that you get everything you need and want.

If you follow this rule steadfastly, it will minimize your risk of surprises later on when it comes time to pay the invoice. Your vendor will have *no reason* to claim that he/she did not know that you were expecting some item(s) that were not delivered!

In the sample purchase order shown below, we have listed each item on a separate line with its own price. Please note that this is a very simplified P.O. not requiring very much detail. If this purchase order were for the acquisition of a much larger or more complicated piece of equipment, there would be many more line items included. For example, it might be necessary to itemize any of the following:

- Additional accessories
- Additional (computer) operating or diagnostic software
- Maintenance or service contracts beyond the warranty period
- Any wiring, plumbing or construction work that the seller or its contractor must perform in order to prepare the installation site
- Any other parts, assemblies or attachments for which you have negotiated
- Additional arrangements for training or in-service either on- or off-site
- Special payment arrangements

**Your Hospital Purchase Order**

<b>Item#</b>	<b>Description</b>	<b>Price</b>
1	Surgical Ophthalmic Microscope model 12345 with 45 degree inclined binocular 12.5X eyepieces coaxial light with tungsten-halogen lamps, 3-step magnification system, motorized focus and zoom	\$6,975.00
2	Floor Stand for model 12345	495.00
3	Video camera adaptor and attachments	355.00
4	Assistant microscope non-coaxial, monocular, with refractive error adjustment	225.00
5	20X eyepieces	192.50
6	Footpedal	212.00
7	Spare lamp and fuse kit	62.75
8	2 Complete sets of operator's manuals and user's guides	No Charge
9	2 Service manuals including parts list, trouble-shooting guide and complete wiring diagram	No Charge
10	1 Year Service Contract (beginning at the expiration of the warranty period — with an option to purchase 4 additional years of service at the same guaranteed rate)	750.00
11	1 Year Warranty including all parts and labor and travel shall begin upon acceptance of microscope by the director of the Department of Ophthalmology	No Charge
12	Install standard 220 volt grounded receptacles in room. Install adequate wiring and grounding connections in room	600.00
	Seller agrees to provide training to all members of the ophthalmology staff and shall continue until the staff are sufficiently trained in the use of the equipment. Seller also agrees to provide on-site technical training for the Bio-medical Engineering Department. On-site training for the Nursing Department shall be provided as well as in-service videotapes.	No Charge
<b>Total Purchase Price</b>		<b>\$9,867.25</b>

**The important point to remember is that everything should be shown on the P.O. so that you receive all items that you need and expect.**



A young girl is refracted in Bulgaria. Provided courtesy of the International Eye Foundation



Cataract surgery in the Solomon Islands. Provided courtesy of James Standefer, MD



Patient in an eye clinic in Mongolia. Provided courtesy of James Standefer, MD

## **II. The Pre-purchase Investigation and Negotiation**

Perhaps more important than the purchase order itself is your careful and *thorough* investigation of the product, allowing you to intelligently select and negotiate for those items and services which you would like to have included. From the time that you initially consider buying a piece of equipment until the purchase order is issued and accepted by the seller, you should take the time to become familiar with every aspect of the equipment and its requirements (environmental concerns, special wiring and plumbing needs, etc.). This will not only help you to know the specific requirements of the equipment, but also ensure that you are purchasing the most appropriate equipment for your particular needs.

Again, keep in mind that you are purchasing a piece of equipment that you hope to use for many years after it's been installed. Therefore, it is most important that your conversations with the vendor include explanations of the provisions necessary to help keep your equipment well maintained in the months and years to come.

NOTE To fully cover all the considerations that go into purchasing medical equipment, it is highly recommended that a team of hospital officials composed of members from the medical staff, nursing, biomedical engineering, plant engineering and finance/administration departments form a buyer's advisory group to evaluate all aspects of the purchase. It is only with this multi-disciplinary approach that the hospital can maximize its purchasing power. Each member of this committee brings his/her own special knowledge, suggestions and needs. As all these needs are evaluated and discussed, the vendor can be presented with a list of requirements which, in many cases, he/she is able to provide, especially, if he/she is requested to do so in writing. The collective wisdom of an equipment buying committee gives the hospital a well-rounded base of experience that generally allows for the most informed and best equipment purchase decision.

The best method to ensure that all details will be reviewed is to divide the purchasing procedure into three time frames and consider, separately, the respective conditions and clauses that should be included on the P.O. for each period: 1) pre-delivery preparation, 2) delivery/installation and 3) after-purchase requirements. In the sections below, we briefly discuss some important considerations for each of these periods:

- 1 Pre-delivery preparations should include all the necessary modifications and preparations needed to accommodate the piece of equipment.

You should investigate, for example, whether this device will require special air conditioning, a gas line or water line for cooling (such as for a large laser), separate electrical wiring or special lighting. Is the device especially sensitive to dust, thereby requiring a special air filtration system? Does it require a constant temperature and adequate cooling (e.g. equipment with computers)?

It is helpful to obtain, in writing, exact specifications for these utilities and environmental requirements from the seller so that your preparations can be made well before the seller's installation team comes. In some cases, the seller may assess additional charges for the unpacking and installation of the equipment.

- 2 The delivery and installation should be made as painless to the institution as possible. Accomplishing this task often requires the complete cooperation of the seller, the hospital's plant manager, the medical, nursing and biomedical engineering staff and sometimes the independent subcontractors who will perform all or part of the installation. Whether insignificant or major, the installation of a piece of equipment should be carefully planned well in advance.

The following questions and considerations for hospital staff and the seller may help you to coordinate this effort.

- Will the equipment be delivered in several different crates or cartons requiring safe storage until the seller's representative can assemble the device, perhaps several weeks later?
- You should determine whether there are special environmental storage requirements for some or all of the parts while they await installation. Ask that such cartons/parts be clearly marked.
- Who will install and assemble the equipment? What technical skills are required? Will a manufacturer's representative supervise or help with the installation?
- How long will the installation take? What is the impact on the department, floor or entire hospital during the installation? Will it be necessary to move patients and for how long? What other services may be interrupted?

- Will the installation team be able to work continuously over the weekend, if necessary, to complete the job in the most timely fashion? Interruption of basic hospital services can be minimized if planned well in advance. The shutdown of water, electricity and other utilities may be accomplished during periods of least utilization. For these reasons, a good plan of action is necessary. To formulate a good plan, you will need the cooperation of the vendor and all affected hospital personnel. Only through well coordinated and planned efforts can you avoid unnecessary delays in the installation and operation of the equipment.
- 3 Of all the terms and considerations involving the purchasing process, those which involve the *after-purchase* period are, by far, most important. For it is these aspects of the purchase agreement which will determine how well and how long your equipment will operate in the coming years.

**NOTE It is helpful to remember that the purchase price of a piece of medical equipment represents only a percentage of the total life-time cost of owning that device. The cost of operation, repair and maintenance may eventually be as much as five or more times its purchase price. Thus, the importance of negotiating wisely for post-installation support cannot be understated.**

It is here that your equipment committee will have the greatest impact and will serve to obtain the greatest benefits for your institution. You will see examples of how each participant's questions might help you formulate a strong purchase agreement that maximizes any equipment's usefulness to the hospital.

The medical department will, of course, be interested in the clinical applications of the device under consideration. But beyond this, the doctors will want to know:

What are the in-service arrangements?

Where will the training take place? on- or off-site?

How long will the training be?

Is the vendor flexible in arranging training schedules?

What training materials are available?

Is a train-the-trainer program available?

Does the company provide on-going application literature on a subscription basis? Is it without charge?

What is the company's upgrade policy?

How will the staff be notified of an available upgrade?

Can the upgrade be performed locally or must the device be shipped to a service center?

If so, how long will the device be out of service? Is loaner equipment available during this period?

How does the company provide additional training for upgrades and enhancements?

What are the consumable or disposable requirements?

Can disposables be reused? (Laws prohibit the reuse of disposables in some countries, including the U.S., and it is unfair to request this information from the manufacturer. Your best source of information on this topic may be from current users of the device(s) in your region.)

How long can reusable accessories be expected to last?

Are accessories available in the sizes or varieties desired by the medical staff?

What is the initial supply which accompanies the equipment purchase?

The nursing department in many institutions is responsible for setting up, cleaning and calibrating equipment especially in such areas as the O.R. and clinics. Therefore nursing should be an important part of the decision-making process. This department will want to know details concerning their responsibilities:

How will the vendor provide training for the nursing staff?

Who will provide the training?

Where will the training take place?

What training materials are available?

Is there a train-the-trainer program available?

The biomedical or clinical engineering department is one of the best sources to help develop a list of appropriate questions to discuss with the seller before the issuance of the P.O. In fact, the director of the biomedical engineering department should be included in all discussions which pertain to the evaluation, installation, delivery, training and in-service, and maintenance and repair of the equipment. The biomedical engineering staff will seek answers to such questions as:

What are the warranty terms?

When does the warranty begin?

How long is the warranty?

What is covered? Both parts and labor?

Are travel expenses included?

Is an extended warranty available?

Maintenance and repair

What will the maintenance and repair costs be for the first 5 years, inclusive or exclusive of the warranty period? It is an increasingly common occurrence for companies to be asked to provide an estimate of the anticipated service costs over an extended period of 5 years, or more.

What is the manufacturer's recommended frequency of routine preventive maintenance and servicing?

What is the cost of this service?

Can the service be performed by hospital-based biomedical engineering staff?

Is the vendor willing to train the biomedical engineering staff in repairs?

What has been the average amount of time over the course of the instrument's life spent not functioning (downtime) in a similar institution or environment?

Where is the manufacturer's nearest parts facility?



**Learning microsurgery using a grapefruit in Nigeria. Provided courtesy of James Standefer, MD**

What is the recommended spare parts inventory? Most companies know and can offer advice on which high usage spare parts should be kept on hand.

Is a spare parts consignment option available? Some companies may offer a spare parts inventory free of charge and following a periodic inventory count, charge only for the parts consumed.

Will the company include a basic spare parts inventory as part of the purchase agreement?

Is an enhanced spare parts inventory available at a reduced cost?

Are service loaners available? At what cost?

Does the company offer technical advice by telephone, fax or e-mail?

What are the most frequent service problems?

What parts need repairs most often?

**NOTE In some locations it is prudent to purchase an enhanced spare parts inventory because of difficulty obtaining parts after the purchase. If this is the case in your location, you might consider purchasing as much as twice the recommended spare parts inventory. It would be advisable to speak with the manufacturer's director of service to help you choose a parts inventory which will suit your needs for the foreseeable future.**

#### Service contracts

What are the provisions of the standard service contract?

What are the qualifications of the service vendor (if it is an organization other than the manufacturer's own). Ask for a list of their clients and talk to the clients about the quality of service they are receiving.

What service coverage is available? Are there options? Some vendors offer service 7 days/week, 24 hours/day or optionally, at a reduced price, 5 days/week, 8 hours/day service.

Does the contract cover scheduled maintenance or just repairs? Are the parts used in the maintenance procedures covered, without additional charge, under the contract or are there charges for the parts consumed? Are parts used in the repair of the equipment similarly covered? Are replacement parts new or used?

Does the contract make a distinction between routine and major repairs? How are “major repairs” defined? Some contracts do not make this distinction clear. To avoid future misunderstandings by all concerned parties, make sure you fully understand the language of the contract before signing it.

What is the five year (guaranteed) cost of the service contract? As with routine maintenance costs, many hospitals are requesting service providers to guarantee a fixed long term (five or more years) price for their service contracts which extend beyond the current period.

What is the guaranteed response time of the manufacturer’s service representative?

Does the service contract provide technical upgrades as they are released?

Is there a biomedical screening or biomedical cooperation option available to reduce the cost of the basic service contract? Some manufacturers will offer a substantial discount if the hospital’s biomedical engineering department performs initial troubleshooting and first level maintenance. Many manufacturers provide free training (often factory training) upon request thereby avoiding large travel expenses and loss of time to make trivial repairs.

#### Technical training and documentation

Is service training for biomedical engineering personnel offered without additional cost?

If not offered free of charge, what is the cost of service training?

Where is the service training offered? How long does it take for adequate training?

Are all service manuals including theory of operation and repair manuals, troubleshooting guides, wiring diagrams and parts listings provided as part of the purchase price?

It is very important to obtain any and all of the resources that are available.

Are technical bulletins, recall notices, notices of mandatory and recommended modifications issued automatically and without charge to all registered purchasers? If you are servicing your own equipment, technical bulletins and updates are necessary to keep your equipment current and safe.

#### Upgrade policy

What is the company's upgrade policy?

How does the company distinguish between upgrades that enhance features and those that allow the device to meet safety or performance criteria?

Are software upgrades available without charge for the life of the device? If not, for what period of time? What has been the cost historically of these upgrades?

For what period of time are hardware upgrades available without charge?

How are upgrade notices issued? Through the manufacturer's marketing or service organization?

The finance/administration department is interested in the overall cost of the equipment and the benefits obtained from acquiring it. They will want to know the following:

Is the hospital getting the most for its money?

What will the cost of the acquisition and operation be for the next year? Two years? Five years?

What is the expected useful life of the equipment?

Is it more economical to maintain the equipment in-house or with a service contract over its useful life?

Can the equipment be leased rather than purchased outright? If so, is this a preferable alternative?

### **III. Problem Solving Strategies & Suggestions**

In this section we provide some strategies and suggestions that you may use to help you avoid any potential problems *before* the purchase and resolve any difficulties *afterward*. Of course, the surest way to avoid problems after you receive an equipment delivery is to solve potential problems before the delivery arrives. However, it is impossible to anticipate all potential problems, so we have outlined some tips to help you work through some of the more common ones.

- 1 We have made the assumption in this guide that the equipment under consideration has already been evaluated. Thus, not much has been said about this vital part of the purchasing process. However, we have included some suggestions below that might prove beneficial in your evaluation process:
  - Consult other users of the same equipment and, if possible, the very same brand and model. Although this suggestion may seem obvious, many medical devices have been purchased solely on the strength of a good salesperson's speech. Ask the salesperson for the names of the hospitals and the physicians in those hospitals who are using his/her company's products. If there are no neighboring users of this manufacturer's equipment, you may wish to consider other manufacturers with more customers in your area. (The company is more likely to be able to provide service to you if it has several customers in your area).
  - Communicate with colleagues in major teaching centers that are likely to have the specific devices you are considering.
  - Consult the major publications in your specialty for articles containing objective evaluations of the particular equipment you are interested in.
  - Consult the publications of independent research organizations such as ECRI (Emergency Care Research Institute, Plymouth Meeting, PA, USA) for comparative evaluations of devices.
  - Seek help from non-governmental organizations (NGOs) that might be in a position to obtain objective information from other practitioners abroad.

- If possible, defer the purchase until you can visit a major equipment exhibition at a professional meeting or conference (such as the American Academy of Ophthalmology Annual Meeting) where you can seek out other users and compare the products of many different manufacturers all in one place.

**NOTE Always try to determine who distributes equipment in your area. If the seller is an independent distributor in your region, try to understand his/her relationship with the manufacturer, that is, does the distributor sell exclusively for this manufacturer? Or does the seller represent several competing lines? What is the distributor's reputation in your area? Is there more than one vendor selling the device under consideration in your region? Where there is competition, you may find better or less expensive equipment and servicing. Understanding the relationship between the manufacturer and the seller (if they are not the same) is one more aid to making an informed and satisfactory purchase.**

2 Regrettably, there are some unscrupulous vendors. If it your misfortune to deal with one, the following suggestions may help you to obtain greater customer satisfaction. A few unethical vendors sometimes use several tactics to refuse parts, service, manuals or training; these are listed below with suggestions to help achieve cooperation between you and these vendors:

- If the vendor claims that parts, manuals or other documentation cannot be sold to anyone who is not "factory-trained", include a request for manufacturer's training for your biomedical engineering staff in the purchase agreement.
- If the vendor is not willing to accept legal liability for the operation of the instrument unless the repair or calibration is performed by his/-her own employees, offer to sign a letter stating that your hospital will be responsible for any problems caused by a technician who is not factory-trained.
- If parts on order never arrive, are continually back-ordered or temporarily out of stock, but are nevertheless available immediately when a manufacturer's technician is paid to install them;

Form or join a buying group with neighboring hospitals — as a team you have much more buying power and can purchase parts in higher quantities, which makes a sale more worthwhile to a vendor;

Include a stated penalty for a vendor's refusal to deliver ordered parts as an amendment in the P.O.;

Consider purchasing an inventory of spare circuit boards and other vital components at the time of the initial purchase (as discussed previously);

Write or fax the CEO of the company.

- If parts and accessories are priced extremely high or there is a very expensive minimum price for an order, ask for a complete parts and accessory list including their prices, as part of the purchase agreement. (In the U.S., manufacturers are legally prohibited from charging more than their published list prices). Here, too, membership in a buying group would be helpful.
- If an individual part is not available and must be purchased as part of an expensive sub-assembly, ask if the vendor will offer credit for the return of the defective sub-assembly to offset the cost of a new one.
- If the vendor claims that repair documentation is unavailable or contains important trade secrets that cannot be exposed to anyone outside of the company, offer to sign a letter guaranteeing the confidentiality of all material and documentation provided by the manufacturer. However, all manufacturers have the right to refuse information.
- If service and/or operator's manuals are priced extremely high, include, on the P.O., a request for at least two copies of the operator's manual, videotapes, quick references and all other training and operational guides available (one for the clinicians and one for the biomedical engineering reference library) and, at a minimum, one complete set of service documentation including all schematic drawings, wiring diagrams, parts lists, troubleshooting guides, theories of operation and any other material given to the vendor's own technical staff.
- If the service manual is included but only contains enough information to perform minor repairs, see previous suggestion.
- If the vendor will provide comprehensive operator or application training but refuses to supply service training, remember that you should always attempt to negotiate for service training in the original purchase agreement.
- If the service training is available, but is unreasonably expensive, provided only annually at an unannounced time, or offered at a level that is superficial and inadequate to prepare the technicians to perform the high degree of repairs and maintenance necessary;

Request a schedule of service training sessions as part of the P.O.

Request that the service training be at the same technical level as that which is provided to the manufacturer's own technical staff.

- If the vendor fails to provide adequate user training to all current clinicians, include, on the purchase order, a requirement that on-going training be provided until all clinical personnel are trained to your satisfaction. It is unreasonable to expect that a seller will establish a permanent trainer at your location. However, the vendor can reasonably be expected to accommodate your staffing schedule, as complex as it may be. Remember that both you and the vendor are best served by flexibility and cooperation.
- 3 The foregoing strategies and suggestions should help you to avoid unnecessary difficulties with future equipment purchases. But what about equipment you already own? Are there ways you can work together with vendors who have already sold you equipment and have received payment in full? Admittedly, there are fewer incentives for cooperation on the part of the unscrupulous vendor, however, most vendors and manufacturers are interested in keeping you as a customer and will work with you. Here are some suggestions which you may wish to use to help smooth the way for cooperation with an unethical vendor:
- Reach an understanding with the manufacturer or distributor that future equipment purchases rely on the adequate satisfaction of your needs for the equipment you already own.
  - Communicate to the manufacturer/distributor your willingness to tell other hospitals, professional associates, the ministry of health, buying groups and any other interested parties, of both your satisfaction and your unhappiness with the product or service provided. (Make certain that you communicate all information, good and bad, to a buying group of which you are a member!)
  - Once you have researched the manufacturer's product and clearly stated all your needs, it's fair to expect the manufacturer/distributor to support your equipment and to make them aware of any dissatisfaction you experience, as a result of their failure to provide you with the support you consider necessary to provide optimal patient care.
  - Whether you are served by a distributor or the manufacturer's own sales representative, you will often get better results writing to the chief executive officer of the manufacturer, if you have any significant and serious complaints about receiving equipment, training, parts, service or documentation. This is especially true if the sales organization you use is an independent distributor who may not be fulfilling his/her contractual obligation to the manufacturer. Make certain that you send copies of your correspondence to the ministry of health and any other interested parties.

NOTE In the United States, many hospitals have joined with others in the region or with other hospitals of the same specialty or type (for example, municipal-owned hospitals or those owned by religious orders) to form buying groups whose purpose is to negotiate the best prices, the most favorable warranties and the strongest service and training support possible. It is self-evident that a large number of hospitals banded together (for buying purposes only) can purchase in large enough quantities to become favored and significant customers with all the benefits that status brings. Even more important is the collective intelligence that usually arises from such an arrangement. It is this information that will help the buyer avoid making an expensive mistake by acquiring an inferior product, a product not suitable for your environment, or by purchasing a product which may be quite satisfactory when it works but is not supported at all when it is broken. In some cases, independent buying groups are actually formed and supported by the member hospitals each of which contributes a small amount of money toward its maintenance. Sometimes, the groups save the member-institutions so much money that they can add a small amount to the net purchase price to pay for themselves. The buying groups may use a preprinted purchase order which has all the clauses and conditions designed to ensure the needs of the member hospitals are fully met. Additional (special) clauses may be added to suit specific needs of individual members. Vendors know that since they are dealing with a large united group that can influence individual member's purchasing decisions and can make relatively frequent large purchases, it is in their best interest to keep these members happy. And because they know that the buying group has the authority to act for all member institutions they will offer the same and usually better advantages to all members than they can provide for smaller customers. Although organizing a buying group may require a great deal of work initially, it is well worth the rewards your hospital will gain during later purchases.

#### **IV. Conclusion**

As with any major expenditure of resources, careful research and planning save future time, money and worries. Fully assess your needs and communicate to the vendor, any special circumstances pertaining to your hospital or location. A seller can not provide you with satisfactory service without a clear understanding of these things. It is important to remember that is in your best long term interest to develop lasting relationships with reputable vendors. Demand those things which are reasonable to expect as part of the course of doing business, but demonstrate a willingness to pay a fair price for the fair value of the products and services you are getting. Remember, too, that honest and successful vendors want to give you the goods and services you need so that they may continue to have your business.

It is our hope that these guidelines will be of some help to you and your hospital in your efforts to select the appropriate equipment and to prolong its useful life. Through careful and inclusive planning, you should be able to improve your chances of maintaining your equipment in a manner that will best serve you and your institution.



A Kosovar refugee is examined in Albania, with support from her son. Provided courtesy of Robert Butner, MD

Back cover photo:

Students observe eye surgery in Vietnam.  
Provided courtesy of Dr. La Trong Thu