The meeting opened with a welcome from the Chairman of UK DURG, Professor John Feely. He then spoke of the ‘Pressure on prescribing in Europe as seen from an Irish experience’. He described the strong inverse correlation between drug consumption and price; in Northern Europe where the price is high consumption of drugs is much lower; in Southern Europe where the price is lower, there is up to a threefold increased consumption. He emphasized that the majority of controls, either on the supply or demand side which are implemented to varying degrees in different countries, are not subject to evaluation; examples of supply control measures include fixed budgets, such as in the UK and Germany, guidelines on cost effectiveness and use of limited lists. On the demand side examples include cost sharing with co-payment by patients, health education of professionals and development of a market for over the counter products. Strategies aimed at the market as a whole include price control, taxes on the promotion of drugs, development of a market for parallel imports and generic products.

Professor Feely then described initiatives that had influenced prescribing in Ireland.

1. Limited list
A limited list introduced in 1982 to curb huge increases in state supported General Medical Services (GMS) costs excluded aspirin, paracetamol, cough mixtures and antacids. However, prescriptions for more expensive products such as mefanamic acid, carbocysteine and H₂ antagonists increased. When antacids were subsequently reintroduced to the list their consumption rose but did not alter the use of H₂ antagonists.

2. Formulary
Experiences have shown that feedback is a key issue in the effectiveness of formulary usage and continuous input is necessary to maintain effectiveness.

3. Education of professionals
Education of hospital doctors through a study showing that use of antibiotics in the form of oral therapy is as effective as intravenous therapy for treatment of patients hospitalized for respiratory infections; however, prescribers revert to intravenous therapy when education is not sustained.

4. Incentives
The introduction of an indicative drug budget, the ‘50:50 cash back’ scheme has had a major influence in reducing the costs of prescribing. The resultant changes appear targeted, the percentage of generic prescribing has increased considerably but the use of ACE inhibitors and beta blockers has remained unchanged.

As an example to increase the efficiency of drug use the lipid lowering drugs were studied. At present in general practice in Ireland these agents are prescribed mainly for females and 35% of prescriptions are for those aged over 65 years. Targeting of post CABG or myocardial infarction patients (75% of whom have a cholesterol level more than 5.5 mmol/litre) and the younger male population would yield considerably more benefit.

Dr Zachary Johnson introduced ‘The Standardized Prescribing Ratio’ — a new method for comparing the proportion of patients prescribed any drug or group of drugs on individual GP panels taking patient age and sex into account. GMA claims for the fourth quarter of 1995 were analysed...
using SAS for all drugs, antibiotics, ulcer healing drugs, antidepressants and thyroid hormone. The observed number of patients on a particular drug was compared with the expected number for each age and sex group using the age-specific prescribing rates of the entire Eastern Health Board (EHB) GMS population as a reference population. The standardized prescribing ratio (SPR) is the ratio of observed to expected prescriptions for each panel expressed as a percentage. It is a measure of the extent to which the number of patients on a particular drug is above average or below the group norm taking account of age and sex. Hence an SPR of 100 is average for the group of GPs (550) being studied; an SPR of 200 is twice the average and an SPR of 50 is half the average.

Dr Johnson reported that 57% of the EHB GMS population received at least one prescription during the 3-month study period, one-third received at least one prescription for an antibiotic and 1 in 20 at least one prescription for an ulcer healing drug. The SPRs showed a large amount of variation from average for all drugs and for each of the four drug groups studied. Practices with above average SPRs for all drugs, antibiotics and ulcer healing drugs were significantly larger than those with below average SPRs. Practices of below average SPRs for thyroxine were significantly larger than those with above average SPRs. Older GPs had higher SPRs for ulcer healing drugs. The SPR therefore provides useful age/sex adjusted method of comparing prescribing between GPs and can be applied to any drug or group of drugs.

Dr Morgan Feely described ‘The Prescribing Index — a tool for targeting the prescriber’. The prescribing index was a tool designed to measure the effectiveness of the PRIDE (Prescribing Review and Independent Drug Evaluation) campaigns. The prescribing index (PI) is the ratio of generic drug divided by generic plus proprietary drug, e.g.

\[
PI = \frac{\text{Frusemide}}{\text{Frusemide + Lasix}}
\]

It was used to measure the effectiveness of the influence of visits to GPs by an academic representative to measure the effectiveness of a promotion campaign targeting NSAIDs and the effectiveness of a campaign to promote generic prescribing. All of the campaigns showed measurable improvement in the prescribing index. The use of ibuprofen increased in the active intervention group and actually decreased in the controls possibly due to a concurrent campaign. However, the financial influence on a prescribing index was not as great as it might have been as low cost drugs were targeted rather than high cost drugs. A failure to specifically target the low prescribers of generic products and almost one-third of GPs declining to meet the academic representative were other difficulties associated with the study.

Dr Hugh McGavock spoke on the influence of formularies on prescribing. He spoke in favour of using a national published formulary and adapting it locally for general practices. The number of doctors in a practice may influence the number of drugs in the formulary, 200 with one and 400 with six doctors. He considered this to be a much more practical option than GPs developing formularies themselves, as the time needed to compile and verify all data in a formulary is major and access to many different specialists is required. He recommended that GPs should work with consultants and consultants should be asked to prescribe formulary drugs. In its implementation a D-day approach ensures everyone adapts quickly but it takes about 4 weeks for smooth operation. A more gradual approach may be appropriate for the management of emergencies and the introduction of new drugs.

Professor Tom Walley spoke of his experience of the influences on prescribing that work, in relation to improving the effectiveness or cost effectiveness of prescribing. Potential targets include doctors, patients and the pharmaceutical industry.

Written information may improve knowledge but may not change behaviour. The value of written information such as drug information bulletins is extremely limited unless it gets into the media. Feedback of prescribing data such as PACT data on its own is ineffective as it is perceived to be unsynthesized, irrelevant and causes information overload. However, feedback coupled with group discussion is very effective but the effect is not sustained. Academic detailing, whereby face to face contact is made with prescribers by an academic person is effective but is more cost effective if targeted and specific feedback is given. The effectiveness of medical and pharmaceutical advisors who give mixed education/professional/managers messages and where the emphasis is on practice visits rather than academic detailing has not been assessed. He then spoke of the growth of community

© 1998 John Wiley & Sons, Ltd.  
pharmacists in practice in the UK. A number of projects such as the Birmingham Project and the Evidence Based Outreach Project from York have been set up to evaluate the cost effectiveness of visits by pharmacists on influencing prescribing. In the York project, evidence-based guidelines were set up for four groups of drugs, NSAIDs, SSRIs, treatment of congestive cardiac failure and aspirin. The intervention was delivered by a trained pharmacist. The outcome measures used were the PACT data and patient audit. Initial evidence from these projects would indicate that education of outreach by pharmacists is effective.

He then spoke of the financial constraints in the UK and the effect to data of the Indicative Drug Budgeting Scheme. An inherent difficulty with the Drug Budgeting Scheme is that it has not been rigorously evaluated and therefore its effect is uncertain. While GP fundholders have reduced prescribing costs and increased the proportion of generic prescribing, comparisons with non-fundholding practices are not easy as fundholding practices tend to be group practices in affluent areas and with a high proportion of training practices. The incentive scheme for non-fundholders is difficult to evaluate as they are largely self selecting practices.

Other methods used to control prescribing costs in the UK are limitation of access through limited lists, strict adherence to formularies and prior approval before prescribing certain drugs; however, these impinge on freedom to prescribe. Use of prescribing guidelines with incentives for those who follow them have been effective in France. However, he feels that national guidelines generally have this effect because of a lack of local ownership, although an exception is the beta interferon guidelines as these appear to have worked.

Professor Walley then outlined the considerable potential of information technology to alter prescribing habits. Development of a computerized series of guidelines for general practice has been the work of the Prodigy Project currently under evaluation in the UK. Other influences include patient co-payments. Here use of co-payments has decreased the utilization of essential as well as non-essential items. A more targeted approach whereby co-payments are requested for non-essential items would appear to be more appropriate. The IMPACT study of patient education would appear to have a positive influence on prescriptions of antibiotics; however, this work is not yet published.

Describing the ‘reactions from a targeted prescriber’, Dr Karl Cannon, a Dublin GP, considers himself a target particularly in relation to the marketing techniques employed by pharmaceuticals.
companies. The missiles that he is subjected to include the ‘bumph’, such as the glossy brochures and the junk mail, the ‘treats’, both educational and social, and the ‘goodies’, such as the pens, notelets, clocks, calculators, etc. The ‘big guns’ of course are the drug representatives who use a variety of sales techniques mostly trying to sell themselves and then piggy backing the product on that relationship. He is most critical of the soft sell and the emotional blackmail approaches. Dr Cannon considers that he is not immune to these approaches but he continues to prescribe more and more generics and has decreased his volume of prescriptions.

The type of approach that Dr Cannon feels would work would be providing easily digestible information on drugs, e.g. the five most important things to remember about ACE inhibitors, sponsoring of skill building sessions, and more actively considering the needs of GPs. In recent years, he has adopted a policy of only seeing pharmaceutical reps by appointment. He suggested that GPs should ask for letters in advance from drug companies prior to a planned visit from a rep stating the purpose of the visit so that the GP can prioritize the urgency of the visit.

Dr L. von Ferber from Cologne described ‘Quality circles in Pharmacotherapy’ that have been developed in Germany. The quality circles comprise groups of 10–15 GPs who meet for 6–8 sessions per year — 1.5 years to discuss their prescribing. The aim is to provide feedback to the GPs in relation to their present prescribing and how they might improve. Two moderators, themselves GPs, act as facilitators. Fundamental to the operation of the group are the characteristics of tolerance, openness, confidentiality and a non-judgmental approach. The overall aim was to change prescribing behaviour adopting a quality assurance cyclical approach. The cycle ranged from an assessment of prescribing, identification of the problems, selection of a problem, problem analysis, development of guidelines, a second evaluation leading to identification of remaining problems. The indicators used to measure changes in behaviour were changes in prescription frequency in the direction of the guidelines and changes in the prescription frequency of the participants towards those of the moderators. The circles resulted in a 20% reduction in costs among the high prescribers. Drugs of limited clinical value and presumptive drugs, e.g. benzodiazepines, were prescribed less often. HPET was prescribed more often.

SYNOPSIS OF ABSTRACTS

Dr D. A. Gregory described a comparative study of prescribing carried out in Newcastle, Belfast, Edinburgh and Dublin. Diagnostic information was obtained for each item prescribed. The proportion of generic prescribing was lowest in Dublin at 17% and the highest in Newcastle at 84%. Newcastle appeared to have a higher prevalence of depression, Belfast a higher prevalence of non-ulcer dyspepsia. In Dublin and in Belfast there was a higher proportion of prescriptions for antibiotics and NSAIDs. New prescriptions were the most susceptible to prescribing influences, whereas long-term repeat prescriptions were less open to influence.

Dr D. Steinke described differences in training and non-training practices which were explained by a deprivation score. He explained that while non-training practices were 60% more likely to prescribe antibiotics and 46% more likely to prescribe psychotropic drugs than training practices, the population deprivation score largely explained these differences.

Dr C. Fitzpatrick described the 3-month intensive campaign in Northern Ireland which was set up to save £6.5 million to pay for elective surgery. Four groups of drugs were targeted: ulcer healing agents, antibiotics, analgesics and NSAIDs. GPs from non-fundholding practices were invited to attend workshops on these. The cost per item in the targeted practices fell significantly with the highest savings occurring in the first 2 months of the campaign.

Dr M. Jenkins attempted to assess the influences of legal, peer and media categories on adverse reaction reports. He concluded that peer pressure was more effective than MCA-CSM warnings. Population media coverage was highly effective. UK reports were more effective than overseas reports.

REPORT ON RESEARCH ACTIVITIES FROM THE REPUBLIC OF IRELAND

The Eastern Health Board in association with the Department of Gastroenterology at Beaumont Hospital will shortly commence an evaluation of a programme to implement evidence-based prescribing for peptic ulcer using HPET as a model. Outcome measures will include the proportion of patients with peptic ulcer disease who
receive HPET and the number of prescriptions per patient for ulcer healing medication in intervention and control groups. The project has been supported by funding from the Irish Health Research Board.

In an intervention to promote generic prescribing in the Eastern Health Board, all doctors and pharmacists within a defined area have been asked to prescribe and dispense generically from a limit of six drugs over a 12-month period. The intervention commenced in May 1996. An evaluation is currently taking place to compare the proportion of drugs prescribed generically and the costs of these drugs pre- and post-intervention in the defined catchment area and in a control area.

A comparative study of prescribing in EHB vocational training practices compared to non-training practices is currently being conducted.