Antimicrobial resistance is without doubt one of the greatest current challenges to the effective treatment of infection and, by extension, to much of health care. Furthermore, there is every prospect of the problem continuing to worsen. A great deal has been said and written about resistance in the past few years, and this issue of the Journal consolidates some opinions as a contribution to the debate. Stimulated by the report on the meeting at the Royal Society of Medicine in April 2001, the issue focuses on surveillance.

There have been a number of initiatives in the surveillance of resistance at the national and international levels, funded by a variety of sources, and this is to be welcomed. It is vital, however, that there is greater clarity of thought on why any particular piece of surveillance is being done, and how its outcomes might or should help to control resistance. Feeding back the results of surveillance in a thoroughly understandable and readily usable form to those who need them is a priority. A weakness to date of many published surveys has been the lack of reliable, or indeed any, denominator data, making it difficult to compare reliably the results between locations or in time, or to generalize them to larger populations.

Perhaps more worrying than the deficiencies of the surveillance itself is the current obsession with it, giving the impression that it will itself somehow produce beneficial change. While good surveillance importantly can provide a measure of the extent of resistance and a basis for measuring the effects of active interventions, we could well be just observing the situation getting beyond our control. For example, much emphasis has been put on reducing the use of antimicrobials as a means of controlling resistance. But what if reducing prescribing to the minimal level compatible with the safe treatment of individual patients has no effect on the prevalence of resistance? Surely we should, if possible, know this sooner rather than later, and not be waiting on the institution of more effective surveillance before we do? Good surveillance will not be cheap, but large scale and well-designed research into the effect of restricting prescribing will be orders of magnitude more costly. Nevertheless, we should be setting out now to undertake such research alongside surveillance. Controlling resistance in hospitals by improving prescribing is presently hampered by a widespread lack of relevant IT, particularly individual patient prescribing and clinical records (for audit purposes) and algorithm-assisted prescribing. The universal introduction of such IT will be difficult and costly, but it should be tackled without delay.

Another important plank to controlling resistance is that of preventing the acquisition of resistant microbes in the first place. So long as our healthcare institutions remain under-resourced in terms of staff, buildings and infection control expertise, this will remain a virtually impossible task.

The way that data on resistance are presented is an important aspect of their dissemination and utility. It is vital that as much data as possible are put into the public domain. This enables them to be re-analysed, perhaps for the purpose of comparison with future results. This cannot be done from data published only in figure form. However, extensive tables of, say, MICs certainly take up a lot of space in the Journal and may well be indigestible for the average reader. For that reason, the Journal will from now offer authors the facility of appending supplementary tables of data to the Journal’s electronic copy of their paper. The presence of them will be indicated on the title page of the printed and electronic copies of a paper. Discussions as to the format of susceptibility data will be needed so that it is standardized as far as possible.