Bear with us while we illustrate.
The 100 most popular drugs probably represent somewhere between 3.3% and 5% of the drugs in your formulary (that require pill counting). These same 100 drugs probably account for about 33% of the scripts filled by your pharmacy. Many pharmacies install automation to help alleviate the burden caused by these scripts, and, hopefully, save money at the same time. When doing the cost justification, it rapidly becomes apparent why the most popular drugs are chosen. The time savings on a per script basis is small, even when the comparison is between manual counting and various types of automated or semi-automated counting. If the capital investment required for automation is large then the number of scripts filled per day must be correspondingly large.

Most pharmacies seem to look for a Return on Investment (ROI) that will recoup their initial investment in one year (or less), which is somewhat aggressive but not unreasonable. Most also add the present value of money to the amount to be recouped, and the value of any added floor space that must be allocated. Given these conditions it would appear that even the largest retail pharmacies cannot justify doing much more than the 200 most popular drugs with large scale automation.

So what happens to the rest of the formulary if the top 100 drugs are automated? Usually the balance of the drugs, like 95% of the formulary, is counted manually. This is the largest eccentricity that we note. Drug number 100 made the economic cut, but poor drug 101 didn't. That is not reality. In point of fact there is almost undoubtedly a form of automation that could easily be justified for drug number 101. Wouldn't it be great if it also did the entire formulary.

One thing for sure, the capital investment had better be small. Wait a minute, this unit is going to do all but the top 100 drugs, that means it is going to do about 2/3 of the scripts that require pill counting, and well over 1000 different drugs. There is only one type of automation that can do every drug in the formulary that requires pill counting, and do them quickly and accurately, and with no cross contamination. The technique is counting by weight. It has some limitations. Total pill weight cannot exceed the scales capacity (500.g for instance). Minimum actual pill weight (not dosage weight) cannot, by law, be less than 30.mg (we know of no such drugs). The pharmacy should build its own stored table of average pill weight (APW) for every drug in the formulary. This can be carried out while filling actual scripts, with very little added time. These APW should be updated periodically.

Don't add another form of automation that only does a small portion of your formulary. Every

different system adds a layer of complexity and confusion. A single system that does the entire formulary has a lot going for it (like manual counting, only faster and easier)