**Choosing an Infusion Pump**

By Kris McFalls

**LITTLE ATTENTION** is paid to infusion pumps, which are used to deliver medications to patients in a controlled manner, unless there is a problem. This is because the choice of which infusion pump to use is typically made by the infusion provider. Patients often don’t realize they have a choice of pumps, and doctors usually will order whatever pump is recommended by the provider. And although cost is a factor, safety, reliability and ease of use also are considerations.

**Cost Consideration**

Providers have to weigh cost as an important factor when deciding which pump to carry, especially since the prices vary greatly. In fact, some pumps can cost as much as a nice used car. Additionally there are maintenance costs. Electronic pumps, in particular, require yearly maintenance to ensure they are clean and calibrated correctly. Failing to properly maintain equipment could result in a malfunction of the pump, fines for the provider and harm to the patient. And, since the cost of maintenance is typically not paid for by insurance, in most cases, it falls on the provider.

If deciding to purchase a pump on their own, most patients have a durable medical equipment (DME) benefit that will cover part of the cost. However, many insurance companies limit the reimbursement for all DME to $2,500, leaving all extra costs, including maintenance, up to patients.

Another cost consideration when choosing a pump is supplies. Several pumps require the use of proprietary supplies, such as specialized tubing or syringes, that add further costs to the infusion process.

Taking into account all of the cost factors, it’s easy to see why providers limit their supply of infusion pumps to one or two models.

**Other Considerations**

Besides the cost of a pump, there are other important considerations, such as ease of use and reliability. Being able to consistently control the rate of a pump can be an important factor that helps prevent rate-related side effects. Many of the electronic pumps do a very good job controlling the rate. Additionally, many of the electronic pumps include alarms to alert the caregiver about possible problems, such as occlusions and air in the line.

Infusion pumps, significantly more portable than traditional intravenous drips with a pole setup, can provide increased mobility to patients receiving home infusion. Often, backpacks or fanny packs are used to hold the pumps to help give the patient more freedom of movement and a decreased risk of snagging the infusion line when ambulating.

IG patients choosing subcutaneous IG (SCIG) instead of intravenous IG (IVIG) find utilizing a syringe driver pump is especially helpful. IG is already a viscous solution, but SCIG products are higher in concentration and even higher in viscosity. Having a good syringe driver pump that can deliver the medication with even pressure in a controlled manner is paramount for comfortable and successful treatment.

**Consider All Factors**

All factors must be considered when choosing an infusion pump. Ideally, doctors, patients and pharmacists should team up to consider all options to find a solution that will work best for each patient to ensure optimal treatment.

**KRIS MCFALLS** is the full-time patient advocate for IG Living magazine.

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**Directory of Infusion Pumps**

**Moog**

The 4000 Clinical Management System is a multi-therapy ambulatory electronic infusion pump capable of continuous, PCA, PCEA, subcutaneous, TPN, intermittent and variable modes. It can be easily programmed with menu-driven protocols and context-sensitive help screens. It measures 5.1-by-4.0-by-2.5 inches and weighs 17.5 ounces.

(800) 970-2337; www.moog.com/products/medical-pump-systems/infusion-pumps/4000-cms

**IntraPump**

The Crono S-PID50 has a small and compact size, runs on batteries and was designed with subcutaneous immuno-globulin in mind for the home setting. It offers continuous administration and bolus administration of medications and has a very high...
PSI and occlusion alarms, appropriate for highly viscose medications. A liquid crystal display (LCD) shows relevant information to patient and physician with respect to settings, delivery time and diagnostics. (866) 211-7867; www.intrapump.com

MarCal Medical

The Graseby 3400 offers a wide range of infusion rates. Unlike many other syringe drivers, it is compatible with many syringe sizes and tubing, which makes it cost-effective, as there are no dedicated disposables. The operation is simple, and it features an easy-to-read display. It runs on batteries and also requires at least yearly maintenance. (800) 628-9214; www.marcalmedical.com

Micrel Medical Devices

The Micrel MP101 syringe driver provides infusion therapy for a wide range of applications. It is an efficient infusion system for delivery of small volume medications, and can be used in both the homecare and hospital setting. Features include a simple rate setting with an LCD display, clear identification of alarms detected and a double microprocessor. It is lightweight and portable, has an ultra-low battery consumption, and comes with a shoulder holster for ambulatory use, plastic carrying case, operating instructions and a set of batteries. 30 210 6032333 (Greece); www.micrelmed.com

RMS Medical Products

The Freedom 60 pump requires no electricity or batteries; the patient just needs to wind it up. It utilizes proprietary tubing to administer subcutaneous infusions at predetermined rates. It is very portable and effective and requires no preventive maintenance. While it may be a bit larger than some of the ambulatory competitors, its ease of use has made it a popular choice for subcutaneous therapies. (800) 624-9600; www.rmsmedicalproducts.com/Freedom60info.htm