

Date: Wednesday 14 March 2001
Venue: Committee Room 3, National Assembly for Wales
Title: REPORT OF THE TASK AND FINISH GROUP ON PRESCRIBING

Purpose

1. To present the final report of the Task and Finish Group on Prescribing to the Committee for their consideration.
2. The Health and Social Services Committee is responsible, under Standing Order 9.7, for contributing to the development of Assembly policies relating to the prescribing of drugs, the provision of pharmaceutical services and the supply of pharmaceuticals in Wales. It would be very helpful to have the Committee's comments at this stage on this report, to enable us to put together a detailed implementation plan with costs and benefits.
3. The Committee is asked to:
 - (i) endorse the report prepared by the Task and Finish Group and
 - (ii) offer views on the priority to be given to implementing the recommendations made in the attached Annex 2.

Summary / recommendations

4. The document at Annex 2 provides a summary of the recommendations made by the Task and Finish Group to improve prescribing practices and the provision of medication to patients.
5. Implementation could, realise early benefits to patient care particularly in respect of:
 - implementation of repeat dispensing pilots by community pharmacists
 - the use of patients' own drugs in hospitals with the associated use of patient packs
 - development of district-wide formularies
 - electronic links between GP surgeries, community pharmacies and NHS Trusts
6. It would be helpful, however, if the committee were to offer its views on the priority of the recommendations in Annex 2.

Timing

7. This report is being presented as a conclusion to the work of the T&F Group. Following the receipt of the committee's views, a further paper will be submitted to the Health and Social Services Committee in the Autumn, outlining the action taken and the further action planned. The paper will also address the financial issues associated with the action plan and will seek the Committee's views on the proposals.

Background

8. The Task and Finish Group on Prescribing were asked to consider the options available to the National Assembly for Wales to improve the prescribing of medicines, the provision of pharmaceutical services and the supply of products in Wales, taking into account all relevant factors within the framework of the Assembly's powers and responsibilities.

9. The recommendations made by the group are broad and far-reaching; many include new areas of work, others build on existing good practice that needs to be extended throughout Wales. Work already in-hand, that is consistent with the advice given by the group, includes the introduction of PRODIGY information support for patients and the setting up of links between the Assembly and key stakeholders such as GPs, pharmacists and the drug industry. Many of the recommendations can be implemented directly by administrative action but others will require consultation and negotiation with the Health Service, health professionals or other groups.

10. The recommendations cover the following themes:

- The provision of patient focused services that encourage patient involvement and the provision of suitable information to patients to enable them to make informed choices on their care
- Unification of working arrangements to provide seamless care across boundaries and the use of Information Technology to facilitate this.
- Increased collaboration between General Practitioners and Pharmacists.
- Enhancement of the role of pharmacists and their inclusion as full members of the primary health care team.
- Partnership between the Health Service and the Pharmaceutical Industry
- Continued development of appropriate systems and culture throughout the NHS to ensure that the requirements of clinical governance are met.
- Recommendations from other reports that have not yet been implemented.

Consideration

11. A full copy of the Report of the Task and Finish Group, providing a full exploration of the issues supporting the recommendations, is given in Annex 1.

Compliance

12. The Group has been set up under devolved powers of Section 2 of the National Health Service Act 1977. This has been delegated to the Minister for Health and Social Services. Compliance implications will be identified once the recommendations have been considered. The Assembly Compliance Officer has seen this paper and is content.

Finance

13. Since many of the recommendations made are subject to negotiation with the contractor professions, it is not possible to quantify the financial implications of implementing the report at this time.

14. Following the receipt of the committee's views on the recommendations made, a further paper will be submitted to the Health and Social Services Committee outlining how these will be taken forward. That paper will address the financial issues associated with action plan and will seek the Committee's views on the proposals.

15. Whilst the recommendations made by the Group will undoubtedly contribute to a better service for patients and a more efficient use of resources, there are some which are likely to achieve substantial reductions in expenditure in the short term.

Action for subject committee

16. The committee is asked to:

- (i) endorse the report prepared by the Task and Finish Group and
- (ii) offer views on the priority to be given to implementing the recommendations listed in Annex 2.

Jane Hutt
Minister for Health & Social Services

Contact point

Mrs Carolyn Poulter or Mr Gavin Parry, Pharmaceutical Service Branch, Primary and Community Health Division are able to provide further information on the Task and Finish Group on Prescribing if required.

ANNEX 1

***REPORT OF THE TASK AND FINISH
GROUP FOR PRESCRIBING IN WALES***

MARCH 2001



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CHAIRMAN'S SUMMARY

The Task and Finish Group for Prescribing was set up by the Health and Social Services Minister in late 1999 and met for the first time on 14 January 2000.

It was required to advise on the improvement of all aspects of the prescribing and provision of pharmaceuticals, quantifying the benefits and necessary resources, identifying the barriers to implementing the improvements, and on the gathering of data and its use as information.

The Group had wide representation from the relevant professions in the NHS and from within the National Assembly departments, and was commendably supported by a number of other health professionals and administrative staff.

Quantifying the benefits and the costs of our proposals has not proved easy. Indeed, it may be expeditious if the costs are assessed for implementing only those recommendations which find favour with the Minister, the Committee and the Assembly.

The Group is confident of the improvement for patients and for NHS staff of the implementation of its procedural recommendations, the rationale for which is explained in the text.

The Recommendations deal with those aspects of the use of medication which are described below:-

- the involvement of, and respect for, the patient in the choice and use of drugs
- the experiencing by the patient of as “seamless” a service as possible. This means that the demarcation lines within the clinical professions involved in prescribing should be reduced to a minimum where they cannot be removed altogether
- the importance of recognising and improving the knowledge and experience of doctors in prescribing and managing drug therapies, but also acknowledging the welcome extension to pharmacists and nurses of a role in prescribing and monitoring treatment
- the need to ensure that all these professions are supported in working together more closely than before
- ensuring that the evidence of clinically effective drug treatment is readily and widely available to prescribers, and that appropriate training in Therapeutics is seen as an absolutely essential part of all clinical practice
- the subsequent use of that knowledge as part of the greater collaboration between doctors, pharmacists and nurses, with particular emphasis on making much more use of the existing knowledge of Community and Hospital Pharmacists

- the process of drug choice and dispensing (including the presentation of the drug and the supply given to the patient), and the monitoring and review of clinical progress
- the scale of prescribing within NHS Wales, which requires the accurate and reliable collection of data to be used to inform prescribers, managers, epidemiologists, commissioners and the National Assembly, as well as being essential for the proper payment of dispensing pharmacists and doctors. Certain processes of automation and of electronic prescribing – e- pharmacy – can assist in coping with such vast amounts of data, as well as improving the convenience for patients’ receipt of their prescribed and dispensed medication
- appropriate contract-purchasing which is already available to the hospitals of the NHS, which the Group believes should be available to LHGs, or even consortia of Local Health Groups (LHGs)
- the way that the NHS in Wales and representatives of the Pharmaceutical Industry should be enabled, and required, to collaborate in such a way that issues of importance or difficulty to either side, can be discussed and resolved, and recommendations made to the Health Minister and the NHS in Wales.

The important Suppliers of excellent medicines cannot be held at arms length by all or by parts of the NHS, nor can they be used in ways which benefit the NHS whilst ignoring possible conflicts of interest. The contribution of the Industry to postgraduate education and specialist posts is considerable. It should also be managed in ways which are clear, open and incapable of misunderstanding.

- finally, the responsibilities of Clinical Governance, which are real and must be respected. In ways which extend from the collaboration of widely different interests at the All-Wales level, to how an individual patient experiences the excellence of knowledge, commitment and expertise of a single health professional or Team, we advise on how prescribers can inform themselves clinically and pharmacologically and on how the best interests of patients, colleagues and responsible organisations or individuals can be safeguarded.

Clinical Governance in respect of prescribing should never be the covert and accidental evasion of responsibility: it must be the overt and deliberate avoidance of incompetence.

The sources of these Recommendations within the Report are marked **®**. I believe that the Recommendations of the Task and Finish Group for Prescribing could serve significantly to assure high standards in the clinical care of patients and to enhance professional fulfilment in those concerned with patients through the prescribing of medicines.

DR NORMAN MILLS
CHAIRMAN, TASK AND FINISH GROUP FOR PRESCRIBING

RECOMMENDATIONS

A. THE PATIENT AT HOME AND AS AN OUT-PATIENT

Patient Convenience

1. If patients are genuinely to be at the heart of the NHS, the demarcation lines between the services provided by pharmacists and GPs, and between primary and secondary care, must be eradicated. There are good advantages to primary care generally and to patients in particular if the skills of the GP and the Community Pharmacist are used jointly.
2. The NHS in Wales should find ways of providing patient information on choices and risks to support prescribing at the initial stage.
3. Patients are entitled to expect the same standards of professionalism from all dispensing contractors, i.e. pharmacists and dispensing general medical practitioners.
4. Consultation with a pharmacist should be available to the same level of privacy and confidentiality as is expected and required throughout the NHS. More use should be made of the existing knowledge of Community Pharmacists as a readily available source of advice to the public. The ideal situation, which should be the aspiration in Wales, is for the Pharmacist to be a full member of the Primary Healthcare Team, and, if possible, to be working within the same premises as the rest of the Team, at least for part of the time.
5. There is need for an efficient, safe and more streamlined system of repeat prescribing which is easy for the patient to use, and which avoids the patient's returning to the GP at monthly intervals as a formality. A three monthly or six monthly prescription, dispensed and monitored by a named pharmacy on a monthly basis, would be a way forward. A repeat dispensing pilot study could establish how best to implement this.
6. The funding and status of FP10HPs should be changed, so that they may be dispensed either in a hospital pharmacy or in a Community pharmacy.
7. Only when there is an urgent clinical need should hospital outpatients receive their initial supply of medication from the hospital pharmacy.

Patient Packs and Automation

8. The introduction of patient pack dispensing both in primary and secondary care can be used to address issues in many of the activities investigated.
9. Finance Directors of Health Authorities, Local Health Groups and Trusts should establish mechanisms to enable prompt implementation of patient pack dispensing.

10. Implementing patient packs enables systems automation to be introduced and Trusts should investigate the options concerning automation of pharmacy dispensing and distribution activities in order to enable the redeployment of hospital pharmacy staff to ward areas.
11. Trusts and Local Health Groups should work together to develop electronic systems for the transfer of prescribing information across the interfaces in the Community and in Hospitals. At discharge from hospital this would include full details of medication changes that had occurred during the inpatient stay.

B. THE PATIENT IN HOSPITAL

1. The patient's understanding of their medication is an essential component in ensuring future safe treatment. A patient's medication should be part of the ongoing discussion between hospital staff and the patient concerning their care throughout their hospital stay, and should not be addressed only immediately prior to discharge.
2. Hospitals should use the patient's own GP prescribed medication that has been identified and approved for use, during the inpatient hospital stay. LHGs, Health Authorities, GPs and patients should agree that GP prescribed medication can be used during the patient's stay within the hospital service.
3. When a patient is supplied with medication during their inpatient stay a "patient pack" should be provided and pre-labelled for use after discharge, when appropriate.
4. Hospitals should install individual patient bedside medicines cabinets to facilitate the use of "patient packs" and the introduction, where appropriate, of self-medication systems for use as part of the inpatient stay.
5. All nursing and pharmacy staff involved in medication systems at the ward level must receive appropriate training and demonstrate and maintain requisite knowledge and skills.
6. Training and accreditation systems should be developed for nursing and pharmacy staff on the safe administration of drugs and on medicines-related duties at ward level.
7. There should be an All-Wales prescription chart and a standardised approach to electronic prescribing, especially to assist medical and nursing staff during their 'rotational' training and their subsequent career pathways.

C. THE PRESCRIBING OF MEDICINES

Clinical Governance

1. The National Assembly for Wales should recognise that improvements in quality of health services may substantially increase certain prescribing expenditures and that improving prescribing behaviour on the part of doctors and other prescribers has its part to play in finding the necessary resources.
2. All staff undertaking prescribing should be appropriately trained and undertake accreditation to carry out these functions within the recognised limits of their competence.
3. All prescribers should be given training in communication and counselling. Clinical Audits in Wales must reflect this training and its effect on prescribing and other consultation outcomes.
4. The roles of pharmacists and nurses as supplementary prescribers must be developed so as to offer patients regular opportunities for dialogue about and monitoring of their medicines.
5. There should be a continuing drive for more effective prescribing, involving adoption of new drug regimens as well as encouraging appropriate use of established agents. Wales is some way from being sure that it is achieving clinical effectiveness and cost efficiency from the £434 million it now spends on medicines. That is true at a national level: the wide variations in prescribing patterns between practices suggest that it is also true at a local level.
6. There should be a new partnership of related organisations in Wales, which could be known as Welsh National Prescribing Support Service, which would develop a national role in advising on all aspects of safe and effective prescribing.
7. There is an important need for GPs to monitor carefully the repeat prescribing of drugs to patients. The use of suitably trained pharmacists in clinical medication review should become the norm throughout Wales as part of an enhanced collaboration between doctors and pharmacists.
8. There must be attention to decision opportunities to ensure that changes to treatment regimens can be implemented competently where they are felt to be necessary.

Wider Options

9. New budgetary freedoms should be employed by Local Health Groups (LHGs) to ring-fence funding previously spent on prescribing to allow access to other services. Several successful "Prescription for Exercise" schemes have been run but evidence for its effectiveness is mixed. Other interventions such as cognitive therapy should be piloted and funded from the drugs budget when deemed effective and relevant.

10. Specific attention should be given to reducing levels of benzodiazepine (tranquilliser) prescribing in Wales and, more generally, to increasing the capacity for recognising and dealing with mental health problems in the Community.

D. INFLUENCES ON PRESCRIBING CHOICES

Training and Development

1. All Doctors, Pharmacists and Nurse Practitioners should see accredited Continuing Professional Development (CPD) programmes in Therapeutics as essential to their professional practice, as with all other maintenance of competence and knowledge.
2. Training programmes by academic bodies should be developed to fulfil this requirement, and appropriate incentives should be put in place where the Terms of Service of any profession justify them.
3. Strong encouragement should be given to practice-based CPD opportunities that are independent of sponsorship from the Pharmaceutical Industry.
4. There should be development of The Welsh Medicines Resource Centre, (WeMeReC), to build upon the success of their distance-learning and training pack materials by:
 - increasing the publication programme
 - increasing GP participation
 - extending the work to other healthcare professionals, including hospital doctors, pharmacists and nurse prescribers
 - use of interactive internet publications
5. (The Group acknowledges the requirement for additional resources to fulfil these developments.)

The Strategic View

6. There should be defined (and subsequently updated at regular intervals), an All-Wales Prescribing Strategy, as a recommendation to the Health Minister, which, on approval and implementation, would clearly guide the management of disease by medication for the whole of the NHS in Wales, and represent both the best current clinical evidence and the affordable policies and priorities of the National Assembly.
7. An All-Wales Medicines Strategy Group should be established on a formal basis accountable to the National Assembly, with “Terms of Reference” outlining its roles, responsibilities, formal reporting mechanisms and membership.

8. Health Authorities should retain responsibility for the allocation of resources based on the advice received from the All-Wales Medicines Strategy Group until such time as “Improving Health in Wales” is implemented.
9. Prescribing Committees at LHGs should be retained and their role developed as LHGs evolve and move towards unified budgets (across sectors) in line with “Improving Health in Wales”.
10. Priorities and strategies for influencing prescribing patterns should be locally based to reflect prevailing strengths and weaknesses.
11. Health Service planners should make effective use of prescribing data in Health Improvement Plans (HIPs), as an indicator of treatable morbidity in the Community.

Local Professional Choice

12. Drugs and Therapeutics Committees at NHS Trust level should be retained, in view of their wider remit, but opportunities to transfer some of the prescribing issues to LHGs should be explored.
13. A higher level of prescribing advice and support should be given to practitioners, particularly as new groups of prescribers enter the service.
14. There should be development of and strong adherence to agreed formularies as a valuable educational tool for prescribers, as well as a safety benefit to patients, as their implementation can encourage and achieve rational prescribing and reduce costs, even at a local level.
15. District-wide or LHG formularies should be implemented, including on a joint basis with NHS Trusts, to ensure dialogue between health professionals in primary and secondary care. Any more “local” formularies should be made consistent with them.
16. With change in the structure of management in the NHS in Wales by 2003, formularies should be developed on an LHG basis, and, after appropriate negotiation, be merged across several LHGs, especially where these are adjacent.
17. There should be closer liaison between Formulary Committees across Wales, particularly in relation to the consideration of costly medicines. This should lead to appropriate harmonisation of large formularies over the whole of Wales.
18. PRODIGY will be introduced progressively by practice computer suppliers as a method for supporting prescribing decisions. There is a need to provide practices with awareness and skills training to maximise the contribution of this development.

Incentives to Improved Prescribing

19. NAFW officials should extend to all of Wales the review of evidence relating to Prescribing Incentive Schemes which showed that, after the end of fundholding, in one Health Authority ex-fundholders unit costs for prescribing rose faster than for non-fundholders.
20. In order to produce flexibility the existing directions on incentive schemes should be modified or the statutory requirement removed altogether.
21. All future incentive schemes should refer to quality measurements as well as budget performance.

E. DISPENSING IN THE COMMUNITY

1. The role of existing 'Patient Information Leaflets' is to accompany a medicine once it has been prescribed. A major deficiency needs to be overcome to ensure that the information properly sets out choices and risks as in informed consent processes employed in clinical trials and clinical treatment.

An Extended Role for the Pharmacist

2. The roles and remuneration of dispensing contractors must be re-examined as legislation develops. A shift from pharmacist remuneration based on items dispensed to "medicines management" should be piloted in order to avoid unnecessary prescribing and dispensing.
3. Pharmacists have a very important role to play in the delivery of repeat medicines to patients.
4. Pharmacists should continue to have the option of working as salaried professionals with a clearly defined and important role within the Primary Healthcare Team, and be funded directly from the LHG.
5. Alternatively, they could continue as independent contractors, providing valuable services and advice where they are already located, but liaise closely with GPs when appropriate.
6. The location of GPs and Pharmacists in the same premises should be encouraged and developed.
7. NHS rules should be reviewed to permit the dispensing of NHS prescriptions via e-pharmacy.

Safe Substitution

8. A system of **generic substitution** could be derived for use in the Community. A small group representing all relevant parties should produce an Action Plan for the implementation of this in the Community. That Plan should highlight:

- objectives
 - method of implementation
 - constraints and methods of overcoming them
 - measurable outcomes , including for the purposes of audit
9. There should be a pilot site where close co-operation would occur between the medical and pharmaceutical professions.
 10. A research site should be set up to test the feasibility of introducing a method of **therapeutic substitution** in the Community which will satisfy the professions in terms of clinical governance, financial audit and the needs of patients.
 11. Appropriate schemes should be introduced which assist GPs in choosing and providing the most appropriate medicine under difficult circumstances e.g. emergency medicine bags, without having to resort to company samples.
 12. The amount spent on such ‘specials’ in Wales should be investigated and methods of obtaining the best value for money examined.

F. DISPENSING IN THE HOSPITAL

1. Trusts which have an acute hospital facility should provide pharmaceutical services which effectively meet urgent clinical needs at all times, including work on the wards.
2. Systems should be introduced which use patients own medicines whilst in hospital, which encourage self-medication during hospital stays and which unify prescribing choices between hospitals and local GPs.
3. Trust Chief Pharmacists should be given the responsibility and resources to establish effective “medicines management” systems.
4. NAFW, Health Authorities, LHGs and Trusts should recognise that there are various implications of this and there may be a need to pump-prime hospital pharmacy services to achieve these Controls Assurance and Clinical Governance improvements.

G. THE INFORMATION AND FINANCIAL SYSTEMS

Data Flow and Information

1. A system of coding of medicines in Wales should be implemented such that primary and secondary usage data are comparable.
2. Connection of Community Pharmacies to the NHS Wales network is essential to achieve effective communication flow.

3. Resolving the technical and other problems at the Prescription Pricing Service (PPS) is urgent and pivotal to ensuring the maximum benefit from the resources devoted to medicines in Wales.
4. If the technical problems at PPS are solved then sufficient capacity must be deployed to ensure the required throughput of prescriptions. If the technical problems persist then a determined effort is required to adapt existing technology to enable reliable and routine pricing at the point of dispensing and transmission of the data electronically to those who need to receive it.
5. Within the hospital sector systems currently in use are reasonably uniform and should be harnessed to produce comparative information between units and to feedback to Consultant-led teams their own comparisons with peer groups.
6. Work should be commissioned to ensure that hospital prescriptions can be analysed throughout Wales using standardised and comparable indicators of cost and efficiency.

Finding the Money

7. The allocation formula being developed for primary care prescribing in Wales should be relatively simple and based on determinants such as age, sex and deprivation, so having a basis which is understandable mathematically and from first principles. This should be seen as a short- to medium-term measure to ensure equitable distribution of funds and to encourage cost and clinical efficiency.
8. The NHS in Wales presents an opportunity to develop an 'elemental' approach to funding the drugs bill. Based on morbidity data compiled at practice and local level, the GP morbidity database and Welsh Health Survey should be used to map "need for medicines".
9. The emerging National Services Frameworks and other well accepted therapeutic guidelines should be used to calculate expected usage rates and therefore costs of drugs. Such information would provide an innovative tool for resource planning and benchmarking practice at All-Wales and local levels.
10. At an All-Wales level, cost pressures should be reviewed and deficiencies across all budget headings within health, social services and housing recognised. Comparisons with other UK countries should be made.

H. PURCHASING OF MEDICINES

1. The method by which the multi-disciplinary, multi sector, All-Wales Drugs Contracting Committee complies with the EEC Directive on Public Procurement, thereby obtaining the best value for money for the secondary sector without harm to the primary care sector budget, is wholly endorsed.

2. The hypothesis should be tested that the LHGs and even consortia of LHGs should be the purchasing bodies for specific items which are already being purchased within GP practices. They could, therefore, negotiate better terms with respect to the cost of medicines supplied to LHG populations.

I. PARTNERSHIPS AND GOVERNANCE

Real Collaboration

1. The Assembly should create an **All-Wales Forum** to include strong representation from the Pharmaceutical Industry to discuss sales and marketing expenditure in Wales.
2. It should examine:
 - mechanisms for setting priorities
 - current patterns of activity and drivers for change
 - transparency and reporting
 - the establishment of a generic fund to support service training and postgraduate education.
3. When “Improving Health in Wales” is implemented, the NHS representation should be appropriately reconstituted to reflect the new structure of the NHS in Wales.

Sponsorship

4. It is important to acknowledge the major contribution of the Pharmaceutical Industry to innovation in medicine and to continuing medical education. However, industry-sponsored Continuing Professional Development (CPD)-approved programmes are more likely to be respected and beneficial when the control of content and the selection of presenters and moderators rests with a CPD-sponsoring institution.
5. Sponsorship or direct employment by the Industry of service-based posts should cease. Pharmaceutical sponsorship for staff training should be indirect through a generic fund rather than, as at present, through direct provision and funding.
6. Where there is justification for the deployment of **specialist nurses** then they should be funded by the NHS. Existing sponsored nursing posts should be funded by a transfer from primary care drugs budget within the unified Health Authority allocations.

Safeguarding Public Standards

7. The bodies responsible for professional postgraduate education should be asked to work with the Pharmaceutical Industry to formulate a funding mechanism which will ensure integrity of activity whilst demonstrating openness and transparency.
8. Organisers of CPD-approved educational events and the pharmaceutical companies involved should abide by the “Code of Practice for the Pharmaceutical Industry” agreed by the ABPI in relation to hospitality and gifts.
9. Safeguards equivalent to the Department of Health’s ‘Commercial Sponsorship – Ethical Standards for the NHS’ and its “Code of Conduct” should be introduced in Wales and applied to all situations where there is interaction between those who promote and those who commission or influence the use of drugs.
10. The All-Wales Forum should be asked to build upon these standards and to develop codes for NHS Trusts, LHGs and Primary Care Organisations. In all cases it should consider audit mechanisms. The principles underpinning these codes should be based on the ‘Seven Principles of Public Life’ established by the Committee on Standards in Public Life. They should also incorporate the Committee’s specific recommendations relating to sponsorship.

Safe Innovation

11. The Assembly should also consider a **watchdog arrangement** to scrutinise sales promotional activity and to ensure that the standards and codes are adhered to. It must have the ability to investigate complaints that require corrective action. This should extend beyond pharmaceuticals to other commercial activities such as surgical materials, other supplies and property development.
12. The introduction of new products and changes in use must be managed effectively. Necessary drugs and those with proven benefit should be available to all who need them, wastage must be avoided and overall expenditure on drugs must be considered in the context of other demands.
13. The work of CSM Wales should be extended so that all relevant health care professionals in primary and secondary care are strongly encouraged to be aware of their role in reporting suspected adverse drug reactions. CSM Wales should continue to inform health professionals in Wales about the safe use of medicines.
14. The monitoring of the safety of medicines is important in informing decisions relating to rational and cost effective prescribing in Wales.
15. The “Green Card” scheme should be extended to include GPs in Wales
16. The adoption of a performance indicator measuring the frequency of prescribing of new drugs and practices and localities (cost and volume of black triangle drug prescribing).

17. A confidential **Medication Error Reporting Programme** for Wales should be established. Such a programme should work alongside the other agencies with a national role in encouraging and ensuring safe and effective prescribing and dispensing.
18. There should be an investigation of possible linkage between the Drug Surveillance Research Unit in Southampton and prescribing activities in Wales.
19. The NAFW should work with patient groups and the professions to ensure that adequate safeguards are in place against the abuse of electronic prescribing and supplying of medicines.

J. RECOMMENDATIONS FROM PREVIOUSLY PUBLISHED REPORTS

1. The Group identified a number of recommendations from previously published reports which it felt warranted further consideration by the NAFW. They are set out in Chapter 11.

POWERS OF THE ASSEMBLY RELATING TO THE RECOMMENDATIONS

The National Assembly for Wales is responsible for the National Health Service in Wales. It has a duty to continue the promotion of a comprehensive health service designed to secure improvement in the physical and mental health of the people and in the prevention, diagnosis and treatment of illness. Within the framework of Acts of Parliament, the Assembly has a wide range of regulatory and other powers to enable it to carry out this duty. In the most general terms, the Assembly powers cover the role and functions of Health Authorities and Hospital Trusts, the services provided by doctors, dentists and pharmacists in the Community, and the terms of service of Community Pharmacists, GPs, and dentists. These powers also encompass NHS charges, which fall outside the remit of this study. Some related functions are not devolved to the National Assembly for Wales, notably those relating to the licensing and safety of drugs, and determining what drugs can be sold over-the-counter and what drugs supplied only on prescription. Appendix 2 gives a broad outline of those powers of the Assembly which are most likely to be relevant to prescribing."

TERMS OF REFERENCE

- To consider what options the National Assembly for Wales has to improve the prescribing of drugs, the provision of pharmaceutical services and the supply of pharmaceuticals in Wales, taking into account all relevant factors within the framework of the Assembly's powers and responsibilities.
- To quantify the likely benefits and the resources needed to implement these options.
- To identify barriers to implementation and action that the Assembly can take to overcome these barriers.
- To consider what information the Assembly should seek to gather on the need for prescribed drugs and on the contribution of prescribed drugs to the overall health and well-being of the people of Wales; and how these information requirements should be met.
- To make recommendations to the Health and Social Services Secretary.

The focus will be on the Assembly's own powers and responsibilities for prescribing and related matters, either directly or through the NHS in Wales. The group will not be making recommendations on matters not devolved to the Assembly. NHS prescription charges together with charge exemption and remission arrangements also fall outside the scope of this exercise. There are no other constraints on the scope of the group's activities. Within these parameters, the group may interpret its remit as it thinks fit.

CHAPTER 1

PRESCRIBING, PATIENTS AND SOCIETY

Traditional studies of prescribing have focused on the prescriber: how rational is the decision to prescribe and how appropriate and (more recently) cost effective is the selection of product? However, good prescribing must incorporate respect for patients' choices and fit within the wider health and social policy contexts. The benefits of considering patient and social factors in treatment decisions are well known. Furthermore, prescribing is often not a rational process of using a drug for its pharmacological effect. Doctors prescribe for other reasons, described in 1990¹⁰ as:

- to avoid doing something else (giving a sick note, explaining, referring, history taking)
- to maintain contact
- to satisfy an urge to give

This view of prescribing goes some way to explain the wide variations between doctors in their patterns of prescribing.

Concerns of the Public

Patients wish to be prescribed the most effective and appropriate medicines for their particular illness irrespective of cost and, in general, wish to be made aware of possible side effects. This means that professionals in both primary and secondary care have a duty to keep up to date with new developments of proven value.

Patients expect their Medical Records to be kept confidential by the professionals involved in their care.

Patients wish to have a choice of pharmacy outlet to fit in with their normal shopping routines and particularly for the elderly the neighbourhood pharmacy is valued, which is usually nearer than the surgery.

Ⓡ Patients often need advice and support to take their medicines as prescribed and value the role of their local pharmacist in this context as well as for advice relating to non prescription medicines. Consultation with the Pharmacist should be available to the same level of privacy and confidentiality as is expected and required throughout the NHS.

There is general support for patient packs but elderly people with reduced dexterity could have problems with releasing tablets.

Ⓡ Patients would welcome a more streamlined repeat prescribing system to avoid returning to the GP practice at monthly intervals as a formality. In many cases a 3 monthly or perhaps 6 monthly prescription, dispensed and monitored by a named

pharmacy on a monthly basis would be a way forward. This approach would focus on the need for a regular review at appropriate intervals as decided by the GP and encourage close working with the Pharmacist to help to ensure compliance as well as early warning of adverse reactions.

Patients wish to have their medication regularly reviewed to ensure continued effectiveness and appropriateness with minimum side effects. Some patients report that once a prescription has been issued there is little or no interest generated on the part of professionals as to compliance and effects and effectiveness. This must be a cause for concern in terms of the clinical care of patients and inefficiency in the use of NHS resources. The prescription should be regarded as a first stage of treatment, not an end to a consultation.

Ⓜ If patients are genuinely to be at the heart of the NHS, the fault lines and demarcation disputes between pharmacists and GPs, and between primary and secondary care must be eradicated. The patients are entitled to expect the same standards of professionalism from all dispensing contractors, i.e. pharmacists and dispensing general medical practitioners.

The Group was advised of certain issues which were regarded as very important by the general public. These were:

- accurate dispensing of prescriptions at pharmacies and GP dispensaries.
- continuity within pharmacies: e.g. less dependence on locums and better supervision where employment of a locum was unavoidable
- clearly displayed information of pharmacy opening hours and rota arrangements
- seven day per week and even 24 hour availability of a pharmacy service
- the routine advising of patients of the availability of an equivalent drug for purchase when it is cheaper than their prescription
- the labelling and presentation of medicines to show the correct day for use where this is appropriate, especially for the frail elderly.

Many problems which may occur where prescribing does not take full account of patient choice and social issues have been described in the literature. They include:

- Patients who do not understand why medicine has been prescribed will be poorly motivated to take it. This is especially true if the medicine has unpleasant effects and/or the disease has few symptoms. Conversely, patients who are well motivated towards their treatment can have better outcomes.
- Patients who have a poor relationship with their prescriber may not “own up” to not taking a medicine or report its unpleasant side effects.

- Systems for repeat prescribing and dispensing often do not encourage dialogue and review between prescriber and patients.
- Many studies have shown that doctors consistently overestimate patients' desire for a prescription^{1, 2, 3}.
- The ready availability of prescribed medicines when compared with other forms of intervention may lead to medicalisation of social problems. The prescription then creates a dependency on itself and the prescriber, especially if it is a tranquilliser or antidepressant and if it is repeated for a long period.
- Patterns of prescribing appear to confirm social inequity.^{4,5} Patients in affluent areas are more likely to seek health promoting and disease preventing measures like immunisation and less likely to request or receive symptomatic remedies like antibiotics, pain relief or relief for dyspepsia.
- Consultations, diagnosis and treatment decisions are less likely to succeed if there is a demographic or ethnic mismatch between doctor and patient. This is especially true in the area of mental health.^{6,7}
- Diagnosis, selection of treatment and monitoring in the area of mental health depend on the relationship between doctor and patient, the skills of the doctor and the range of alternatives available such as cognitive therapy.
- Anecdotally, other problems are in evidence:
 - ◆ Patients receive medicines from a variety of sources and with seemingly conflicting instructions, names and appearances. This is especially true if they have been a hospital inpatient as well as taking medicines prescribed by their GP. It is sometimes difficult for any professional to be certain that they have a full record of patients' current medications and therefore to provide incontrovertible advice. How then are patients to cope with their medicines?
 - ◆ Consultations may not provide the framework to fully involve patients in decisions about whether to take medicines or the choice of preparation. It is probable that the service could not manage to provide a fully informed consent process for prescribed medicines unless expensive time was found or cope with some of the difficult questions which may result. (For example, should a patient take warfarin which would reduce their risk of death but when they would prefer not to incur the lesser risk of drug toxicity?).
 - ◆ These concerns about the patient and social aspects of prescribing are general for the NHS. However, there are particular Welsh aspects which need to be understood and action taken.
 - ◆ Approximately 80% of people in Wales visited their doctor in 1998 and, of those, 75% received a prescription.

- ◆ The rate of prescribing per resident of Wales is consistently greater than in England – 26% more items per capita in 1999.
- ◆ The prescribing rate correlates with deprivation – 15 items per person per year in Merthyr Tydfil in 1999/2000 compared with less than 10 in Cardiff and Powys.
- ◆ In 1998 the costs in Wales of a range of symptomatic remedies (anxiolytics, hypnotics, ulcer healing drugs, non steroidal anti-inflammatory drugs) are all above the average for England and Wales combined. In the case of anxiolytics and hypnotics (both mainly consisting of benzodiazepines), the 5 Welsh authorities were all in the top 16 and top 10 respectively of the 105 authorities in England and Wales.

These differences are not fully explained by the different levels of deprivation in the two countries. The rate of prescribing in Wales overall is greater than would be predicted from English data. Even if it were explained in a statistical sense, such an explanation would not in itself diminish the associated problems.

Possible Solutions

Many of the possible solutions to the problems listed here are inevitable or possible benefits of developments already planned or proposed. Recognition of the importance of the patient and social perspectives of prescribing should be translated into specific outcomes for these projects.

Ⓜ Work which is proposed to develop electronic links and records in prescribing should seek to increase the accuracy of medication records held by GPs and provide patients with comprehensive information and advice covering all their medicines. Efforts to implement the recommendations of the Crown Reports associated with secondary prescribing must provide patients with access to knowledgeable and competent medicines management advice.

Ⓜ All prescribers should be given training in communication and counselling. Community Governance Audits proposed for the NHS in Wales must reflect this training and its effect on prescribing and other consultation outcomes.

Ⓜ PRODIGY will be introduced progressively by practice computer suppliers as a method for supporting prescribing decisions. There is a need to provide practices with awareness and skills training to maximise the contribution of this development. The role of existing 'Patient Information Leaflets' is to accompany a medicine once it has been prescribed. The deficiency is of information setting out choices and risks – akin to informed consent processes employed in clinical trials. The NHS in Wales should examine the feasibility of providing patient information to support prescribing at the decision stage.

- Ⓡ Every opportunity should be taken to describe and explain prescribing, pharmacy and other services available to the patient. The aim should be to understand how patients access services and to give them information on which they can base decisions.
- Ⓡ The roles of pharmacists and nurses as supplementary prescribers must be developed so as to offer patients regular dialogue and monitoring of prescribing. There must be attention to decision pathways to ensure that changes to regimens can be implemented, if necessary.
- Ⓡ The roles and indeed remuneration of dispensing contractors must be re-examined as legislation develops. A shift from pharmacist remuneration based on items dispensed to medicines management should be piloted in order to avoid unnecessary prescribing and dispensing, thereby reducing wastage.
- Ⓡ Systems must be encouraged which use patients own medicines whilst in hospital, which encourage self-medication during hospital stays and which unify prescribing repertoires between hospitals and local GPs. Several such developments are described and promoted elsewhere in this report. (see Chapter 8).
- Ⓡ New budgetary freedoms should be employed by Local Health Groups (LHGs) to ring fence funding previously spent on prescribing to allow access to other services. Several successful “Prescription for Exercise” schemes have been run but evidence for its effectiveness is mixed. Other interventions such as cognitive therapy should be piloted and funded from the drugs budget.
- Ⓡ Specific attention should be given to reducing levels of benzodiazepine (tranquiliser) prescribing in Wales and, more generally, to increasing the capacity for recognising and dealing with mental health problems in the Community. The New Flexibilities Guidance¹¹ launched in Wales in 2000 provide for innovative use of funding such as prescribing budgets to commission services traditionally available from other sectors: social services or voluntary sector schemes for example.

CHAPTER 2

GP PRESCRIBING PATTERNS IN WALES

A PRIMARY CARE LED SERVICE

More than 4 out of every 5 persons in Wales will visit their GP at least once a year. The average person in Wales sees their GP over 6 times a year - making a total of some 19 million consultations in Wales every year. By comparison, fewer than one in three a year attend hospital as outpatients or day patients and fewer than one in seven are admitted to hospital overnight. [Source, Health Statistics Wales 1999] For the vast majority of the people of Wales the primary sector is therefore the main point of contact with the NHS and in practice serves to manage most of those health needs which require medical intervention.

On average, 3 out of every 4 people seen by a GP receive at least one prescription. Some 40 million prescriptions are dispensed in Wales every year. This is an average of some 13 NHS prescriptions a year per person. About 80% of these are understood to be repeat prescriptions. The average conceals very wide variations in use between individuals. Patient-related data on prescribing is not collected centrally, but surveys indicate, for example, that on average persons aged 70 and over use some 10 times more prescribed medicines than persons in their 20's, and patients who have bought pre-payment certificates use about 4 times more medicines than the average.

At low levels of aggregation much of the evident variation in prescribing is therefore likely to be due to different case-mixes of patients. At higher levels of aggregation (eg at Local Health Group level) variations are more likely to be due to different patterns of morbidity, and different prescribing practices. Studies presented to the Group by the Audit Commission indicate that there are no coherent patterns across Wales of indicators of good prescribing practice. Different areas appear to have different strengths and weaknesses. It should follow that priorities and strategies for influencing prescribing patterns should also differ locally, to reflect these variations.

Health solutions Wales provide detailed data on prescribing by GPs in Wales, in electronic form. [All-Wales data will be available later this year on the internet.] This is a valuable resource, not only for the purposes of managing prescribing, but also as an indicator of the extent and distribution of treatable medical conditions which are managed in the primary care sector. This resource has to date been largely under-utilised in NHS planning.

Appendix 3 provides a quantitative overview of GP prescribing patterns in Wales.

Possible Solutions

Ⓡ priorities and strategies for influencing prescribing patterns should be locally based to reflect prevailing strengths and weaknesses.

Ⓡ Health Service planners should make effective use of prescribing data in Health Improvement Plans, as an indicator of morbidity which is treatable in the Community.

CHAPTER 3

PRESCRIBING INFORMATION SYSTEMS

Problems Identified

The detail of the prescribing information that has been available is set out in the Appendix 7. The largest part of the budget for drugs in the NHS in Wales is expended in general practice, some £390 million at present. As each prescription presented to the Community Pharmacist for dispensing has to be paid for data is generated. Data on cost and usage are then generated when each prescription which has been dispensed is sent to the Prescription Pricing Service (PPS) for payment. This can be used by Health Authorities and Local Health Groups to determine the types of drugs that are the most costly and which are increasing or decreasing most rapidly in usage. The systems then enable advisers to track differences between practices, groups of practices, Local Health Groups and Health Authorities. Unfortunately, the data does not include information about patients or diagnosis. Even so, the information has been of inestimable value in ensuring that prescribing patterns are logical and based on professional evidence rather than on, say, commercial activity.

Unfortunately technical and management problems at the Prescription Pricing Service has meant that in 1999/2000 for a period of six months (October 1999 to March 2000) only sampling of prescriptions was used to determine payments to pharmacists. Again this year the service is not yet managing to process one month's prescriptions within one working month and another backlog is developing.

Possible Solutions

Ⓜ The solution to this problem is urgent and pivotal to ensuring the maximum benefit from the resources. If the technical problems are solved then sufficient capacity must be deployed to ensure the required throughput of prescriptions. If the technical problems persist then a determined effort is required to adopt existing technology to enable pricing at the point of dispensing and transmission of the data electronically to the centre.

Within the hospital sector, the Group heard that systems currently in use are reasonably uniform and could be harnessed to produce comparative information between units and to feed back to Consultant-led teams their own comparisons with peer groups.

Ⓜ It is recommended that work be commissioned to ensure hospital prescriptions can be analysed throughout Wales using standardised and comparable indicators of cost and efficiency.

CHAPTER 4

ADVISORY COMMITTEES AND THEIR POTENTIAL

Prescribing Advice and Support

Prescribing advice and support can be defined as the use of additional professional input into one or more elements involved in the prescribing process. It has the overall objectives of promoting high quality, cost-effective medicine use and of improving the pharmaceutical care of patients. This should allow NHS resources to be used more effectively and practices to operate with greater efficiency, allowing GPs more time to spend with individual patients and also to improve the health of their practice's population.

Current Position

Promoting evidence based, clinical and cost effective prescribing for patients is a complex process involving input at different levels. A framework has evolved within NHS Wales to support prescribing decisions at practitioner level drawing on advice from a number of sources.

1. Practitioner Level

Prescribing support at this level is usually on a 'one to one' basis.

- **GPs**

The role of education and training for GPs at this level is referred to later in the report on page 32.

- **Clinical Directorates in NHS Trusts**

Support is through clinical pharmacists assigned to the Directorate.

In both settings support involves advice on prescribing patterns and trends, formulary development, implementation and monitoring, medicines management and management of resources. Individuals providing support at this level will also cascade prescribing advice coming from other tiers within the NHS.

2. Local Health Groups and NHS Trusts

Prescribing support at these levels is directed towards promulgating best practice across the organisation and effective management of resources.

- **Local Health Groups (LHGs) - Prescribing Committees**

Established in April 1999, LHGs have responsibility for unified budgets which includes the prescribing allocation.

Most LHGs have identified a person to lead on prescribing issues, many have prescribing committees and a number have prescribing advisers either employed by the LHG or the parent Health Authority.

Reporting to the LHG Board the prescribing committees are multi-disciplinary and consider prescribing issues as they effect the LHG and the management of its resources. Whilst LHGs are in a position to influence prescribing choice they are unable to control expenditure directly.

- **NHS Trusts – Drugs and Therapeutics Committees NHS Trusts**

Reporting, to the NHS Trust Board these are often well established, multidisciplinary, cross sectoral committees with a clear remit. [Ref WHC 88(66)].

In addition to encouraging rational prescribing through formulary development and medicines management these committees encourage good practice and authorise protocols and procedures for use within the Trust. Often acting on behalf of the Trust they will also address issues such as liability and risk management.

Closer working with LHGs should be encouraged as the NHS moves towards more unified working the potential for merging LHG prescribing committees and NHS Trust Drug and Therapeutic Committees needs to be explored.

3. Health Authorities – Prescribing Committees

Prescribing support at this level is strategic in nature. The composition and remit of Committees may vary but are usually multi-disciplinary and have input from LHG and NHS Trusts from within the Health Authority. They address issues such as the managed introduction of new drug entities, implementation of national guidance, development of shared care approaches to medicines management.

4. National Assembly for Wales

Established in July 1999. The Assembly has responsibility for the NHS in Wales. It develops and implements policy through changes in legislation and issues guidance to the NHS in Wales on issues relating to prescribing matters.

The current advisory structure is supported by the following:

- **National Institute for Clinical Excellence (NICE)**

Established in 1999, to provide authoritative guidance to the NHS (England and Wales) on which treatments can be recommended as both clinical and cost effective. Accountable in Wales to the National Assembly there are opportunities to influence the Institute's work programme to meet the needs of the NHS in Wales.

- **All-Wales Medicines Forum**

Established in November 1997, after it was recognised that the potential for duplication of effort at the Health Authority level in assessing evidence, particularly in respect of new medicines, was considerable and that there was merit in collaboration. Comprising of Directors of Public Health and Directors of Pharmaceutical Public Health from each Health Authority the Forum currently advises Chief Executives of Health Authority's on issues such as the managed entry of new drugs and other strategic issues related to medicines.

- **Medical and Pharmaceutical Advisers Forum**

Initially established to act as a Forum for advisers working for Health Authorities. Its membership has been expanded to include those providing advice at LHG level and is set to embrace other professions with prescribing rights (dentists, nurses etc).

It has been instrumental developing prescribing information systems and prescribing indicators.

- **Welsh Medicines Resource Centre (WeMeReC)**

Since its inception in 1993 the Welsh Medicines Resource Centre (WeMeRec) was evolved into a service that is unique to Wales and provides prescribing information and advice to GP's, Community Pharmacists, prescribing advisers and postgraduate tutors through a variety of publications.

Problems Identified

Whilst there are a number of groups and individuals involved in prescribing advice and support at a variety of levels within the NHS Wales there is no standard pattern of approach to prescribing issues, the potential for duplication of effort is considerable, as has been seen with formulary development.

It is not always clear how decisions are made, by whom, on what basis and where the accountability for such decisions lie.

The ability to effect decisions at the appropriate levels and manage the allocation of resources accordingly is essential and whilst local ownership is the key factor, effective mechanisms for managing costly drugs within the NHS are pivotal to the successful management of available resources.

There is little interface between the various levels within the NHS and similarly between the NHS and the National Assembly and this needs to be redressed.

The ability to monitor the effectiveness of the current structures is limited and needs to be further developed.

Possible Solutions

The advisory structure must be able to respond to the significant changes that will occur in NHS Wales over the next few years. It needs to be able to provide advice in an effective, efficient and transparent manner to those organisations and individuals that have responsibilities around strategic medicines management and prescribing.

- **All-Wales Level**

That an All-Wales Medicines Strategy Group be established on a formal basis accountable to the National Assembly.

Its role should be strategic and advisory in nature.

Whilst the All-Wales Medicines Strategy Group itself will not take the final prioritisation decisions (currently a responsibility of Boards of the HA, LHGs, NHS Trusts), its advice should be taken fully into account by those who are ultimately charged with making such decisions.

In making recommendations the All-Wales Medicines Strategy Group should be aware of the constraints affecting HAs, LHGs, NHS Trusts.

To fulfil its role it needs to have the full professional and managerial support of the National Assembly, HA, LHG and NHS Trust Boards within Wales.

It should engender ownership of all the organisations that are represented on it and by it.

It should be seen as the conduit through which consensus can be reached on medicines management issues, especially those affecting both primary and secondary care.

Access to high quality, independent information on medicines is vital to ensure that advice is robust – the role of the proposed Welsh National Prescribing Support Service (WNPSS) in this respect will be essential and is referred to on page 84.

The All-Wales Medicines Strategy Group will need to be aware of new drug developments including information about clinical trials and links with Research Ethics Committees will be required.

Sample terms of reference and good management points for an effective strategy group are attached (at Appendix 4) together with a suggested ‘core’ membership.

- **Commissioning Level**

The advice of the All-Wales Medicines Strategy Group will inform the commissioning process and ensure that prescribing and medicines use issues

are given due weight in wider healthcare planning and service delivery agreements.

Health Authorities currently have responsibility for allocation of resources.

Decisions regarding the allocation of resources should be taken at Board level and LHGs, NHS Trusts informed of these decisions.

Effective two way communication channels will need to be developed between the Health Authority and the All-Wales Medicines Strategy Group and between the Health Authority and the LHGs and NHS Trusts within its area.

It is recognised that the locus for commissioning services will change with the implementation of “Improving Health in Wales”.

- **LHG Level**

Prescribing committees at this level should be retained and, as the role of the LHG evolves, there will be opportunities for merging aspects of the work currently undertaken by LHGs and NHS Trusts particularly those aspects which impact on primary care and where a shared approach to care is required. (See chart on page 30)

- **NHS Trust**

There will still be a need for Drugs and Therapeutics Committees at this level to ensure the effective, efficient and safe use of medicines within the Trust, whilst there are opportunities for joint working it is recognised that the major proportion of drug expenditure at this level is on products used only within the hospital sector. It is also recognised that D & T Committees at this level have a wider remit as outlined (see chart on page 30).

- **Practitioner Level**

Irrespective of sector of practice practitioners will need an increasing level of support in implementing decisions made.

- **Roles and Relationships**

The manner in which the various tiers relate to each other will determine the success of any advisory structure (see chart page 31).

Summarised Recommendations

Ⓜ That an All-Wales Medicine Strategy Group should be established on a formal basis accountable to the National Assembly with “Terms of Reference” outlining its roles, responsibilities, formal reporting mechanisms and membership.

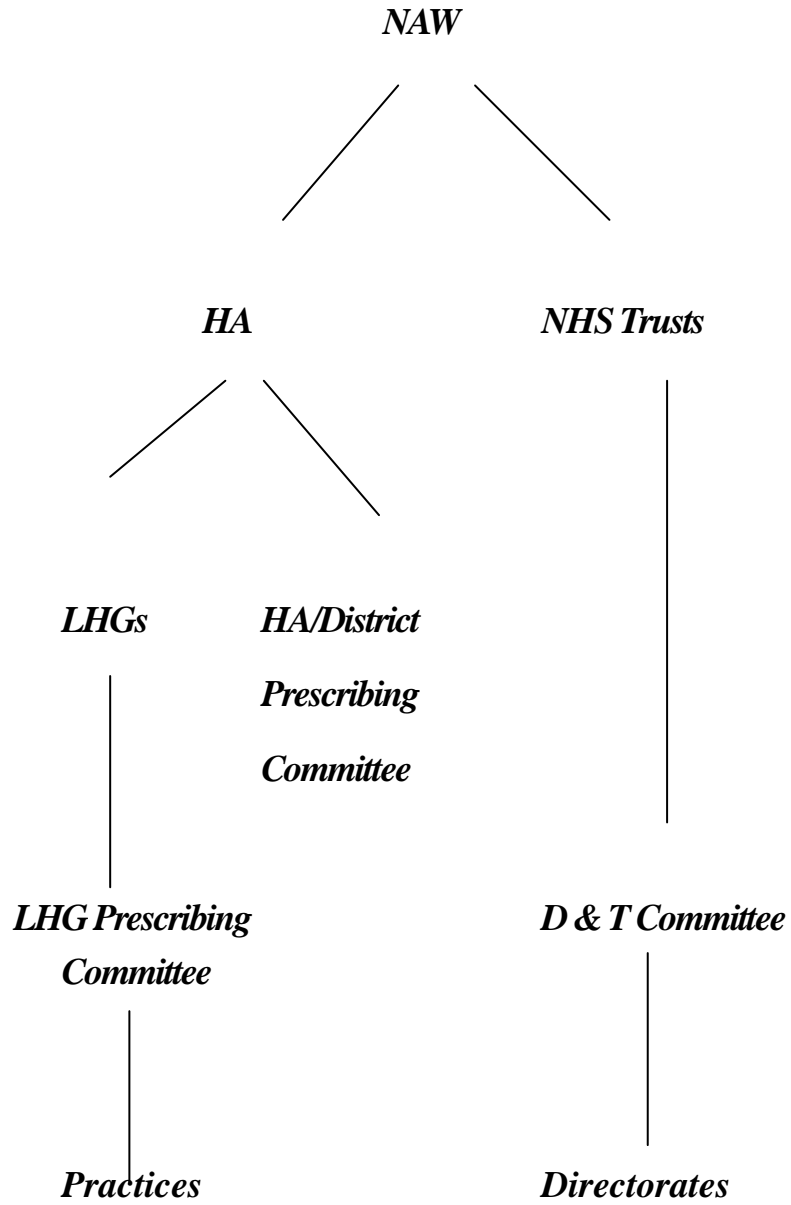
Ⓡ That HAs should retain responsibility for the allocation of resources based on the advice received from the All-Wales Medicines Strategy Group until such time as “Improving Health in Wales” is implemented.

Ⓡ That prescribing committees at LHGs should be retained and their role developed as LHGs evolve and move towards unified budgets (across sectors) in line with “Improving Health in Wales”.

Ⓡ That Drugs and Therapeutics Committees at NHS Trust level be retained, in view of their wider remit, but that opportunities to transfer some of the prescribing issues to LHGs should be explored.

Ⓡ That a higher level of prescribing advice and support is given to practitioners, particularly as new groups of prescribers enter the service.

ADVISORY STRUCTURE
Current Position



ADVISORY STRUCTURE
PROPOSED

CHAPTER 5

INFLUENCES ON PRESCRIBING CHOICES

THE ROLE OF EDUCATION AND TRAINING IN PROMOTING QUALITY PRESCRIBING IN WALES

Education is a fundamental component of all validated approaches to encouraging uptake of new evidence. Lack of awareness of published evidence may result in considerable delay in the uptake of even major therapeutic advances, and some patients may be denied effective treatments.

Education in therapeutics and prescribing issues is important for all health professionals involved in the therapeutic process, including doctors, dentists, pharmacists and nurses. As well as undergraduate training, lifelong learning through continued professional education is important in this continuously changing area. Learning tools available in Wales include seminars and workshops (including those organised by the Welsh Centre for Postgraduate Pharmacy Education), individual feedback on prescribing, publications from the Welsh Medicines Information Centre, distance-learning and training materials from the Welsh Medicines Resource Centre, (WeMeReC), and a University accredited teaching programme in Therapeutics.

The Diploma in Therapeutics was established by the Department of Pharmacology, Therapeutics and Toxicology, in association with the Department of Postgraduate Studies (General Practice) of the University of Wales College of Medicine, in 1994. Its specific objective was to promote more rational and cost-effective prescribing in general practice in the Principality. Because busy GPs in rural areas might have had difficulty in attending a centre some distance away, a distance-learning approach was adopted, based on case-based learning and with an emphasis on evidence-based medicine (*Bracchi R, Smail S A and Routledge P A. Diploma in Therapeutics: a distance-learning approach. Prescriber 7: 26-29 (1996).*). More than 250 candidates (a third of them from Wales) have enrolled in the Diploma in the past 6 years. These have predominantly been GPs, but have also included hospital and Community Pharmacists and nurse practitioners. The Group recognises and commends the contribution of the Diploma in Therapeutics to education in rational prescribing for GPs in Wales.

Possible Solutions

® All Doctors, Pharmacists and Nurse Practitioners should see accredited Continuing Professional Development programmes in Therapeutics as essential to their professional practice, as with all other maintenance of competence and knowledge. Training programmes by academic bodies should be developed to fulfil this requirement, and appropriate incentives should be put in place where the Terms of Service of any profession justify them.

SOURCES OF PRESCRIBING ADVICE

Publications

Traditionally doctors have been distributed with copies of the **British National Formulary**. This is a list of drugs currently available arranged by therapeutic group and contains short monographs setting out the indications for and cautionary notes about the subgroups and individual substances.

The **Monthly Index of Medical Specialities (MIMS)** is a commercially produced document that lists all the commercial details of drugs marketed in the UK, together with some guidance. These two documents have been the mainstay of written advice to practitioners.

The UK Government's Department of Health produce a publication called **Prescribers' Journal** and they distribute the **Drug and Therapeutics Bulletin** produced by the Consumers' Association.

The development of the **National Institute for Clinical Excellence (NICE)** 1999 is designed to provide doctors with a source of authoritative opinion backed by a process that thoroughly examines the available evidence but on, as yet, a very limited list of drugs and interventions

Pharmaceutical Company Representatives

On a more personal level the Pharmaceutical Industry has employed representatives to engage individual doctors and groups of doctors in discussion. More detail of these activities is in Chapter 5.

Clinical Pharmacists

Clinical pharmacists within hospitals and drug information pharmacists have formed networks serving hospital prescribers.

Primary Care Medical Advisers

Between 1950 and 1992 experienced GPs were appointed to the Regional Medical service and one of their activities related to giving prescribing advice directly to GPs.

In 1992 Health Authorities were required by statute to appoint medical practitioners to make enquiries about prescriptions. These primary care medical advisers have been active in promoting best advice on prescribing.

Primary Care Support Pharmacists

More recently primary care support pharmacists have developed a direct role guiding GPs in choice of drugs and management of prescribing. These systems are addressed in more detail in Chapter 8.

CHAPTER 6

RELATIONSHIPS WITH THE PHARMACEUTICAL INDUSTRY

Background

At a simple level, the Pharmaceutical Industry is a supplier and the NHS and its patients purchasers and consumers of products. However, the relationship is more complicated than almost any other in health services.

The reasons are:

- The price paid for drugs includes a significant element for sales and promotion. The extent of advertisement, face to face marketing and sponsorship undertaken by the Pharmaceutical Industry is probably second to none. Estimates vary from 10%, 20% to 40%¹⁻³ of pharmaceutical companies' income which is spent on these activities. Unfortunately, the ABPI were unable to supply the Group with data on the precise situation in Wales.
- In the UK, Central Government determines the overall cost of drugs through the Pharmaceutical Price Regulation Scheme. Wales does not have a facility to negotiate its own drug prices. It is the use of the sales and promotion element of drug costs (a figure between £40 million and £100 million per annum) which is a unique aspect of the pharmaceuticals market.
- Whilst individual medicines require prolonged testing prior to marketing, pharmaceuticals continue to provide a rich source of innovation of available treatment. The NHS needs robust mechanisms to consider choices and to fund and manage changes in service provision.
- By comparison with other calls on the health and social care purse, most pharmaceuticals are available immediately. This fact brings measures such as formularies and restrictions on new drugs to the fore.

These issues can be addressed as two main problems:

- The need to align expenditure on drugs promotion more closely with NHS priorities
- An imperative to ensure that decisions on whether to prescribe a drug or introduce a new drug have an equal status with decisions about other core resources.

Problems Identified

Sales, marketing and general support for pharmaceuticals is likely to account for between £40m and over £100m of NHS expenditure in Wales each year. This investment is used for:

- direct sales and marketing including hospitality, sponsorship

- support for educational events
- training of NHS staff
- employment of healthcare staff and sponsoring of posts
- grants for research
- development and other support for the NHS

Whilst many of these activities have potential to benefit the NHS and its patients, there is little or no external participation in how companies allocate these funds and no openness about what has been spent. The Group received particular concerns about industry funding for:

- **direct sales activities.** Although it is often said that GPs prefer to receive information from sales representatives, this statement is not a guarantee that such advice is balanced, appropriate and of high quality. Doctors often underestimate the effects of advertising bias on their views about drug choices.⁴
- **training, sponsorship and employment of healthcare staff.** Pharmaceutical companies recognise the opportunities for product promotion through direct access to staff. They will undoubtedly promote further developments in training and influencing prescribers in particular the ‘new prescribers’, with large numbers of nurses prescribing following the Crown Reports. A direct link between companies commercial interests and the selection and ordering of goods is potentially in conflict with Nolan Principles of Integrity, Objectivity and Accountability in Public Life.
- **‘Research’** activity involving Pharmaceutical Industry access to health records and health service information.
- Conversely, the current level of **postgraduate education**, especially of doctors, would be unsustainable without money from the Pharmaceutical Industry. In this instance, the concerns are well expressed by a recent Lancet⁵ editorial describing Continuing Medical Education in USA. With so much material coming ‘through the filter of industry’ how can integrity be ensured?
- Informally, the Group is also aware of concerns about the level and nature of **sales and hospitality** activity. Whilst many companies are members of the ABPI and therefore adopt its code of practice, it would serve the interests of the industry, the NHS and its patients were these practices to be subjected to greater scrutiny.

In summary, if a fund of between £40m and £100m is an inevitable result from UK agreements on drug pricing, how can it be better channelled to meet NHS needs and priorities?

Possible Solutions

Ⓡ The introduction of new products and changes in use must be managed effectively. Necessary drugs and those with proven benefit should be available to all who need them, wastage must be avoided and overall expenditure on drugs must be considered in the context of other demands.

Ⓡ The Assembly should establish an All-Wales Forum with the Pharmaceutical Industry to discuss sales and marketing expenditure in Wales.

It should examine:

- mechanisms for setting priorities
- current patterns of activity and drivers for change
- transparency and reporting
- the establishment of a generic fund to support service training and postgraduate education

Ⓡ The Department of Health's 'Commercial Sponsorship – Ethical Standards for the NHS'⁶ should be introduced in Wales and applied to all situations where there is interaction between those who promote and those who commission or influence the use of drugs.

Ⓡ The All-Wales Forum should be asked to build upon these standards and to develop codes for NHS Trusts, Local Health Groups and Primary Care Organisations. In all cases, it should consider audit mechanisms. The principles underpinning these codes should be based on the 'Seven Principles in Public Life' established by the Committee on Standards in Public Life.⁹ They should also incorporate the Committee's specific recommendations relating to sponsorship. (see below).

Ⓡ The Assembly should also consider a watchdog arrangement to scrutinise sales promotional activity and to ensure that the standards and codes are adhered to. It must have the ability to investigate complaints that require corrective action. This could extend beyond pharmaceuticals to other commercial activities; surgical materials, other supplies and property development, for example.

Ⓡ Sponsorship or direct employment by the industry of service based posts should cease. Pharmaceutical sponsorship for staff training should be indirect through a generic fund rather than, as at present, through direct provision and funding.

Ⓡ Similarly, the bodies responsible for professional postgraduate education should

be asked to work with the Pharmaceutical Industry to formulate a funding mechanism which will ensure integrity of activity whilst demonstrating openness and transparency.

Having given considerable time to the issue of managed introductions for drugs, the Group does not recommend that a special procedure be put in place for this purpose. At the time of marketing, there is insufficient information to properly evaluate new drugs. Thereafter, bodies such as NICE are well placed to carry out this task. There is scope, however, for examining two issues:

- What are the benefits of extending the Schedule 10 list in Wales? This development would effectively result in a Welsh prescribing list. Such a list would not preclude shorter more restrictive lists being developed in local areas. Would such a Welsh list deliver advantages?
- How can local Health Improvement Planning (HIP) processes be supported to ensure that they take account of drugs alongside other service pressures? In resisting the case for making high cost drugs an issue for special cost-cutting planning processes, there is an assumption by the Group that the developing HIP process will deal with this issue effectively.

SPONSORED NURSES

Problems Identified

It is becoming increasingly common for NHS Trusts throughout Wales to accept sponsorship of specialist staff from the Pharmaceutical Industry and from the suppliers of medical appliances. The Committee gave consideration to this occurrence.

For many years hospitals and Community units have relied on sponsorship to provide certain specialist nursing care. A recent enquiry in one Health Authority in Wales revealed that this sponsorship was particularly common for the provision of Ostomy products. The results of the enquiry indicated that there is an influence on the prescribing patterns in the Community as a consequence.

Possible Solutions

The Group considered evidence that company sponsorship of nurses within Trusts could distort the advice offered. Concerns were also expressed that the introduction of nurse prescribing within the Principality could add to the possibility of bias in product choice by sponsored nurses.

Ⓜ The Group decided that if there was an evidence based justification for the deployment of specialist nurses then they should be funded by the NHS. Given the existing effects on GP product choice, the Group recommends that existing sponsored

nursing posts should be funded by a transfer from primary care drugs budget within the unified Health Authority allocations.

SPONSORED AND PROMOTIONAL POSTGRADUATE EDUCATION AND THE PHARMACY INDUSTRY

The UK Pharmaceutical Industry has been innovative over many years in producing new medicines for the effective management of disease. In order to invest in further research and development, pharmaceutical companies must recommend their products to potential prescribers, and this is done in a variety of ways, including sponsored educational events and visits by pharmaceutical company representatives.

The Pharmaceutical Industry currently funds about 50% of all Continuing Medical Education (CME) and post-graduate training of medical staff in the UK. However, a distinction can be drawn between sponsorship of educational events where the control of content, presenters and moderators lies with the CME-sponsoring institution and those in which the content is decided by the pharmaceutical company and is also directly promotional.

A survey of 100 GPs in Wales showed that while a majority (60%) disliked the promotional aspects of pharmaceutical company organised meetings held away from their practices, a similar proportion nevertheless liked the educational content. The same survey revealed that 60% of those who worked in practices that held meetings organised by pharmaceutical company representatives thought them to be of little or no educational value. (*Hayes TM et al. Br J Gen Pract 1990; 40: 510*)

The ABPI has set guidelines related to promotion and sponsorship, to which its member companies are expected to adhere. These specify that sponsored meetings should have a clear educational content, that hospitality for sponsored educational events should be proportionate and subordinate to the main purpose of the event, and such sponsorship should be clearly indicated at the meeting or symposium and in subsequent reports or proceedings.

Possible Solutions

Ⓜ We acknowledge the major contribution of the Pharmaceutical Industry to innovation in medicine and to continuing medical education. However, industry-sponsored Continuing Professional Development (CPD)-approved programmes are more likely to be considered to be beneficial when the control of content, and the selection of presenters and moderators rests with a CPD-sponsoring institution.

Ⓜ Organisers of CPD-approved educational events and the pharmaceutical companies involved should abide by the Code of Practice for the Pharmaceutical Industry agreed by the ABPI in relation to hospitality and gifts.

Ⓜ Encouragement should be given to practice-based CPD opportunities that are independent of sponsorship from the Pharmaceutical Industry.

CHAPTER 7 RESOURCES

The NHS in Wales incurred expenditure of £434 million (17%) on drugs out of a total spend of £2552 million in 1999/2000 (NHS Wales, Summarised Accounts). Primary care expenditure accounted for £349 million and secondary care £85 million.

Primary care drugs funding (1998-99) is now part of cash limited allocations, and has increased by an average of 8% over each of the past three years. The secondary care expenditure on drugs at hospitals throughout Wales varies and ranges from £1.2million (4%) in Ceredigion NHS Trust to £23million (7%) in Cardiff and the Vale NHS Trust. On average it represents approximately 4% of a Trust's total revenue expenditure.

In recent years both the primary and secondary care sector drugs budgets have been under pressure as a result of volume increases in the use of drugs, general inflation and the introduction of new and often expensive drugs. This report identifies initiatives to improve efficiency and effectiveness that will require even more co-operation between managers and professionals right across the service. It also draws attention to the impact that the Commission for Health Improvement (CHI) and National Service Frameworks (NSF) will have on drugs prescribing over the coming years.

For the future the NHS in Wales will need to continue the drive for greater operational efficiency and clinical effectiveness in prescribing and dispensing through partnership and innovation, which will also enable new drug regimes to be introduced. Proposals for increased spending on drugs will have to be considered as part of the planning process alongside all other clinical developments. The NHS will then need to make informed decisions on how additional discretionary revenue resources will be applied.

The cost of primary care prescribing per capita of population in Wales has been substantially higher than in England {in recent years between 16% and 22%}. The number of prescriptions received by each Welsh resident is greater than for English residents (26% to 30%). In both countries, the share of the total NHS resource spent on primary care prescribing has increased considerably (OHE Compendium of Health Statistics).

There is a need to ensure that the priority given to expenditure on drugs is equitable between areas and appropriate in the context of competing demands for health and social care priorities. there is a pressing need to ensure that the 20% premium represents good value for money, on grounds of patient benefit, patient safety and equity of care for all.

The Audit Commission Report – A Prescription for Improvement (1994)³ and a comparison of English and Welsh prescribing¹ both point to greater use of expensive branded medicines by Welsh prescribers than those in England. While there will have been changes since data for those reports was gathered, there has been little or no change in the relative prescribing costs of England and Wales, suggesting that the

available evidence points to the need to evaluate and continue to compare cost effectiveness in prescribing between Wales and England.

Ⓜ There should be a continuing drive for better prescribing, involving adoption of new drug regimes as well as encouraging appropriate use of established agents. In essence, Wales is some way from being sure that it is achieving clinical effectiveness and cost efficiency from the £434 million it now spends on medicines. That is true at a national level: the wide variations in prescribing patterns between practices suggest that it is also true at a local level.²

Problems Identified

The allocation of 17%, and rising, of NHS resources to medicines is not unquestionably justified by evidence of effectiveness and efficiency. Neither is it clear to what extent the increasing share of resources given to drugs reflects increasing need relative to other services such as Community and hospital services or even non-health sector services such as housing and social support. The most powerful influence on the setting of national allocations to these services is “observed demand” (current expenditures). The question is, is the difference in growth rate therefore at least in part a result of encouragement and almost no resistance to the availability of prescribed medicine compared with supply difficulties in other sectors? What would happen to relative demand if a doctor could prescribe a house adaptation or home help as easily as an antibiotic?

Following a decision to allocate a particular share of the NHS resource to prescribing, the portion given to individual Health Authorities, LHGs and (often) practices is largely based on historical spend. There is little reference to an ‘ideal’ model (what should be the cost of prescribing for this group of patients?) and little incentive to produce sustained cost efficiency.

There is generally a very limited capacity to plan for the costs of new drugs or therapeutic regimes. Predictions of costs are difficult at the time that drugs are first licensed and take-up rates are variable. In contrast, the costs of implementing newly introduced National Service Frameworks may be difficult to absorb within a short timescale.

“Clinical Freedom” gives Doctors the discretion to select the medicine most appropriate to the individual patients needs.

However, variation in doctors’ prescribing practice often appears greater than can be justified by differences in patients’ needs. It is important to ensure that prescribing decisions are rational and seen to promote the most clinically- and cost-effective use of resources.

Possible Solutions

Ⓡ An allocation formula is being developed for primary care prescribing in Wales and applied at the Health Authority level. It should be relatively simple and based on determinants such as age, sex and deprivation, so having a basis which is understandable mathematically and from first principles. This should be seen as a short to medium-term measure to ensure equitable distribution of funds and to encourage cost and clinical efficiency.

Ⓡ The size and managerial arrangements of the NHS in Wales present an opportunity to develop an 'elemental' approach to funding the drugs bill. Based on morbidity data compiled at practice and local level, the GP morbidity database and Welsh Health Survey it is possible to map need for medicines. The emerging National Services Frameworks and other well accepted therapeutic guidelines offer an opportunity to calculate expected usage rates and therefore costs of drugs. Such information would provide an innovative tool for resource planning and benchmarking practice at All-Wales and local levels.

Ⓡ At an All-Wales level, there is a need to review cost pressures and recognise deficiencies across all budget headings within health, social services and housing. Comparisons with other UK countries would be valuable. At this macro level, is the relative priority given to drugs appropriate?

CHAPTER 8

CURRENT MEDICATION PROCESSES IN THE HOSPITAL SERVICES

Background

The existing hospital medication supply system used within the hospitals in Wales is based on the premise that the hospital is responsible for the provision of all medication during an inpatient stay. This is based on a Circular from the Department of Health (HM (70) 36).

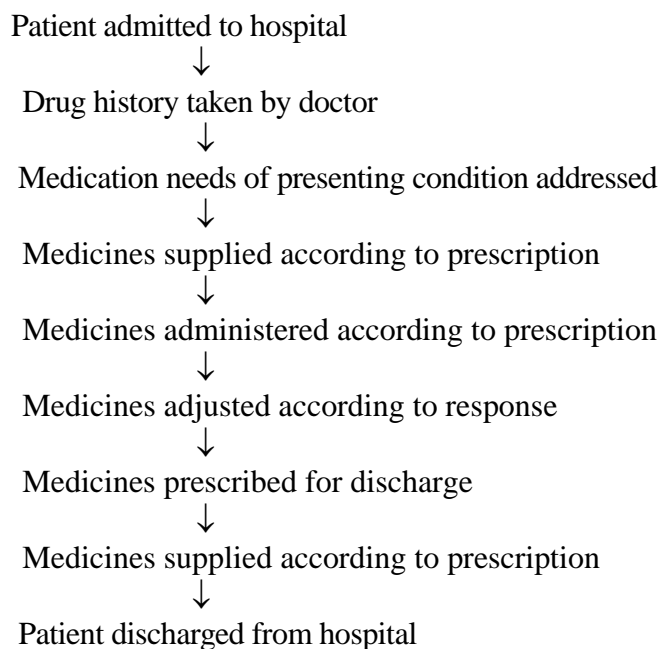
This supply system no longer takes into account the vastly increased range of effective medicines now available to the NHS, nor their packing and presentation. The presentation of medication cannot be taken in isolation from the whole medicines use process, as it is a major contributory factor to some of the risks inherent in the current system.

A significant impact on drugs costs in secondary care could come from reducing waste and error. Waste of medication and staff resources arise from inefficiencies in the medicines management process.

Analysis of the existing hospital medication process has identified key risk issues in the initial drug history taking, initial prescribing, dispensing and drug administration process. The correct identification of medication is a key factor in all of these areas.

The Current Inpatient Medication Process

The current system of medicines used within the hospital service is shown below:



Each part of this process is associated with its own risk, and errors may occur at any stage. It is only by rigorous assessment of the risks associated with these processes that we can achieve risk reduction.

Risk Analysis of the Current Process

The Drug History

The drug history in hospital is traditionally taken by a junior doctor. The sources of information available to the doctor are as follows:

- Medications brought in by patients
- The GP letter accompanying the patient
- The patient
- The relatives or carers

Junior Doctor Knowledge

The medication history is often taken by the most junior member of the medical team, who is also the least experienced. They may, inevitably, have a lack of knowledge of the formulations, appearance, available strengths, and trade names of prescribed and over the counter preparations.

Availability of the Patient's own Medication on Admission

This is influenced by several factors including:

GP Attitude

Many GPs tell patients not to take their GP prescribed medication into hospital, as it may be "lost". This is also reflected in advice given by some paramedics when taking patients to hospital.

Patients' Attitude

This may be based on their previous experience in hospital where medication has not been returned to them. This may have been appropriate but the reasons may have lacked adequate explanation. The patients' attitude, in turn, may be coloured by whether or not they have paid a prescription charge.

Emergency/Elective Admission

It is often the case in an emergency admission that the patient is not in possession of their current medication. Elective admissions can be requested to bring in their medication. This is custom and practice for short stay procedures such as Day Case Surgery and Ophthalmology.

GP Letter and Repeat Medication List

A GP admission letter may accompany the GP repeat medication list. A recent study has shown that approximately 45% of these repeat lists were inaccurate ⁽¹⁾ and contributed to an inaccurate inpatient prescription.

Identification of Drugs on Admission

The Pharmaceutical Industry has worked towards the supply of patient packs and this means that the confirmation of a medicine's identity has been eased. Staff are dealing then with blister packed tablets which are individually labelled by the manufacturer. The absence of the patient's own medication presented in this form is a major hindrance in the collation of an accurate medication history.

(Approximately 20% of patients admitted via the medical admissions ward at the Wrexham Maelor Hospital (summer 2000) brought in their GP dispensed drugs. These 20% of patients accounted for 40% of the pharmacist interventions on the medical admissions unit i.e. the provision of the patient's own drug initiates exploration of issues which may otherwise be overlooked.)

Waste of GP Prescribed Patient's Own Drugs

As outlined above these are not routinely used within the hospital service. There is a significant potential for saving here ⁽²⁾. A recent report for North Wales Health Authority estimated the average value of pharmaceutical waste at £143.00 per kilo. Based on this figure the Health Authority pays for the incineration of approximately £1.5 million worth of unused medication each year. Within one Welsh DGH in 1998/99, approximately £140,000 worth of patient's own medication, of which over 90% was GP prescribed, was incinerated.

Inpatient Prescription Chart Design

The design of this document is a factor in the safe prescribing, dispensing and administration of medicines.

The existing document design is over 25 years old and was originally produced as an All-Wales document. This ceased with the creation of independent Trusts. Several hospitals have redesigned the inpatient chart. This has resulted in variations across Wales, which are confusing to Junior Medical Staff on rotation and career progression, and to anyone else who works over time in several hospitals.

Problems Identified

Approximately 60% of all prescriptions written by junior doctors on the medical admission unit require the intervention of a pharmacist ⁽³⁾, often as a result of an incomplete or inaccurate medication history.

Hospitals purchase drugs for use during the inpatient stay many of which the GP has previously prescribed. Hospital pharmacies may be left with residual drugs for which they have little or no immediate use, once the patient is discharged.

The patient's own medication brought into hospital is removed from the patient and possibly destroyed.

Ⓡ A variety of inpatient prescription charts is now in use in Welsh Hospitals. This has resulted in variations, which are confusing to Junior Medical staff during their rotations and career pathways.

Ⓡ The original All-Wales chart no longer meets the needs of modern healthcare and contributes to error. There is a need for an All-Wales prescription chart and a standardised approach to electronic prescribing.

Addressing the medication needs of the present condition may result in the following actions:

- new medicines' being added to existing therapies
- the treatment's being adjusted according to clinical response
- problem therapies' being discontinued

The effectiveness of this review is jeopardized if the drug history obtained is incorrect. The inpatient prescription may not reflect the patient's drug therapy prior to admission and the appropriateness of new therapies and doses may be confounded by the absence of other drugs that the patient has been taking.

All this may impact on the patient's morbidity, length of stay within hospital and mortality. (For example, an Inquiry by the Cambridgeshire Health Authority into the death of a patient in April 2000 showed that the patient had been given an incorrect dosage of a toxic drug by the GP, and, because of the failure to recognize this on admission to hospital, the regimen was continued and the patient died).

The Supply of the Prescribed Medicine

Delay in medication supply occurs when non-formulary drugs are prescribed, which in turn may lead to a delay or interruption in the provision of treatment for the patient.

The dispensing process involved with the repackaging of medication carries a risk of error. This has been quantified and benchmarked across the Welsh hospitals.

It is possible for the patient to receive the incorrect therapy with adverse effect on morbidity, length of stay and even mortality.

There is the potential for unnecessary or repeated work for pharmacy and nursing staff, delay in the patient's discharge and for increased risk of medicine wastage.

Medicines Administration

Medicines in Welsh hospitals are traditionally issued from the ward drug trolley. The advent of patient packs, with their increased bulk, has meant that the ward drug trolleys are now highly congested, particularly in Medical Units. In addition, packs are presented which have a manufacturer's house style, which renders them very similar. Consequently, there is an increased risk of inappropriate drug selection. Alternatively, nursing staff may not be able to locate a drug and mark it as 'not available' despite its presence within the drug trolley.

From studies conducted within the UK there is an associated drug administration error rate of between 3 and 10% (median 5.5%)⁽⁴⁻¹¹⁾ of doses given.

The Review and the Adjustment of Medication

The prescriber, when evaluating a patient's response, would usually have reason to assume that the previous prescription was based on a sound medication history, a sound supply system and an accurate drug administration system.

If these assumptions are not well-founded the medication may be inappropriately adjusted, which may impact severely on the patient's well-being and length of stay in hospital.

Medicines Prescribed for Discharge

The decision to discharge a patient is frequently taken during a ward round. Discharge prescriptions are not customarily written until the end of the ward round. Nursing staff cite this as the major source of delay in discharging patients. (Process Analysis Reports, Wrexham Maelor Hospital, Annually 1998-2000 inclusive).

Patients' understanding of their medication at the time of discharge is key to minimising waste and achieving the desired therapeutic outcomes. Any intended change should be discussed with them prior to discharge. There is an important body of evidence to indicate that after discharge a significant number of medication problems can arise. A recent study comparing drugs prescribed at discharge from hospital with those prescribed post discharge concluded that one unintentional discrepancy having a definite adverse effect could be prevented for every 19 patients discharged⁽¹²⁾.

In a second study, 12.5% of medication prescribed on discharge was stopped within 6 weeks of discharge and an equal amount started. In these examples of unintended lack of continuity of drug taking, the patient was responsible for 80% of the unintended discontinuations and 40% of the commencements⁽¹³⁾.

In a third study, in 45 out of 50 patients there was a lack of continuity between the drugs being taken on discharge from hospital and those being taken one and two weeks later⁽¹⁴⁾.

A further study demonstrated that 80% of GP practices used reception staff to update their Patient Medication Records (PMR). These staff have little or no knowledge of

the medicines and their task was further complicated by hand-written discharge summaries. The discharge summary was commonly filed with the patient's medical notes before the PMR was updated. From investigations it was clear that on occasions when PMRs were updated new medication was simply added to existing medication. Amendments that were made to medication whilst a patient was in hospital were often not recorded, and old medication was not stopped unless the discharge summary specifically stated that it must be. ⁽¹⁵⁾.

Ⓡ The patient's understanding of their medication is an essential component in ensuring future safe medication. A patient's medication should be part of the ongoing discussion between hospital staff and the patient concerning their care throughout their hospital stay, and should not be addressed only immediately prior to discharge.

Delay in initiation of discharge medication dispensing and consequent delay in discharge (Medicines Supplied According to Prescription)

Important checks made by the pharmacy on "To Take Home" (TTH) medication can lead to delay in discharge.

It is estimated that approximately 15% of TTH prescriptions reaching the dispensary have to be queried by pharmacy staff. About two thirds of these queries result in a change in the discharge prescription. ⁽¹⁶⁾

With the current temporary stock system pharmacy asks that the named patient medication in use on the ward is returned to the dispensary for re-dispensing as part of that patient's take home medication. The location and the returning of these medications to pharmacy with the discharge prescription is problematic and frequently new supplies are issued. There is a consequent increase in waste both in staff time and resources.

Possible Developments

A Remodelled Inpatient Process

Hospital Pharmacists across Wales are aware of the above issues and have been struggling to realign their systems to free staff resource to address the issues outlined. The remodelled medication process would adopt the following principles:

On Admission

Ⓡ **Patients would bring in GP prescribed medication and agree to its use during their inpatient stay.**

Ⓡ LHG, Health Authorities, GPs and patients should agree that GP prescribed medication can be used during the patient's stay within the hospital service. This will give the clinician that is recording the medication history a

more reliable indication of the patients current medication and dosage regimes.

Introduction of these two recommendations would enable the Hospital Pharmacy Service to implement effectively the following steps:

- Medication histories will be taken or checked on the admissions wards by pharmacy technicians. Any discrepancies would be referred to the pharmacist and then dealt with as appropriate.
- Patients own drugs would then be assessed and utilised where appropriate against written criteria. This assessment will be carried out by the pharmacy team⁽¹⁷⁾.
- Bedside Medicine Lockers would be used to store patient's own medication deemed appropriate for use. Supplemental medication prescribed within the hospital would also be stored within the lockers, labelled "ready for discharge". Hospitals would have to be equipped with these lockers.
- A Pharmaceutical Care Plan encompassing the drug history review and care planning would be initiated. This has been shown to reduce medication-related problems, the length of stay and cost of stay^(18 - 20). This would be incorporated within the patients ward documentation.

(NB The concept that dispensed medication is considered to be the patients own property does not apply to other items supplied by the NHS. Guidance should be issued after establishing the exact legal position concerning ownership of patient's own medication as part of the introduction of more effective medicines management)

Addressing the Patients' Medication Needs

An accurate medication baseline would now be available. Clinicians would then have an accurate medication baseline from which to base their assessment of the patient's presenting condition.

The Revised Prescription

The Hospital Pharmacy would dispense inpatient medication as "patient packs", unless this would be inappropriate.

Pharmacy departments would move towards using manufacturers unopened patient packs as a routine within the dispensing process. The use of manufacturers "patient packs" routinely for dispensing will aid the efficiency of the dispensing process, reduce the risk of dispensing errors, provide the patient with a patient information leaflet concerning their medication and facilitate the automation of the dispensing process.

As part of the re-engineered process, any named patient medication provided to the ward would be provided as a patient pack labelled for inpatient use and for use after discharge (if necessary). With average lengths of stay of 5 days or less in acute Hospitals, assuming their medication is unchanged, a patient could then be discharged with up to 3 weeks supply of medication, depending on the dose regime. (Currently 7 days is supplied on discharge). This would greatly increase hospital costs, but the use of the GP prescribed medication within the hospital must be off set against this additional cost. Increasing quantities supplied on discharge will ease the concern for patients over getting follow-up supplies from their GP.

The Provision of Medication to the Patient

Ⓜ When a patient is supplied with medication during their inpatient stay a patient pack will be provided and pre-labelled for discharge when appropriate. Currently hospitals dispense for the patient whilst in a ward and have to re-dispense the same drug ‘To Take Home’ (TTH). In one DGH 40% of medical patients are discharged within 48 hours so the re-dispensing process becomes burdensome and repetitive. The supplied medication would be checked for correctness at the time of discharge home from the ward.

Medicines Administered According to Prescription

Drugs stored in the patient’s bedside locker will reduce the risk of administration error and facilitate self-medication.

If a patient’s medication is stored within a bedside drug locker rather than a ward drug trolley, nursing staff will find it easier to locate, correctly identify and administer the patient’s medication.

Storage within the bedside locker also means that self-medication systems may be easily facilitated aiding the patients’ understanding of their treatment.

The introduction of patient’s own drugs, presented in “patient packs” and located in the bedside locker has led to a fourfold reduction in the drug administration error rate by nursing staff in one hospital where this has been piloted ⁽¹⁷⁾.

On Discharge from the Hospital

Medication should be prescribed by the doctor or pharmacist as appropriate.

Patients must be counselled about their medication by nursing staff, the pharmacy technician or the pharmacist as appropriate.

Information on their medication prescribed at discharge, and, where relevant, that which has been discontinued, must be passed on to the GPs and Community Pharmacist.

Use of patient packs means that the patient will receive written information concerning their medication.

These arrangements will result in a more structured discharge, with fewer organisational delays and more time to discuss medication with the patient, with consequent increase in concordance and reduction of waste.

Written information about the medication is available to the patient and good communication will come about with the GP and the Community Pharmacist.

Ⓡ Medication, in most cases, can now be issued straight from the locker as it has been previously supplied labelled ready for discharge. Safeguards must be maintained within this process such that a pharmacist, accredited technician or an accredited nurse must carry out this function.

This should reduce considerably any delays in discharge resulting from delays in dispensing 'To Take Home' (TTH) medication.

The Current Outpatient Medication Process

Traditionally, GP's refer patients to hospital for a consultation, and any subsequent prescription would be written by the GP.

Across Wales, on average, 15% of hospital outpatients now receive a prescription. This is normally written on a hospital prescription form, which can only be dispensed within the hospital. It is estimated that two thirds of hospitals' dispensed outpatient medication could potentially be provided via Community Pharmacies without causing problems.

The initial hospital prescription may be for specific drugs not used within the patient's GP practice. Any consequent and subsequent change in medication by the GP practice may require lengthy discussion and may result in loss of patient confidence in either the GP or the hospital clinician.

Most outpatient prescriptions are for drugs readily available within Community pharmacy. If they were not to be dispensed in the hospital this would free hospital staff resources to address inpatient and discharge issues.

The nature of the hospital outpatient prescription process means that the patient does not have the choice of where they get their prescription dispensed. Having the prescription dispensed within the hospital may not always be convenient: this is suggested by comments from a CHC and a patient survey feedback at a DGH in Wales.

Hospital pharmacies normally provide 14 days supply to outpatients. Following the introduction of patient packs the EC stated that patients should receive a patient information leaflet (normally enclosed within the patient pack) whenever they receive a prescription directly from any pharmacy. The hospital policy (and funding) of 14 days means that the provision of patient packs to outpatients is not possible as they are not presented in that exact quantity, and consequently not all patients receive the patient information leaflet from an 'intact' pack. This is in contravention of EC

regulations. (92/27/EEC, *Official Journal of the European Communities*, 30/04/92, and SI 1994/3144)

The patient may, as a result, be confused about the drugs they require and there may be a loss of confidence in the prescriber.

The hospital pharmacy is using valuable staff resources to provide an outpatient dispensing service, which could, in many cases, be met via the Community Pharmacist. This would release hospital pharmacy staff time to deal more effectively with inpatient and discharge issues.

Ⓡ Only when there is an urgent clinical need should hospital outpatients receive their initial supply of medication from the hospital pharmacy.

The funding and status of FP10HPs should be such that they may be dispensed either in a hospital pharmacy or a Community pharmacy. This will give the patients the choice of where they have any hospital outpatient prescription dispensed, to suit their convenience.

Ⓡ Hospitals should provide “patient pack” dispensing for outpatients where an outpatient supply is appropriate. The re-engineering of the medication system in secondary care will save on drug wastage across primary and secondary care. However, the impact on each area of spend cannot accurately be predicted. Trusts, in particular, may be required to provide additional support for the drug budget.

Ⓡ Finance Directors of Health Authorities, LHGs and Trusts should establish mechanisms to enable prompt implementation of “patient pack” dispensing.

Impact of the Changes in the Inpatient and Outpatient Medication Systems on the Hospital Pharmacy Service

A reduction in outpatient workload within the hospital pharmacy would facilitate re-deployment of the pharmacy staff to address inpatient and discharge issues.

The use of patient packs within pharmacy for both inpatients, and where appropriate, outpatients, would facilitate automation within the dispensary and distribution areas. The increased bulk of patient packs cause pharmacies storage problems. The introduction of automation will be essential if pharmacies are to cope with the increased number of patient packs which will have to be purchased, stored and issued.

Ⓡ Trusts should investigate the options concerning automation of pharmacy dispensing and distribution activities in order to facilitate the re-deployment of pharmacy staff to ward areas.

This would facilitate the re-deployment of pharmacy staff and their integration into ward teams where their input would improve the medicines management process. The key areas of input would be:

- producing a validated medication history
- identification and assessment of GP prescribed medication brought in by the patient as appropriate for use in the hospital and after discharge
- the supply of any additional medication required during the inpatient stay
- to discuss with the patient their medication, particularly focusing on its purpose, dosage regimens and any specific precautions
- ensuring that the medication provided for the patient on discharge is accurate
- ensuring that medication issues do not unduly delay a patient's discharge
- communicating a patient's medication information to their GP and Community Pharmacist
- the training and accreditation of nursing and pharmacy staff to safely administer drugs.

Inpatient Self –Medication

The storage of patient's own medication and that dispensed by the hospital within a patient's bedside cabinet facilitates self-medication systems. In these circumstances the nature of the 'medicines round' is changed to one of observation of the patient's understanding of dosage instructions and their knowledge of their medicines. This is a move from a system where the patient is disenfranchised within the treatment process and suddenly discharged with an expectation that they know and fully understand their medication. Self-medication systems, correctly supervised, will improve the patient's understanding and concordance with treatment regimens.

Ⓜ Training and accreditation systems should be developed for nursing and pharmacy staff on the safe administration of drugs and medicines related duties at ward level.

Availability of Pharmaceutical Services

Ⓜ The skills of the pharmacist and pharmacy technician are most appropriately used at ward level in ensuring the smooth running of the medication processes. To be fully effective, this service needs to be available 7 days a week. Trusts which have acute hospitals should develop systems to access pharmaceutical services which effectively meet urgent clinical needs at all times.

Prescriber Assessment

Ⓜ It is anticipated that the range of authorised prescribers will spread across several professions within the foreseeable future. It is important that prescribers from all disciplines demonstrate their competence in these areas. All staff undertaking prescribing should be appropriately trained and undertake accreditation to carry out these functions within the recognised limits of their competence.

Management and Systems Monitoring

Ⓜ Comprehensive medication error and incident recording structures need to be in place and the systems' effectiveness audited. Trust Chief Pharmacists should be given the responsibility and resources to establish effective medicines management systems.

Ⓜ NAFW, Health Authorities, LHGs and Trusts should recognise that there are various implications of this and there may be a need to pump-prime hospital pharmacy services to achieve these Controls Assurance and Clinical Governance risk management standards.

CHAPTER 9 GOOD PRACTICE

PRACTICE BASED PRESCRIBING SUPPORT

Over the last few years there has been a significant increase in the number of pharmacists working within primary care providing prescribing advice and support to GP practices. This development was encouraged by the Welsh Prescribing Support Project, which demonstrated that pharmacists working in GP practices had a significant impact on the quality and cost effectiveness of prescribing.

- **Advisory activities**

The provision of independent advice, free from commercial influences and firmly based on clinical evidence and best practice forms the cornerstone of practice prescribing support.

- **Implementing change**

One area that practice based pharmacists have demonstrated their value is in implementing changes agreed by the GPs in their practice prescribing policy.

Approximately 75% of GP prescriptions are for repeat prescriptions and patients often remain on medication long-term with minimal review of their medication. Pharmacists have played a useful role by applying clinical pharmacy knowledge to review selected areas and recommend appropriate changes to medication.

The advantage of being practice based is the ease of access to medical records and to the members of the primary healthcare team. A good example is pharmacists undertaking proton pump inhibitor reviews with the aim of changing from treatment to maintenance doses where appropriate. This has been carried out in most Health Authorities in Wales even prior to the NICE Guidance supporting this approach.

- **Patient clinics**

These include services such as pharmacist-run patient medication review clinics and anticoagulant clinics.

Where such services have been introduced the GPs and patients were enthusiastic of them since they reduced the workload on the GPs and provided an improved service to the patients. However the workforce and financial implications of these services has meant that they are only available in a minority of practices across Wales.

SKILLS OF THE COMMUNITY PHARMACIST {See also “The Monitoring and Control of Repeat Prescribing in General Practice in Wales”}

Core skills

- Safe and effective supply of medicines-including both over the counter and prescribed medicines with formal participation in the notification of Adverse Drug Reactions (ADRs). The supply, support and advice to patients on medicine-taking are based on the principles of concordance that recognises the health beliefs of the patient in deciding the best approach to treatment of the individual.
- Protection of the public from harm, which includes medicines for licensed and un-licensed use, substances which are misused, and non-regulated products such as herbal remedies.
- Use of Patient Medication Records (PMRs) to facilitate the safe and effective supply of medicines and as a tool for the management of pharmaceutical care.
- Safe disposal of patient-returned unwanted medicines (DUMP schemes)
- Health promotion leaflet display
- Emergency supply of prescribed medicines

Additional Current Pharmaceutical Services

- Advice to nursing and residential homes on safe storage and administration of medicines
- Oxygen supply and delivery
- Needle and syringe exchange schemes
- Extended hours services (Rota arrangements)
- Supply of urgent medicines out of hours

Examples of current, non-funded services of ‘added value’

Supply of medicines in the Community to vulnerable groups

- Supervision of methadone administration
- Monitored dosage systems
- Domiciliary visiting, where applicable
- Home delivery of drugs
- Collection of prescriptions from surgeries on patients’ behalf

- On-going support for smoking cessation

Funded Primary Care Projects

Funding was obtained from a variety of sources (National Assembly for Wales, Health Authority Primary Care Development, Pharmacy Practice Development Schemes for Wales etc), for one-off projects to identify good practice. In the Appendix 5 entitled “Skills of the Community Pharmacist” can be found examples providing a positive contribution to improved patient care, and need to be considered for roll-out Wales-wide and long-term.

Additionally, a resource document and guide to ‘GP Prescribing Support for the new NHS’ has been produced by the National Prescribing Centre in England (September 1998) which includes a wealth of information on good practice which has been distributed in Wales.

WELSH MEDICINES RESOURCE CENTRE (WEMEREC)

Since its inception in 1993 the Welsh Medicines Resource Centre (WeMeReC) has evolved into a service that is unique to Wales. WeMeReC has developed beyond the provision of bulletin publications to a system for delivering rational prescribing messages through education and peer review.

WeMeReC has provided prescribing information and advice to GPs, Community Pharmacists, prescribing advisers and postgraduate tutors through a variety of publications. These include bulletins, information packs, PGEA-approved distance-learning education modules and case study training packs. The annual publication programme currently comprises two distance-learning modules with two case study packs and one or more bulletins on additional topics.

The WeMeReC distance-learning initiative for GPs integrates prescribing guidance into GPs practice and supports the objectives of the continuing professional development with work-based learning. In addition, the distance-learning modules provide an extensive knowledge base of GP prescribing in Wales that can be used for informing the direction of medical and pharmaceutical education on prescribing and to support the clinical governance agenda.

The Group has been advised that within existing resources the staff level has reached production capacity but that these developments are achievable with further investment from the NAFW.

® The Group recommends the development of WeMeReC to build upon the success of their distance-learning and training pack materials by:

- increasing the publication programme
- increasing GP participation

- extending the work to other healthcare professionals, including hospital doctors, pharmacists and nurse prescribers
- Use of interactive internet publications

The Group acknowledged the requirement for additional resources to fulfil these developments.

LOCAL HEALTH GROUP INITIATIVES

Established in April 1999, the 22 Local Health Groups in Wales have been acutely aware of the issues raised in this report.

Prescribing Support and Advice

In response to some of the early challenges, many Local Health Groups established posts to help them to provide local responses to these issues. The posts are variously described, but most are called “Prescribing Support Pharmacists”.

Additionally, some Local Health Groups engage Pharmacists on a sessional basis to provide advice and support to the Local Health Group Board, independent contractors and their staff.

Anecdotal evidence suggests that this sort of support is crucial to successful implementation of the Clinical Governance agenda at LHG level. The prescribing support pharmacists, acting as a resource to the Clinical Governance leads and as a link between the LHG, Health Authority and Trusts are said to be pivotal to ensuring robust professional networks. Consequently, it is claimed, good practice is shared and the potential for promoting safe, appropriate, effective and economic use of medicines is optimised.

Formulary Developments

A medicine formulary is not only a list of drugs, but also a policy that involves several complex processes and activities. Ideally a formulary should be developed based on relative efficacy, safety and cost-effectiveness criteria. Creating such a formulary from scratch takes considerable time, but merely adopting one wholesale and without examination may result in a lack of local perspective and ownership. Keys to a successful formulary system are to continuously monitor drug use and compliance with criteria, and to work collaboratively with all health-care professionals in its continuing development, implementation and monitoring.

Local Developments

- **LHGs**

Formulary development is at various stages of development across the LHGs in Wales. Bro Taf have a number of GP locality formularies agreed and hospitals in Bro Taf have been working together to integrate hospital formularies. The integration of GP and hospital formularies is the next step.

Other LHGs have started formulary development e.g. Blaenau Gwent has a formulary for Cardiovascular drugs that has been agreed between GPs and Trust clinicians. The formulary is currently being implemented and compliance is being monitored.

Formularies can be developed between LHGs and Hospital Trusts. The Rhondda Cynon Taf Formulary is an example of such a local initiative that has had a considerable impact at local level. Not only is the development of a formulary a valuable educational exercise for the health professionals involved, but it can achieve rational prescribing and produce cost savings.

- **District-wide Developments**

With increased movement of patients and medical staff (particular junior staff) between health-care facilities within districts, differences in availability of medicines becomes more apparent. While differences may sometimes be relatively small, they may cause considerable concern to patients and frustration to prescribers. Bro Taf Health Authority has addressed this issue by commissioning its Drug and Therapeutics Committee to produce a district wide joint (primary and secondary-care) formulary. Several specialist inter-disciplinary working groups with primary and secondary care representation have made recommendations that were sent to all LHGs for consultation before their adoption. The Formulary will be available in hard copy form as well as on the Internet and NHS Intranet. Consideration is being given to its integration into computer-based management systems.

- **National Formulary Developments**

Formularies work best if those using them have been involved in their development. Consultation at a national level to produce a single formulary would be complex and time consuming. However, closer liaison between formulary committees in Wales would encourage the sharing of expertise so that any district-wide formularies might develop in parallel and with considerable harmony. This will be particularly relevant in relation to costly medicines, so that so called 'post-code prescribing' can be avoided. The proposed Welsh National Prescribing Support Service (WNPSS) (see Chapter 12) could act as a vehicle for this dialogue.

Possible Solutions

Ⓜ Formularies have valuable educational value for prescribers, as well as safety benefit to patients, and their implementation can encourage and achieve rational prescribing and reduce costs, even at a local level.

Ⓜ District-wide joint formularies are feasible, and encourage dialogue between health professionals in primary and secondary care. They should be implemented and local formularies be made consistent with them. With change in the structure of management in the NHS in Wales by 2003, it would be beneficial to patients if

formularies developed on an LHG basis were, after appropriate negotiation, to be merged across several LHGs, especially where these are adjacent.

Ⓜ Closer liaison between Formulary Committees across Wales should occur, particularly in relation to the consideration of costly medicines. This should lead to appropriate harmonisation of large formularies over the whole of Wales.

CHAPTER 10

OTHER PERCEIVED PROBLEMS

IMPACT OF NATIONAL SERVICE FRAMEWORKS ON PRESCRIBING

The Commission for Health Improvement (CHI) is a new national body for England and Wales that aims to support and oversee the quality of clinical services. Part of the Commission's role is a review of local activity on implementing National Service Frameworks (NSFs). These Frameworks are being developed to set national standards and define service models for a service or care group, put in place programmes to support implementation, and establish performance measures against which progress within agreed time-scales will be measured. Within Wales the Assembly has commissioned work to facilitate the implementation of the Frameworks. At the same time the National Institute for Clinical Effectiveness (NICE) is examining the evidence for emerging technologies including new drugs.

Part of the effect of these activities is to set standards for the detection and prevention of disease including measurable effects on prescribing patterns and costs. For example the committee has examined papers on the impact of implementing the NSF for heart disease and noted the potential increase for the prescribing of statins to prevent deaths from heart disease. The increase in drugs costs could be as much as £30 million per year for statins alone. However the potential benefits are high. There are other examples within the heart disease NSF for example, an increased use of anti-hypertensives.

Ⓜ The Group acknowledges that improvements in quality of health services may substantially increase prescribing expenditures and hence recognises that improving prescribing behaviour has its part to play in finding the necessary resources.

ADVERTISING-BASED PRESCRIBING

The ABPI during their presentation to the Group pointed out that the Pharmaceutical Industry has a legitimate right to promote its products. Much of their advertising is aimed at Doctors in medical journals and in medical newspapers. Typical adverts include slogans and graphics to make points about the drugs in question.

The Industry through its own self-regulation framework, insists that clinical information is included. However it is easy for busy doctors only to note the slogans and the trade names. Gradually doctors can be confused by the welter of names and become unclear as to the chemical nature of the product that they prescribe.

Doctors may well, as human beings, be swayed by emotive slogans and not have the time or the knowledge to dissect the evidence and the references in the small print. Much is being done by the advice teams referred to elsewhere in this report but there is a danger of doctors being unfairly influenced.

Possible Solution

® It should be possible in Wales to resolve such concerns with the Industry perhaps by setting up an All-Wales Forum at which representatives of the service and the industry could agree clear codes.

THE MONITORING AND CONTROL OF REPEAT PRESCRIBING IN GENERAL PRACTICE IN WALES {See also “Skills of the Community Pharmacist}

One of the great successes of general practice in the last decade has been the huge increase in the diagnosis and treatment of patients suffering from chronic illness.

The better identification of the Type 2 diabetic patient, the child with asthma, and those with a substantial risk of coronary heart disease has created a growth industry in the repeat or regular prescription for medication. In many practices more than 75% of the monthly prescriptions are on a repeat basis.

This process creates problems for patients and doctors alike. The patient is often keen to be able to get their continuing medication easily, without excessive monitoring and via a system which is convenient to use within the working day.

Doctors must not compromise the need to monitor the patient and detect any new medical event or deterioration in the patient's condition by trying to meet this requirement.

These two aspirations can often come into conflict.

Problems Identified

- The appropriate level of monitoring of powerful and perhaps dangerous medications is not always available, especially if the practice does not use an efficient, up to date, computerised repeat prescribing system. There are a number of practices in Wales which are still not computerised; this makes the efficient monitoring of repeat prescribing very difficult. This needs to be addressed and quality standards set for repeat prescribing in all surgeries.
- On the other hand patients have often complained that they have to return to the surgery for their repeat prescription every month. They find this burdensome and inconvenient.

This issue raises a number of different difficulties and considerations:

There are the issues of storage, safety and wastage, and there are contractual issues for both pharmacies and dispensing practices.

The issuing of large quantities of drugs (e.g. three or six months supply) will inevitably raise the risk of loss, or misuse by the patient or other household members, and the problems associated with the effectiveness of medicines which have not been stored in a proper manner.

It has been identified that this type of prescribing can also lead to wastage of prescribed medicines for the reasons identified in the next section Waste of Prescribed Drugs.

These are important considerations and there has to be a balance struck between the gain to patient convenience against the dangers to the patient, relatives and the financial loss to the NHS.

There is the issue that the current contractual process rewards a dispensing contractor for each prescription dispensed. A significant change to the repeat prescribing interval would have serious consequences for dispensing contractor income.

The NHS would also lose large amounts of income from the loss of the monthly prescription charge.

Pharmacists are keen to extend and utilise their skills by becoming more actively involved in the monitoring of repeat prescribing. They have a major contribution to make in advising GPs about effective prescribing and about drug interactions. The ideal situation is when the pharmacist is in the surgery building. The contractual arrangement may be one where the pharmacist is employed by the Local Health Group, or by the practice, or a group of practices. The pharmacist would then be on hand to deal with problems as they arise. There are greater, but not over-riding, difficulties for the pharmacist based remotely in a retail Community pharmacy, but it is important to have a flexible approach which best suits the healthcare team in their own locality.

There is also the issue of patient choice. This may be straightforward in the rural setting but is much more complex in the urban or inner city environment. It is not always appropriate for a practice to “nominate” an individual pharmacist to have access to the repeat prescribing system as the patient may choose to use a different more convenient retail Community pharmacy at any particular time.

The issues of the transmission of the patient medical record to a pharmacist are currently fraught with technical, professional and medico-legal problems, particularly around the Data Protection Act and informed consent by the patient.

Possible Solutions

Some of these problems could be overcome if GP computer software could be altered to allow restricted access to the repeat prescribing system only by a nominated pharmacist via a modem. There would have to be clear lines of responsibility determined between the patient, practice and pharmacist so that the data flow was transparent and agreed.

However, the Group is satisfied that there are good advantages to primary care generally and the patient in particular if the skills of the GP and the Community Pharmacist are used jointly for the safety and benefit of the patient.

There is a need for an efficient, safe system of repeat prescribing which is easy for the patient to use.

The ideal situation, which should be the aspiration in Wales, is for the pharmacist to be a full member within the primary healthcare team and, if possible, working within the primary healthcare premises, at least for part of the time.

Pharmacists should continue to have the option of working as a salaried professional with a clearly defined and important role within the primary healthcare team, and funded directly from the LHG. However there are already arrangements where GPs and pharmacists are co-located in the primary healthcare premises and where appropriate this should be encouraged and developed. Alternatively, they could continue as independent contractors providing valuable services and advice where they are located and when appropriate attend joint meetings at the GP surgeries.

Ⓜ There is a need for the GP to carefully monitor the repeat prescribing of drugs to patients.

Pharmacists have a very important role to play in the delivery of repeat medicines safely to patients.

WASTE OF PRESCRIBED DRUGS

Several studies and reports have identified the level of unused prescribed medicines, as indicated by the quantities of medicines returned for safe disposal through Community Pharmacies, as an issue.

In addition to the physical waste, consideration also needs to be given to the lost opportunities; that is, to the patient who has not benefited from the intended treatment; the time of the practitioners involved, and the patients who might have benefited from the investment of time and cost of medication had it not been wasted.

Levels of Waste

One example of a study demonstrating the level of waste was undertaken by Kirklees LPC and published in 1996. The conclusions drawn by the researchers were that a detailed analysis of medicines returned to 30 Community Pharmacies indicates that approximately £40 million per annum of medicines could be wasted nationally; 31.4% of the returned items contained more than 90% of the original amount dispensed. Further analysis of the percentage of unused doses returned in each container indicates that wastage could be reduced by about £ 13 million per annum (33% reduction) if the prescription length was limited to 28 days. Expensive products in BNF categories 1 (gastro-intestinal) and 3 (respiratory) contributed most to the cost of the wastage, but the items returned in bulk were from BNF categories 2 (cardiovascular) and 4 (central nervous system).

Repeat Dispensing

A randomised control study demonstrating the clinical and administrative role of the Community Pharmacist in the repeat prescribing system was recently published¹. A total of 12.4% of patients had compliance problems, side effects, adverse drug reactions or drug interaction identified by the pharmacist. There were significantly more problems identified in total in the intervention group. The total number of consultations, deaths and non-selective hospital admissions was the same in both groups. 66% of the study patients did not require their full quota of prescribed drugs, representing 18% of the total prescribed costs (estimated annual drug cost avoidance of £43 per patient). This system of managing repeat prescribing has been demonstrated to be logistically feasible to identify clinical problems, and to make savings in the drugs bill.

UNNECESSARY PRESCRIBING

The Audit Commission report “A Prescription for Improvement” in 1994 highlighted a number of drugs that are often over-prescribed e.g. antibiotics are often prescribed for viral infections where they have little or no effect. There have been a number of campaigns to reduce this and in fact antibacterial prescription numbers have reduced over the last few years. It requires education of the patient and the prescriber to change this culture. A number of studies have shown that GPs perception of patients expectation is different from the patients in respect of wanting a prescription. The use of anti-diarrhoeals in self-limiting conditions is another example. Education of patients for a number of common conditions is one of the keys to tackling this area.

Other examples include ulcer healing drugs which are sometimes prescribed for inappropriately long periods by remaining on the practices repeat prescribing systems. Drugs of limited value e.g. peripheral vasodilators can often be considered as unnecessary prescribing and consideration has to be given to the risk-benefit ratio. Adverse events are common with most drugs so the benefits have to outweigh the risks.

Improved communication between primary and secondary care should be a priority. There are many *anecdotal* examples of unnecessary prescribing having occurred due to inadequate drug information being provided to practices by hospital specialists. *Repeat prescribing reviews in practices in one Health Authority in Wales has revealed* that a number of patients have remained for inappropriately long periods on drugs that were intended for short-term use.

UNNECESSARY DISPENSING

Unnecessary dispensing can only occur if the practice do not operate a tight repeat prescribing policy. However pharmacists are in a key position to be able to recognise and assist with this. Even though patients are not registered with specified pharmacies most patients, particularly those on chronic medication, use one pharmacy. Unfortunately there have been a number of examples detected by Health Authorities undertaking a review of prescriptions as part of potential fraud investigations where unnecessary dispensing has taken place with duplicate prescriptions being dispensed at inappropriate intervals. Other examples include large quantities e.g. 3 months supply being dispensed every month.

The vast majority of pharmacies maintain patient medication records for patients on chronic medication. Repeat dispensing should be introduced with the responsibility of ensuring that the repeat is justified resting with the pharmacist. This should be adequately remunerated.

UNDER-REPORTING OF SUSPECTED ADVERSE DRUG REACTIONS (A.D.R)

Prescribing decisions should be made after consideration of the potential benefits and risks of a particular medicine. When a medicine is marketed, the likely benefits are reasonably well-known, but less is known of the possible adverse (side) effects, particularly those that are uncommon but nevertheless potentially serious. While medicines have contributed enormously to disease management, medicine-related problems, including adverse drug reactions, account for 5% of hospital admissions and may be the fifth leading cause of death in hospital. (*Einarson, T. R. Annalf of Pharmacotherapy 1993; 27: 832-839*)

The system for spontaneous monitoring of suspected ADRs (the “Yellow Card” system) which was set up in the UK in 1964 in the wake of the thalidomide tragedy, is the cornerstone of medicines’ safety surveillance. It is the only reporting system open to all prescribers as well as other related health-professionals involved with the therapeutic process, and it has contributed to for the early identification of many important drug safety issues over the last 40 years (*Rawlins MD. J Royal Coll Phys Lond 1995; 29: 41-49*)

The Welsh Adverse Drug Reactions Scheme (now Committee on the Safety of Medicines Wales) was started on St David’s Day 1983 to encourage the yellow-card reporting of suspected ADRs in Wales. At that time, the rate of reporting in Wales was only half that of the rest of the United Kingdom, despite higher drug prescribing rates. By 1998 the reporting rate was 360 yellow cards per million population in Wales compared with 310 per million for the United Kingdom as a whole. However this encouraging overall figure hides the relatively minor impact on reporting rates in certain areas, particularly in certain hospital specialities, and it is likely that around 90% of even the serious (life-threatening) drug-associated adverse events still go unreported overall. Poor reporters need to be targeted for education and encouragement to report their suspicions to CSM Wales.

The Green Card reporting scheme was set up by the Drug Safety Research Unit (DSRU) (1980) in Southampton to provide information on adverse events associated with the prescription of a selected number of newly introduced medicines. It links GP prescriptions to patterns of adverse events to identify possible drug-safety signals. It complements, but is not a replacement for, the yellow card scheme. At the present time, the “Green Card” Scheme has not been extended to GPs in Wales.

Possible Solutions

Ⓡ The work of CSM Wales should be extended so that all relevant health care professionals in primary and secondary care are strongly encouraged to be aware of their role in reporting suspected adverse drug reactions

Ⓡ The “Green Card” scheme should be extended to include GPs in Wales.

Ⓡ That adoption of cost and volume of black triangle drug prescribing as performance indices at practice and area level.

Ⓡ Investigation of linkage between the Drug Surveillance Research Unit in Southampton and prescribing in Wales.

The Group notes the importance of the monitoring of safety of medicines in informing decisions relating to rational and cost effective prescribing in Wales.

Ⓡ The Group recognises the contribution of CSM Wales to improvements in the monitoring of the safety of medicines in Wales over almost twenty years.

Ⓡ CSM Wales should continue to inform health professionals in Wales about the safe use of medicines.

CHAPTER 11

RECOMMENDATIONS FROM PREVIOUSLY PUBLISHED REPORTS

Ⓡ The Group identified a number of recommendations from previously published reports which it felt warranted further consideration by the NAFW and which it recommends for implementation.

Prescription Fraud an Efficiency Scrutiny, June 1997, NHS Executive

- There should be tangible recognition for practices which can demonstrate good quality management of the operation of their prescribing systems.
- Dispensing practices should be approved only where the practice can demonstrate that it can provide an adequate standard for probity, and it proves impossible to provide an adequate Community pharmacy service at reasonable cost.

Review of Prescribing, Supply and Administration of Medicines, March 1999, Department of Health

- Changes to patterns of clinical care using new models for the prescribing, supply and administration of medicines should be introduced only after full consultation with patient interests, and should wherever possible increase patient choice
- Initial prescribing and supply of medicines should normally remain separate functions in order to protect patient safety and provide other safeguards. Where a prescription cannot be furnished, the current arrangements for the emergency sale or supply of medicines should apply.
- Where exceptionally it is in the interests of patients for the same professional to be responsible for prescription and supply of medicines, this should be subject to clinical audit and probity checks.
- Repeatable prescriptions should be available on the NHS.
- Professional groups putting forward proposals for extended prescribing should liaise with education providers and bodies responsible for approving training courses to develop suitable training programmes in the required prescribing competencies. All training should include a period of supervised practice, and professional and regulatory bodies should take firm action against supervisors who fail to discharge their responsibilities.
- The professional regulatory bodies should draw up clear guidelines on the circumstances in which commercial support or sponsorship for training programmes related to prescribing could be acceptable. Training programmes should not be used to promote particular products.

Supporting Prescribing in General Practice, September 1999, Accounts Commission for Scotland

- PPD/ISD should work with prescribing advisors to agree how these indicators can best be produced to effectively identify good and poor prescribing within practices.
- Each practice should review its repeat prescribing system to ensure that it is safe and effective. PCTs should assist GPs to take action to improve systems where necessary.
- PCTs should establish whether medication reviews of patients on multiple medication have been carried out in the past, and consider whether a programme of reviews should be introduced.
- PCTs should consider how best to implement the CRAG document 'Clinical pharmacy practice in primary care'.
- PCTs should consider the appropriate level and type of pharmacist support required by GP practices. This should involve clear identification of the objectives and costs of the proposed approach, together with agreed targets for improvements in quality and reductions in cost.
- PCTs should encourage GPs and Community Pharmacists to consider different ways of working with patients to carry out medication reviews at either the GP practice or the pharmacy.
- ISD and PPD should work together to ensure that the central processing of prescriptions generates the management information required. This may require changes in the coding of certain fields, compatibility with the systems for paying pharmacists, and the timeliness with which information is provided.
- PCTs should agree with LHCCs and GPs the most appropriate incentive schemes. All incentive schemes should have: the support of GPs, clear and relevant objectives, measurable and attainable targets, outcomes that are measured and assessed.
- Shared care protocols should be developed and agreed jointly. The new structures and financial flows enable resources to shift between trusts in line with the prescribing responsibility for a given drug, and this should allow more effective care to be delivered.

Prescribing Support to Pandyffryn Medical Group – Final Report – July 1999

- Pharmacists are able to make an active contribution to medication reviews and their advice is well accepted by GPs.

- Implementing efficient systems of medication review and supply can generate considerable savings and eliminate wastage.

Rationalisation of Repeat Prescribing in General Practice, MAAG, 1995

- Regular medication review, and documentation of that review, must occur in all patients receiving multiple item repeat prescriptions.
- The ideal repeat prescribing system should ensure that optimum pharmaceutical care is achieved at the same time as being convenient to the patient and practice.
- An interdisciplinary approach involving a pharmacist initially reviewing patients' medication is recommended. This method of prescription review should ensure that regular review of all repeat prescriptions occurs and only results in a doctor-patient consultation if a drug-related problem is predicted or being experienced, thus increasing the convenience and providing reassurance to the patients and the practice.

Report from The Working Group of the All-Wales Drugs Committee to the Welsh Office on the Influence of Central Drug Contracting on Primary Care Prescribing – An Investigation into the Effect of Contracts Awarded by the Hospital Service on Community Drug Expenditure in Wales – May 1996

- That steps be taken to bring about early harmonisation of shared formulary use in Wales with monitoring of costs based on April 1st 1996. This could be limited to the core group of the top 50 items by volume and cost in both primary and secondary care sectors in a pilot site.
- That if successful, the lessons from the pilot site be extended to cover all new Health Authorities in Wales.
- That serious consideration be given to the adoption of a Welsh Formulary or Prescribing Guide.
- That steps be taken to develop a common IT database to record detailed prescribing and dispensing costs across both the primary and secondary care sectors.
- That secondary care prescribers should be constantly updated on comparative prescribing between primary and secondary care sectors

Residual Medicines – A Report on OPCS Omnibus Survey Data Produced on Behalf of the Department Of Health, 1995

- Ways of dealing with residual medicines and wastage need to be addressed.

Clinical Effectiveness and the Clinical Pharmacist in Primary Care – Sue Lord et al – 1998

- All GP practices should have the input of a clinical pharmacist to assist with the management of their repeat prescribing system and the clinical review of patients medication. Local Health Groups must be made aware of the impact that clinical

pharmacy can have on prescribing to improve the effectiveness of drug use and the quality of patient care.

- Collaboration of local pharmacists should be encouraged (hospital, Community and practice pharmacists) to ensure continuity of care, for example, following medication changes, hospital admission/discharge or continuing education requirements. Cultural barriers to inter and intra professional communication should be addressed by the post-graduate committees and professional leaders.
- Increased IT links between the GP's surgery, hospital and the Community pharmacy would aid the notification and update of medication changes.
- Practice development plans should be considered to bring together GPs, practice nurses and Community Pharmacists to ensure continuity of care. Inhaler technique is one example of where the patient would benefit from all professionals involved giving a single message and reinforcing with the same *advice*. Monitoring, for example, peak flows, could be done where it is more convenient for the patient. This may be the local pharmacy.
- Further research should be carried out into role of the Community Pharmacist in repeat prescribing, considering for example, monthly dispensing of a three monthly prescription with appropriate review by the pharmacist prior to dispensing.
- The remuneration system for Community Pharmacists is linked to items dispensed and should be reviewed to ensure that they are not penalised for reducing the number of medicines a patient requires when appropriate.
- Community Pharmacists should have access to patients medical and drug histories to provide them with the information required to make clinical interventions and to reinforce/reconfirm with the patient their understanding of changes in therapy.
- Further education for Community Pharmacists needs to be addressed, areas highlighted in this study include:
 - ◆ therapeutics, to facilitate prescription review and monitoring
 - ◆ use of devices, e.g. inhalers
- This could be carried out by Welsh Committee for Professional Development in Pharmacy (WCPDP) or similar group.
- Accreditation criteria should be considered for pharmacists working with GPs, for example, as formal qualifications (Clinical Diploma, Diploma in therapeutics) or local training via the Health Authority Independent Pharmaceutical Advisor to demonstrate competence and ensure patient safety.

Briefing Paper – Discharge Pharmacist, Medical Unit, Wrexham Maelor Hospital

- Employ pharmacists to carry out admission medication reviews and discharge prescription writing in Trusts.

CHAPTER 12

POSSIBLE DEVELOPMENTS

COMMUNITY PHARMACY ENHANCED ROLES

Future developments must be patient focussed, by being Community focussed and easily accessible to the user, through making full use of all members of the pharmacy team (pharmacists from different sectors and specialities as well as support staff at all levels).

In order to achieve the quality agenda an All-Wales strategic framework needs to be established incorporating All-Wales standards, with the National Assembly for Wales having overall responsibility, supported by local implementation with flexibility to meet need at Health Authority and LHG level.

Pharmacists must be recognised and acknowledged as full members of the primary healthcare team. Teamwork in healthcare needs to be flexible and dynamic, centred on the changing needs of patients and careers as they progress along their care pathway. The team, including the pharmacists, needs to interface effectively with the social care and voluntary sectors.

Specific areas of development must include:

Communication Flow

Access and input for all those involved in providing care for the individual to the unified health record is the ultimate goal, recognising that the patient (or carer) must always be in control. To achieve this will require developments in information and communications technology (ICT). The system needs to be robust in order to enable providers to access appropriate levels of information depending on need to provide effective and efficient care.

Whilst recognising that electronic developments will require time and resource, this should not be a barrier to immediate sharing of appropriate information (paper or electronic) to aid the provision of high-quality information and advice to patients.

Ⓜ Connection of Community Pharmacies to the NHS Wales network is essential to achieve effective communication flow.

Early benefits of connection to the network will be:

- better integration into the early warning system
- improved admission and discharge planning
- faster access to Medicines Information Units.

Future benefits include:

- electronic transmission of prescriptions
- electronic pricing of prescriptions to facilitate reimbursement mechanisms and effective data collection and use of monitoring information
- contribution to the unified health record.

Better use of medicines utilising skills of pharmacists.

Medicines Management

Development of medicines management systems as part of Community pharmaceutical services must be developed to identify and provide ways of supporting patients with their medicine taking.

Ⓡ The first stage to achieving this is the introduction of an NHS repeatable prescription. (Does not require Primary Legislation and can be implemented by the National Assembly Wales). This would enable Community Pharmacists to undertake repeat dispensing, at agreed intervals, within agreed monitoring parameters, as authorised in advance by the prescriber.

This will incorporate the pharmacist reviewing the patient's medicine taking, with referral back to prescriber when problems are identified, which will free up administrative and clinical time at GP surgeries for patients requiring urgent care. Further benefits would include reducing wasteful prescribing practices by identifying unwanted and unused medicines, and identifying non-equivalence for different items on the repeat prescription which leads to waste. This process has been shown to make savings, as well improve patient care (see references in Waste of Prescribed Drugs section of Perceived Problems). The pharmacy intervention should be funded from those savings to contribute to the better use of medicines.

Interval dispensing will be authorised according to clinical and social need. For instance this can be daily or weekly dispensing, or at 28 day intervals. It will also allow therapeutical trial for appropriate newly prescribed medicines.

Effective medicines management requires all members of the pharmacy team working together, as well as interfacing with other health and social care professionals, around the needs of the patient.

Clinical Medication Review by Suitably Trained Pharmacists

Ⓡ There is evidence that that this service enhances patient care and is valued. However, this occurs on an ad-hoc basis and needs to be incorporated into mainstream practice throughout Wales.

Whilst it may often be practical currently for pharmacists to be at the GP practice to provide clinical medication review, with physical access to GP patients' notes and therapeutic drug monitoring results, IT developments resulting in a unified health record, will mean that location will in the future become more flexible. Pharmacists, whether working in the hospital setting, employed by LHG or Community Pharmacists are able to fulfill this role, provided they have the necessary skills, knowledge and expertise.

This process could be patient specific to identify and recommend changes to medication prescribed, or review of particular groups of medicines as part of a practice's formulary development and management.

It is vital that there is good communication and collaboration between all members of the team, that is providers of clinical medication review, medicines management services, as well as dispensing and supply to ensure continuity of care to patients.

Prescribing Support to Prescribers

This is the third aspect to utilising the skills of pharmacists to promote better use of medicines and should include:

- implementation of LHG prescribing strategies
- analysis of prescribing data as an audit tool
- support for development and local implementation of formularies and guidelines
- setting up and managing repeat prescribing systems in GP practices

First Port of Call in the Community

There is already a network of pharmacies around Wales, located where people live, work and shop, which when fully recognised and further supported can make a large impact on improving the health and well-being of the people of Wales. This encompasses a wide range of activities, the benefits of which need to be promoted, including:

- providing support and advice on common ailments in supporting self-care
- sale and supply of 'Over The Counter (OTC) medicines will be facilitated by further deregulation of products from 'Prescription Only Medicine' status (POM) to those for pharmacy, pharmacy only sale (P) [This relies on UK wide Primary legislation]
- as the first port of call to a health care professional in the Community, pharmacists have a valuable role to signpost other services
- formalised mechanisms for GPs to refer people to pharmacists
- referral of callers by NHS Direct Wales to Community Pharmacists

- targetted healthy living messages for at risk individuals and communities
- provision of medicines advice to the public and other professionals, both health and social.

Ⓜ There needs to be a public awareness campaign, and further resource to reinforce the pharmacy role as first port of call in the Community.

Review of Advice to Nursing and Residential Homes

Currently provision of pharmaceutical advice to nursing and residential homes (local service provision at Health Authority level), is limited to safe storage and administration of medicines. This service needs to be developed to avoid duplication with the pharmaceutical aspects of the inspection team role and should include medicines management and clinical review.

Care of Vulnerable Groups

Wider teamworking needs to be encouraged to support the care of vulnerable groups in the Community, who will benefit from pharmaceutical services such as:

- domiciliary visiting
- supervision of medicine taking e.g. methadone
- appropriate use of monitored dosage systems.

Other Developments

- **Supply of medicines under patient group directions**

This locally agreed process facilitates the supply of specified medicines in specific conditions and needs to be implemented by responding to identified need in situations such as:

- ◆ Emergency Hormonal Contraception
- ◆ Conjunctivitis
- ◆ Urinary Tract Infection

- **Pharmacist Prescribing**

The implementation of pharmacist prescribing requires primary legislation, and the government have committed themselves to this process when parliamentary time allows. The National Assembly for Wales needs to keep pace with the developments.

Pharmacist prescribing can be either dependent/supplementary or independent.

- ◆ **Dependent/supplementary prescribing** covers such situations as having the discretion to vary dose, frequency, presentation or active ingredient group within an individual treatment plan specified by the assessing clinician.
- ◆ **Independent prescribing** means that the prescriber is responsible for the clinical assessment of the patient (usually including establishing the diagnosis) as well as for the appropriateness of any prescription which may be issued at the time.

Pharmacists already have the legal right to sell or authorise supply of Pharmacy only medicines (P) and General Sales List (GSL) medicines from a registered pharmacy. Under these terms pharmacists are already independent prescribers. They do not however have the automatic right for reimbursement under the NHS.

Contractual Framework for Community Pharmacy

Changes in the method of remuneration need to be addressed in order to implement the collaborative working recommendations above. It must take account of the following:

- rewarding the quality provision of services
- linking access to medicines (the supply) to appropriate pharmaceutical advice
- identifying clinical need versus perceived demand before planning extension of times of availability for medicines supply and advice.

Advanced Technology

The internet as a means of communication is expanding at a phenomenal rate and the opportunities for e-commerce are growing. These developments need to be harnessed as a tool to benefit patient care, with the support of health care professionals. The benefits of the interface between patients and pharmacists in the pharmacy should not be lost as a consequence of developing technology to ensure that appropriate pharmaceutical advice continues to be linked to supply of medicines.

Electronic Prescribing

Electronic prescribing offers exciting possibilities for more convenient services for patients, and for more timely and complete information about prescribing and use of medicines. Electronic prescriptions will have the same legal force as prescriptions signed in writing. Patients will benefit from easier ordering of repeat prescriptions. Pharmacists will benefit from the new opportunities to use information technology to support their practice. And it will also mean an end to illegible and incomplete prescriptions, which waste everyone's time, as well as being a risk to patient safety.

Transfer of prescription data between GPs, pharmacies and the Prescription Pricing Service should be carried out electronically at the earliest opportunity.

E-Pharmacy

Alongside electronic prescribing, there will inevitably be other developments in the way that technology is used to get people their medicines when and where they want them. The law permits the distance sale and supply of medicines, provided that normal safeguards are met. This means, for example, sales of Pharmacy only (P) medicines by electronic means are acceptable provided they are made under the supervision of a registered pharmacist and from a registered pharmacy.

Assuming proper safeguards and professional standards are in place, there is no reason in principle why medicines should not be sold or dispensed electronically, or by other forms of distance sale and supply, like mail order or home delivery.

Already, “e-pharmacy” is offering people new ways of purchasing over the counter medicines and having private prescriptions dispensed. The Group believes that this new choice should also be available to people with NHS prescriptions. It is therefore suggested that current NHS rules to be reviewed remove obstacles to pharmacies wanting to offer this kind of service.

In the short-term, e-pharmacy will allow people to consult their pharmacist electronically to seek advice and make arrangements for the delivery of their prescriptions, but they will still need to supply their prescription form before being sent their medicines. But, in due course, electronic prescribing is likely to mean that often the prescription too will be transferred electronically.

All pharmacists involved would, of course, be expected to observe the same high standards of professionalism as their colleagues elsewhere. While current legislation and existing professional codes of ethics already offer significant safeguards against the abuse of electronic prescribing and supply of medicines, it is recommended that the NAFW work with patient groups and the professions to introduce further controls if they prove to be needed, or if providers of electronic services cannot demonstrate their own quality and security of service.

Possible Solutions

Ⓡ NHS rules should be reviewed to permit the dispensing of NHS prescriptions via e-pharmacy.

Ⓡ The NAFW should work with patient groups and the professions to ensure that adequate safeguards are in place against the abuse of electronic prescribing and supply of medicines.

NURSE PRESCRIBING

The legislation permitting nurse prescribing received the Royal Assent on 16 March 1992. The Medicinal Products: Prescription by Nurses etc etc Act 1992 amends the Medicines Act 1968, and the NHS Act 1977.

The Medicinal Products: Prescription by Nurses etc Act allows suitably qualified Community nurses who have undergone an approved course of training to prescribe certain items listed in the Nurse Prescribers Formulary. Initially piloted in England the scheme demonstrated:

- better targeted prescribing of Nurse Prescribers' Formulary items
- more cost- effective prescribing of NPF items, particularly in the higher cost areas such as arm slings, bandages and dressings
- reduced workload for GPs
- patient convenience enhanced job satisfaction/professional responsibility for nurses.

Implementation started with training the first cohort of nurses in September 2000, and it is intended that all eligible nurses will be trained by April 2002.

Guidance has recently been issued on Patient Group Directions to clarify the previous use of protocols for nurses administering drugs and appliances to specific groups of patients. Extensions to nurse prescribing will be included in future legislation with consideration being given to nurses in acute settings and a range of clinical specialties.

WELSH WHITE LIST OF NHS DRUGS

At the current time GPs treating patients under the NHS regulations may prescribe any drug marketed unless specific action has been taken to schedule it as not available from GPs ("blacklisting") or available only for certain conditions. (Schedule 11) There have been delays and anomalies in the supply of medications as a result. For example most nicotine replacement products used for patients attempting to give up smoking have been put on the Schedule 10 (formerly 'blacklisted'). However one range of NRT products has never been blacklisted and therefore GPs may prescribe it if they wish.

Another problem with the current arrangements is that as long as the GP deems a product to be a drug then it may be prescribed even though it may not have had full scientific assessment. The authorities have to reimburse the contractors who supply such products for their costs.

Thirdly many similar drugs are marketed with marginal advantages over existing drugs. The potential for confusion by GPs and patients is increased and costs may be incurred unnecessarily. For example as drugs reach the expiry of their patents it is not

unusual for their manufacturers to make available reformulations or similar molecule drugs.

An alternative approach would be for the NHS in Wales to only make available a limited range of drugs and for a definite decision to be made for each new product as to whether it has significant advantages and is likely to be cost effective. (A “White List”)

When the ABPI presented their thoughts to the Group they made a strong plea for Wales not to consider this alternative and indicated their belief that the Department of Health had rejected the notion. In fact the Health Select Committee report indicated that they were not persuaded by the arguments against a White List and recommended that further work be done on the proposal. The DOH response was to acknowledge that further work should be done. In the event we have not been able to find evidence of any further development by the DOH.

Wales could usefully pursue this matter. It is noteworthy that New Zealand, a country of similar sized population to Wales, has been able successfully to operate a White List and have achieved substantial redirection of resources into health care as a result.¹

An alternative halfway house would be to develop further the formulary approach set out in Chapter 9 to engage the whole of the health service in Wales, probably by further use of Internet links.

A NATIONAL PRESCRIBING SUPPORT SERVICE FOR WALES ®

Several organisations in Wales already have a national role in advising on aspects of safe and effective prescribing.

The UWCM Therapeutics and Toxicology Centre (TTC) was established to provide authoritative clinical advice on the safe and effective use of medicines and other agents to health professionals, government agencies and industry. It runs workshops on therapeutic management of disease and a Diploma/MSc in Primary Care Therapeutics for health professionals in Wales using distance-learning techniques.

The Welsh Drug Information Centre (WDIC) co-ordinates, monitors and supports the work of a network of local drug information centres across Wales. The Centre also maintains and facilitates access by local drug information centres to computer databases of journal references and evaluated information. In addition, the WDIC provides a specialist enquiry answering service, and bulletins and newsletters on topics of current interest, including new drugs.

The Welsh Medicines Resource Centre (WeMeReC) was established to help promote appropriate, safe, effective and economic prescribing of medicines in the primary health care sector. Publications that address prescribing in selected therapeutic areas and topics of general prescribing interest are produced for GPs, Community

Pharmacists, prescribing advisers and postgraduate tutors. Interactive case-based techniques are used in distance-learning modules to encourage participation and learning outcomes.

The Committee on Safety of Medicines (CSM Wales) was established 17 years ago to address the problem of under-reporting of adverse drug reactions in the Principality and to increase the awareness of health-professionals concerning the risks of drug-induced disease. It encourages health professionals to report their drug safety concerns via the Medicine Control Agency's yellow card system

In the past, these organisations have collaborated on an informal basis on issues relating to prescribing. Their directors wish to enter a strategic partnership to:

- co-ordinate and facilitate effective quality prescribing initiatives in Wales
- promote the safe use of medicines and enhance the effectiveness of medicines monitoring processes in the Principality
- support local prescribing support initiatives and disseminate best practice
- develop timely, independent and authoritative advice on new drugs, particularly on high-cost medicines, to stakeholders
- contribute to, and encourage the development of educational programmes related to quality prescribing for health professionals in hospitals, the Community and NHS Direct
- facilitate the dissemination and implementation of therapeutic guidance from national bodies such as the National Institute for Clinical Excellence
- evaluate prescribing strategies and drug utilisation in the Principality
- provide written information on major new drugs for potential patients
- work with consumer groups to discuss consumer expectations and their impact on prescribing behaviour.

® The suggested partnership would be known as the *Welsh National Prescribing Support Service (WNPSS)*. It would have a flat (non-hierarchical) structure with strong links to “grass roots” collaborators. It would be responsible to a management board representing the interests of stakeholders across the Principality.

A small core staff would form the WNPSS secretariat. These would include the three principal directors of the four partnership organisations, together with a small group of supporting staff. Working groups would be formed to address individual activities and disbanded when no longer active. The secretariat would be represented on all working groups and be responsible for co-ordination. Communication with the “prescribing Community” would be maintained through a WNPSS newsletter,

contributions to relevant medical/pharmacy publications and a dedicated Internet and Intranet Web site.

WELSH MEDICATION ERROR REPORTING PROGRAMME

Deficiencies and errors in the use of medicines are a significant contributor to the morbidity, mortality and costs associated with medical mistakes. Since safety is a characteristic of systems and not their individual components” (Cook R 1998), it is important that Trusts and LHGs have systems to collate, analyse and respond to risk assessments, near misses and mishaps involving serious harm associated with prescribing of medication at local level. However, it is important that the risk management lessons learned at local level should be disseminated more widely to other organisations within the NHS to prevent similar incidents elsewhere.

Successful and safe medication processes result from a co-ordinated, interactive effort from all health-care professionals involved. It is important that constructive “non-punitive” and confidential error reporting and evaluation is in place, since errors in medication are often multi-factorial, and relate to a highly complex multi-step process, often involving several individuals

A Welsh reporting system would collate reports from health-care organisations in Wales. It would help identify particular patterns of medication error and provide timely advice to all health professionals in Wales on effective strategies to prevent recurrence.

A national Medication Error Reporting Programme could work alongside related organisations within the partnership organisations constituting the proposed Welsh National Prescribing Support Service (e.g. CSM Wales, the UWCM Therapeutics and Toxicology Centre, the Welsh Drug Information Centre and the Welsh Medicines Resource Centre). This would promote communication with other stakeholders, such as the Medicines Control Agency, the executive agency responsible for safeguarding public health by ensuring that all medicines on the UK market meet appropriate standards of safety, quality and efficacy, and the body to which CSM Wales is responsible.

Possible Solutions

Ⓡ A confidential Medication Error Reporting Programme for Wales should be established.

Ⓡ Such a programme should work alongside the other agencies with a national role in encouraging and ensuring safe and effective prescribing

A NATIONAL PRESCRIBING STRATEGY

A reasonable definition of a strategy is a general programme of action and deployment of resources to attain some comprehensive objectives. The purpose of a strategy would be to agree and communicate how major objectives and policies might be delivered.

The Group made enquiries about the existence of prescribing strategies at both Local Health Group and Health Authority levels. All Health Authorities either had a strategy or were working on or intending to work towards developing one. Most Local Health Groups also either had a strategy or acknowledged the need for one.

If the overall aim of the many agencies involved in prescribing and providing medication to patients can be agreed then a definitive national strategy to deliver that aim will be required. Only then can local strategies, policies and objectives be scaled against the decisions and requirements of The National Assembly for Wales.

The Group has noted the exciting developments in new drugs, the rapid change in the mechanisms for supply and administration, the impact of the National Institute of Clinical Excellence guidance and the development of National Service Frameworks.

In the light of this constant change any strategy will need to be revisited on frequent occasions. It will be necessary therefore to identify a responsible person or body to drive the strategy at a National level.

Ⓜ That there should be defined and subsequently updated at regular intervals, an All-Wales Prescribing Strategy, as a recommendation to the Health Minister, which, on approval and implementation, would clearly guide the management of disease by medication for the whole of the NHS in Wales, and represent both the best current clinical evidence and the affordable policies and priorities of the National Assembly.

PURCHASE OF MEDICINES IN WALES

The NHS in Wales spends some £434 million on medicines a year. The primary care sector is responsible for about 85% of that spend. Normal commercial practice would dictate that the larger the purchasing group the better would be the prices obtained. However medicines are purchased and supplied through private contractors to the NHS. The prices paid to them are specified by the Drug Tariff. The prices charged by the Pharmaceutical Industry are controlled by the Prescription Price Regulation Scheme (PPRS) (an agreement between Government and the Pharmaceutical Industry).

The Drug Tariff price is arrived at after assessing the prices paid by the final supplier of the medicine.

Local Health Groups gain as the Community Pharmacist improves their purchasing by a reduction in the Drug Tariff price. These savings reflect competition arising from the purchasing methods of the Community Pharmacist.

One of the largest savings made in hospital pharmacy has been by generic substitution by the pharmacist. This was made possible when Crown Immunity was invoked for the hospital service in the 1960s. The right to substitute was not absolute; it had to receive the support of the relevant medical personnel. To this end the All-Wales Drugs Contracting Committee was deemed to be sufficient to give that approval, with all decisions being reported to the Hospital Medical Staff Committees.

On the loss of Crown Immunity in 1992, the Medicines Control Agency, which is responsible for the implementation of the Act and any exemptions claimed from it, stated that the Drug Contracting Committee or the Drugs and Therapeutics Committees should sanction the substitutions¹.

If this were not the case it would have a profound effect on the drugs budget as minor differences in the labelling, claimed indications etc would prevent equivalent products being used as generics and much of the power to negotiate would be lost.

The All-Wales Quality Assurance Centre exists to assure the quality and equivalence of competing products. By using this system the relevant professionals have developed a confidence in the contracted products. The absence of regional contracts and a quality control system in Europe is the reason why there is little generic substitution on the Continent, at least to date.

Ⓜ Using the same logic (of ‘prescriber agreement to substitute’ in specifically agreed areas) to achieve known outcomes, it is possible that a system of **generic substitution** could be arrived at in the Community. There needs to be a pilot site in which there can be expected to be close co-operation between the medical and pharmaceutical professions. This would eventually equate to the full implementation of an agreed formulary.

Ⓜ There are also potential savings to the drug budget by **therapeutic substitution**. This is where a medicine of a different chemical entity but having a similar therapeutic profile is substituted. The decision on the substitution has to be at a clinical level. However there may be areas in which an LHG could be advantaged without detriment to the patient. e.g. an LHG may take a populist decision to agree on a single Proton Pump Inhibitor (PPI) for all but exempted patients. In such cases, except where the exemption is triggered, the Community Pharmacist could be empowered to therapeutically substitute the agreed product under the generic format proposed above.

It is accepted, however, that therapeutic substitution is regarded in the professions as much more problematical than the generic form.

If an LHG were to agree to the use of one PPI, for example, then that body would be in a position to negotiate cost with the competing industries. In order not to upset the market forces in the supplier side of the market the LHG could negotiate a ‘cash back’ to the ‘coffers’ of the LHG if agreed targets were achieved. (e.g. increase in market share giving a classical 'win win' outcome).

Some medicines, e.g. influenza vaccine, are bought directly by the surgeries. If the purchasing power of the whole LHG were to be used then it is probable that better prices could be obtained.

The secondary care sector, which only spends some 15% of the total NHS drug budget in Wales, is often charged with having an undue influence on the primary care budget. Although an influence is to be expected due to the professional peer group the data is not available in an easily accessible form for analysis. There is a strong need to introduce a coding system (e.g. the national REED codes) such that the data from both sides of the healthcare sectors is comparable.

Medicines purchasing into hospitals in Wales is the responsibility of the hospital pharmacist. The price paid is dependent on the item and the circumstances of purchase.

Items whose total annual value on an All-Wales basis is greater than £3000 are contracted for through the All-Wales Drugs Contracting Committee in accordance with the EEC Directive (Public Supply Directive) on procurement by public bodies.

The Constitution of the All-Wales Drugs Contracting Committee was changed by the Welsh Office in 1996 to reflect the interests of the new NHS following a report by the previous Committee {See Appendix 4}.

Due to possible influence on prescribing in the Community the Committee have refused to place various products on contracts over the past few years e.g. IMDUR and TYLEX.

Newly introduced items often greatly exceed the £3000 value before a contract can be made. In such cases the hospital pharmacist will negotiate locally for advantageous prices before the next contracting round.

Alternatives to the contracting process are:

1. Local Trust contracts – these reduce the buying power of the Welsh NHS.
2. Local ‘incentives’

Either of these could lead to a greater distortion of the market place because there would be no appreciable control.

3. No deals. This infers an uncontrolled market with no competition. This will lead to large increases or incentives given in other areas or central control on prices. It is also illegal for a public body not to tender of goods valued greater than about £120,000 per annum.

The Regional contracting system allows for a degree of control over the market because of the large customers buying power, a factor expected by the Public Accounts Committee of the House of Commons. Wales has used that power to introduce a new player into the field of IV fluids leading to an estimated saving in the UK of some £2 million per annum.

Ⓜ The current contracting system has been proved to be effective and should be endorsed.

One method the industry uses to introduce new products is to supply samples. GPs often use these as starter packs for patients during out of hours. This often leads to a continuing prescription for a product which was not chosen rationally.

In order to overcome these problems a pilot scheme has been running in the Bro Taf Health District between St Marys Pharmaceutical Unit and the ‘out of hours’

consortium of GPs at the Barry Hospital. St Marys supplies an emergency medicines bag which contains the Drugs and Therapeutics Bulletins' approved list of emergency medicines, labelled generically.

Once opened the bags are replaced and refurbished in St Marys. It is believed that the scheme has saved a large sum of money in follow on prescriptions as well as giving a professional service from a pharmaceutical and medical point of view. The introduction of the scheme has removed much of the 'lucky dip' approach of choosing from a collection of company samples.

The service has proved so popular that many of the GPs have purchased the bags for professional use outside the out of hours consortium. The major difficulty is maintaining the supply of replacements once the geographical area becomes large, on what is basically hospital prepackaged medicines. The St Marys Unit is currently discussing the matter with local Community Pharmacists.

Due to the non availability of certain medicines in a licensed form a number of patients are prescribed unlicensed medicines. These are prepared by or for a pharmacist according to a prescription from a practitioner. Those who prepare such medicines, unless prepared extemporaneously, perform the operation in facilities licensed by the Medicines Control Agency for the specific purpose. Such supply is legally² and professionally³ acceptable but the market is by its very nature uncontrolled in respect of the price charged. Those prices can vary from £75 to £6.50 for the same product, depending from where it is sourced.

Although the volume of this market is relatively small it may nevertheless be significant. An assessment of the total amount spent in this area and the sources may lead to a reduction in expenditure.

PRESCRIBING INCENTIVE SCHEME

Background

Since 1995 Health Authorities have had the power to make payments to GPs as an incentive for them to adopt cost effective prescribing policies. These payments have been used to invest in equipment and services of benefit to the patients.

The need to get best value for money out of the drugs budget has been further emphasised by the amalgamation of the prescribing hospital Community services and GMS budgets. Whilst there can be no legal limit on an individual GP's right to prescribe for a particular patient, any overspending on drugs budgets will have to be recovered from hospital and Community services allocations.

Existing Prescribing Incentive Scheme Regulations

A health service circular FHSL/27/95 together with the accompanying Statutory Instrument, sets out the legal position. In summary the Regulations give Health Authorities a statutory function to establish and operate a Prescribing Incentive Scheme in accordance with directions. These directions were issued by the Secretary of State and have not been amended.

Summary of Current Directions

- Health Authorities can specify a target range of expenditure within which a practice is expected to operate.
- They may make payments to practices who meet these requirements or they may impose other conditions in addition to those requirements before any payments are made.
- The total payment made to GPs should not exceed 35% of 1.5% of the total drugs budget.
- No payment to an individual GP may be greater than £3000 in any one year.

Additional Schemes

One authority in Wales has developed a non-statutory scheme, which is not as limited as the current statutory scheme. However existing guidance still requires HAs to operate the standard scheme.

Effectiveness of Incentives

There is some evidence that fundholders were able to control drugs budget expenditures more effectively than non-fundholders.

(The effects of fundholding in general practice on prescribing habits three years after introduction of the scheme - Sarah Stewart - Brown, Rebecca Surender, Jean Bradlow, Angela Coulter, and Helen Doll - BMJ 1995; 311: 1543-1547)

This may or may not have been because they were able to deploy all of the savings in one way or another.

There is published evidence of the effectiveness without detriment to prescribing quality of prescribing incentive schemes for non-fundholders.

(A prescribing incentive scheme for non-fundholding general practices: an observational study. D N Bateman, M Campbell, L J Donaldson, S J Roberts, and J M Smith - BMJ 1996 313: 535-538.)

There is also evidence to suggest that tailoring the scheme to practices is likely to be beneficial

(Prescribing incentive scheme for non-fundholding General Practices Philip Rutledge - BMJ 1996; 313: 1483-1484).

® The Group reviewed evidence that the end of fundholding in one Health Authority area in Wales resulted in ex-fundholders unit cost for prescribing rising faster than

that for non-fundholders and recommends that NAFW officials should extend this study to all of Wales.

Possible Solutions

The existing statutory requirement for an incentive scheme has been operated unevenly.

Health Authorities and their Local Health Groups have indicated their wish to operate more flexibly in allowing practices to reinvest prescribing savings in practice developments.

Ⓜ In order to produce flexibility the existing directions should be modified or the statutory requirement removed altogether

Ⓜ All future schemes should refer to quality measurements as well as budget performance

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- 2 Guidance Note 14 – Medicines Control Agency Feb 2000-05-30
- 3 Note 14 – Welsh Risk Pool

APPENDICES

WORKING ARRANGEMENTS OF THE TASK AND FINISH GROUP FOR PRESCRIBING

Membership of the Task and Finish Group for Prescribing

Dr Norman Mills, Chairman

Dr Alan Willson, Executive Director of Community Partnership, Iechyd Morgannwg Health Authority

Mrs Delyth Simons, Prescribing Advisor & Representative IPA/IMA, Pembrokeshire Local Health Group

Dr Tony Calland, GMP Welsh Medical Committee/GP St Briavels Surgery

Dr Terry Morris, Consultant Physician, Prince Charles Hospital

Mr Christopher Martin, Managing Director and Pharmacy Superintendent, St David's Pharmacy

Mr Mike Pollard, Chief Pharmacist and Clinical Director, Wrexham Maelor Hospital

Mrs Vanessa Bourne, Chairman of the Patients' Association

Mrs Marilyn Pitman, General Manager, replaced by Mr Rob Holcombe, Head of Finance and Performance, Blaenau Gwent Local Health Group

Mr Nigel Towns, Director of Finance, Dyfed Powys Health Authority

Mr Dan Williams, Member Representing Welsh CHCs

Mrs Rovena Cohen, Nursing Officer, National Assembly for Wales

Dr Michael A O Lewis, Reader and Consultant in Oral Medicine, University of Wales College of Medicine

Professor Phil Routledge, Professor of Clinical Pharmacology, University of Wales College of Medicine and Llandough Hospital

Mrs Yvonne Protheroe, Senior Clinical Nurse, Cwmbwrla Health Clinic, Swansea

The Group met on

- 14 January 2000
- 2 March 2000
- 29 March 2000
- 9 May 2000
- 7 June 2000
- 19 October 2000
- 1 December 2000
- 17 January 2001

Presentations and Sources of Advice Received

Presentations to the Group were received from:

Wednesday 29 March 2000

- Mrs Felicity Newton-Savage, Director, WeMeReC entitled "WeMeReC – the Future for Wales".

- Mr Ian Jones, Audit Commission
- Dr Alan Cuthill, Taff Ely Commissioning Group on Repeat Prescribing Local Action/Repeat Prescribing – Review of Taff Ely Commissioning.

Tuesday 9 May 2000

- Dr Paul Myres, Primary Care Advisor to CESU, Llandough and General Practitioner, Wrexham and Mrs Sue Lord, Clinical Pharmacist, North East Wales Trust entitled “Pharmacists and General Practices Working Together to Improve Safe and Effective Repeat Prescribing”

Wednesday 7 June 2000

- Dr Sandra Payne, Director of Public Health, North Wales Health Authority, regarding the work of the All-Wales Medicines Forum
- Mr John Cooke, Glaxowellcome, representing the Association of British Pharmaceutical Industry
- Mr Peter Farley, Head of Programme Development Branch, Health Promotion Division, The National Assembly for Wales entitled “Prescribing for Health and Exercise by Prescription”.
- Mr V’Iain Fenton-May, Specialist Principal Pharmacist, Quality Control Wales, Chairman of the Welsh Drug Contracting Committee, St Mary’s Pharmaceutical Unit entitled “Procurement Practices”

The Consultation Paper was sent out in July 2000 across the Service and the following individuals/Organisations/Committees responded:

- Mrs Jan Williams, Chief Executive, Bro Taf Health Authority
- Dyfed Powys Local Pharmacy Committee
- Ms Cheryl Davies, Secretary of Welsh Chief Pharmacists’ Committee, Singleton Hospital, Swansea
- Mr David Morgan, Director of Pharmaceutical Public Health, North Wales Health Authority and Chairman, Director of Pharmaceutical Public Health (Wales)
- Mr Bryn Williams, Chief Officer, Brecknock and Radnor, Community Health Council
- Ms Delyth Higgins, Policy and Development Officer, Welsh Consumer Council
- Mr T Wilson, General Manager, The Vale Local Health Group
- Mr Richard Dunkley, Wyeth UK, Maidenhead, Berks

- Mr Mike Spencer, Chairman, Welsh Committee for the Professional Development of Pharmacy, University Hospital of Wales, Cardiff
- Ms Erica Barrie, Welsh Executive Secretary and Mr Colin Ranshaw, Chairman, Welsh Executive, Royal Pharmaceutical Society of Great Britain, Welsh Executive
- Mr Robert G McArtney, All-Wales Specialist, Clinical Pharmacy, Directorate Pharmacist, Cardiac Services, University Hospital of Wales, Cardiff
- Mr Jeremy D Savage, Clinical Director, Clinical Support Services, West Wales General Hospital
- Ms Sian Richards, General Manager, Cardiff Local Health Group
- Mr A J Bellamy, Director of Corporate Development, Swansea NHS Trust, Swansea
- Mr C J Fontaine, Medical Director, North Glamorgan NHS Trust
- Mrs Felicity A O Newton-Savage, Director, Welsh Medicines Resource Centre, Llandough Hospital
- Mr Peter John, Chief Officer, Gwent Community Health Council
- Mrs Andrea Robinson, Secretary, Gwent Local Pharmaceutical Committee
- Mr K W O Thomson, Chief Executive, North West Wales NHS Trust
- Mr Dan R Williams, Chief Officer, Carmarthen Community Health Council
- Professor Roger Walker, Director of Pharmaceutical Public Health, Gwent Health Authority, on behalf of the Gwent Medicines Group
- Dr Ian M Millington, Secretary, Morgannwg Local Medical Committee
- Mr Rob Davies, Prescribing Advisor, Wrexham Local Health Group, Formulary Pharmacist, North East Wales NHS Trust
- Ds A Evans, Acting Medical Director, Powys Healthcare NHS Trust
- Bridgend Local Health Group, Bridgend
- Mrs Caroline Marshman, Nutrition and Dietetics Manager, Llandough Hospital
- Mr Mike Pollard, Chief Pharmacist, Wrexham Maelor Hospital, Wrexham
- Mr Barry Harrison, Prestel

- Liz Hewett, Board Secretary, Royal College of Nursing
- Ms Fiona Woods, All-Wales Drug Information Pharmacist, Welsh Drug Information Centre, University Hospital of Wales, Cardiff
- Bro Taf and Iechyd Morgannwg LPCs
- S Lewis, Chief Pharmacist, Secretary to the North Glamorgan NHS Trust Drugs and Therapeutic Committee
- Dr Doug Russell, Head of GP Development, Dyfed Powys Health Authority
- Ms Liz Bratton, General Manager, Swansea Local Health Group
- Mr Dave Roberts, Clinical Director of Pharmacy, Cardiff and Vale NHS Trust
- Mr Tony Glenn, Consultant in Dental Public Health, Iechyd Morgannwg Health
- Mr Peter Gibson, Group Public Affairs Manager, The Boots Company
- Professor T M Jones, Director General of the Association of British Pharmaceutical Industry
- Dr J L King, General Practitioner, The Surgery, Clark Avenue, Pontnewydd, Cwmbran, NP44 1RY
- *Mr John Davis, Springboard Consultancy*

POWERS OF THE ASSEMBLY

Introduction – The National Assembly for Wales

The National Assembly for Wales is a body corporate established by the **Government of Wales Act 1998 (Chapter 38)** (“the Act”). As such, the Assembly must act according to its legal powers as defined by statute, and cannot act outside these powers. General statements about the Assembly’s powers are therefore not very helpful in practice. We need instead to refer to specific legislative provisions. Our starting point is Part II of the Act, which deals with the Assembly’s functions. Under Section 21 of the Act, the Assembly shall have the functions which are (a) transferred to, or made exercisable by, the Assembly by virtue of the Act, or (b) conferred or imposed on the Assembly by or under the Act or any other Act.

The Assembly’s functions are not fixed in time, but are liable to change in the light of new Acts of Parliament which add to or modify these functions, for example, the **Health Act 1999 (Chapter 8)**, at Section 66. The majority of functions which relate to the remit of the Prescribing Task and Finish Group are however those transferred to the Assembly by **The National Assembly for Wales (Transfer of Functions) Order 1999 (Statutory Instruments 1999 No. 672)** (“the Transfer of Functions Order”).

The legislation relating to prescribing and supply of drugs.

This description of the Assembly’s powers and duties aims to outline the main functions that relate to the prescription of medicines and to the ordering and supply of drugs or appliances under the National Health Service. For reasons of space, the list is not complete or comprehensive and the selection of functions has been subjective according to their perceived relevance. It is intended to give an outline of the scope of the Assembly’s powers in this area, not a comprehensive statement of and an interpretation of the law.

Schedule 1 to The 1999 Transfer of Functions Order contains a list of the functions of a Minister of the Crown which, so far as they are exercisable in relation to Wales, are (a) transferred to the Assembly, or (b) exercisable by the Assembly concurrently with the Minister. The two principle Acts listed which relate most closely to the Task & Finish Group’s remit are the **Medicines Act 1968 (c.67)**, and the **National Health Service Act 1977 (c.49)**

The **Medicines Act** deals with licensing of medicines, clinical trials, prescription of medicines, regulation of pharmacies, medicines containers, labels and leaflets, and other related matters. Only section 108, relating to enforcement, is devolved to the Assembly. Under subsection (1) of section 132, the Assembly is the enforcement authority for the Act, as regards Wales.

In practice, the Medicines Control Agency continues to administer the regulatory framework for medicines across the whole of the UK.

The **National Health Service Act** is transferred to the Assembly, with a few specified exceptions. This is the Act which provides the main framework for the ordering and supply of drugs and appliances under the National Health Service.

Relevant exceptions which are not transferred to the Assembly relate to the Medical Practices Committee (section 7(1), (1A) and (2)) and the Dental Practice Board (section 37), and to the control of drug prices (sections 57). The last mentioned, in particular, is undertaken by the Department of Health for the UK as a whole.

The National Health Service Act 1977

Section 1 makes it the Assembly's duty to continue the promotion [as regards Wales] of a comprehensive health service designed to secure improvement in the physical and mental health of the people and in the prevention, diagnosis and treatment of illness. The service shall be free of charge except where the making and recovery of charges is expressly provided for by or under any enactment, whenever passed. See Section 77 for provisions relating to charges for drugs, medicines or appliances, or pharmaceutical services (may also wish to add reference to sections 83, 83A in respect of the remission and repayment of any such charges that are imposed).

Section 2 gives the Assembly power to provide such services as it considers appropriate for the purposes of discharging any duties imposed on it by the Act, and to do any other thing whatsoever which is calculated to facilitate, or is conducive or incidental to, the discharge of such a duty. This general power does not extend to services provided under Part II of the Act, that is, to General Medical or Pharmaceutical Services in particular.

Section 3 makes it the Assembly's duty to provide hospital and other accommodation, medical, dental, nursing and ambulance services, appropriate facilities for the care of expectant and nursing mothers and young children, appropriate facilities for the prevention of illness, and the care and after-care of persons suffering from illness, and services for the diagnosis and treatment of illness.

Sections 8 requires the Assembly to establish Health Authorities (section 11 enables the Assembly to establish special Health Authorities to perform functions as directed on the Assembly's behalf). Health Authorities are required under Section 15 to administer the arrangements for the provision of General Medical and Pharmaceutical Services, set out in Part II of the Act. Under Sections 16D and 17 the Assembly may direct a Health Authority or Special Health Authority to exercise any of the Assembly's own functions relating to the health service, and may give them directions about the exercise of any of their own functions. The Assembly also has specific powers in relation to Health Authorities which are contained in Section 27 of the Government of Wales Act 1998. These enable it, amongst other things, to transfer to itself any or all of the functions of a Welsh health authority.

Section 19 requires the Assembly to recognise committees formed for Wales which represent certain professions, including medical practitioners and registered pharmacists.

Section 20 requires the Assembly to establish Community Health Councils.

Section 23 enables the Assembly to arrange with any person or body (including a voluntary organisation) for that body to provide or to assist in providing any service under this Act.

Section 25 enables the Assembly to supply substances or preparations not readily obtainable to any person, on such terms, including terms as to charges, as it thinks fit. The Assembly must be satisfied that this will not significantly interfere with its other duties to provide services of any kind (Section 62)

The preceding sections encompass the ordering and supply of drugs in hospitals (both in-patients and out-patients) and in the Community by NHS Trusts. Generally, no distinction is made between the supply of drugs and the supply of other services to patients. The detailed arrangements for supplying and funding drugs through hospitals are in practice an operational matter within the discretion of Health Authorities and Trusts, although they could be subject to directions issued by the Assembly.

The ordering of drugs by GPs and the supply of these drugs by dispensing contractors (chemists, appliance contractors and dispensing doctors) is governed mainly by Part II of the Act (sections 29 to 56). These sections deal with general medical, general dental, general ophthalmic, and pharmaceutical services. These are services which, by and large, are provided in the Community by independent contractors to the NHS. They are sometimes referred to as “Part II services” or “contractor services”. All functions under Part II are devolved to the Assembly apart from those relating to the Dental Practice Board in Section 37(1).

Until recently, many Part II services including supply of drugs were not cash limited. The introduction of a “single funding stream” for hospital and Community prescribing from 1 April 1999 was intended, amongst other things, to decompartmentalise prescribing across the Health Service and to facilitate the more flexible and effective use of resources. However, this has not happened to any great extent. The roll-out of pilots for Personal Medical Services Schemes could accelerate the process.

General Medical Services

Section 29, 126(4) and other enabling powers provide for the Assembly to make regulations for General Medical Services. These regulations include provision for the publication of lists of doctors who provide general medical services (that is, GPs) and various other things. The regulations also provide for the Assembly to determine pay and terms of service for GPs, after consulting their representatives.

Sections 43A and 43B concern remuneration arrangements for Part II contractors, including both GPs and pharmacists, and contain further powers to make Regulations.

The National Health Service (General Medical Services) Regulations 1992

The present terms of service for GPs are set out in Schedule 2 of the National Health Service (General Medical Services) Regulations 1992. Paragraph 12 requires GPs to give their patients all necessary and appropriate personal medical services of the type usually provided by GPs.

Paragraph 43 of this Schedule requires GPs to order any drugs or appliances which are needed for the treatment of any of their patients, by issuing to the patient a prescription form (that is, a NHS prescription). The same paragraph covers ordering drugs by instalments. As the regulations stand, GPs can order only certain controlled drugs by instalments.

Paragraph 44 provides that certain drugs (listed in Schedules 10 or 11 of the regulations) may not be ordered under the NHS, or may be ordered only if certain clinical conditions are met. This is sometimes referred to as the “blacklist”. Products listed in Schedules 10 or 11 may nevertheless be supplied under the NHS through the hospitals and trusts, under Part I of the Act.

Paragraph 45 permits bulk ordering of drugs in certain circumstances, for certain institutions. Prescription-only medicines cannot be ordered in this way.

Paragraph 38 provides that GPs cannot charge their patients a fee except in circumstances which are specified in that paragraph.

Details of payments to GPs are set out in a direction made by the Assembly under Regulation 34. This is known as the Statement of Fees and Allowances or sometimes “The Red Book”.

It appears that the Assembly can modify any of the provisions in these Regulations or in “The Red Book”, or introduce new provisions, after consultation with GPs’ representatives.

Pharmaceutical Services

Section 41 places a duty on every Health Authority to arrange for the provision of pharmaceutical services in their area, in accordance with Regulations. There is a distinction between drugs and medicines, and appliances – only “listed” appliances may be supplied under the NHS under pharmaceutical services but there is no such provision for drugs and medicines. Simply, only listed appliances may be ordered by GPs, but they may order any drug unless it is blacklisted. Appliances which are not listed may nevertheless be supplied under the NHS, through hospitals and trusts under Part I of the Act.

The Assembly approves the list of appliances and publishes the list in the Drug Tariff (see below). At present there is a common list covering both England and Wales. Under this arrangement, a specialist unit at Department of Health advises the Assembly on product appraisal and product specification and negotiates with suppliers on the price to the NHS.

Section 41A and B enable the Assembly to give directions to a Health Authority in relation to additional pharmaceutical services, that is, services specified in the directions which do not fall within Section 41. These include additional pharmacist access services (formerly rota services) and advice to residential homes. Other services again, such as needle exchange services or disposal of unwanted medicines,

may be contracted separately at local (Health Authority) level and do not form part of pharmaceutical services.

Sections 41, 42, 43, 126(4) and other enabling powers provide for the Assembly to make regulations for pharmaceutical services. These regulations include provision for the publication of lists of persons who undertake to provide pharmaceutical services.

The National Health Service (Pharmaceutical Services) Regulations 1992

These Regulations control entry to the NHS contract by pharmacists and dispensing doctors. The present terms of service for chemists and dispensing doctors are set out in Schedule 2 of the Regulations 1992. Chemists are obliged to provide drugs or medicines ordered by a doctor, with reasonable promptness, and appliances as ordered in the normal course of his business. these regulations.

Under paragraph 8A of Schedule 2 pharmacists are expected to exercise professional judgement in providing these services, in conformity with the standards generally accepted in the profession.

Details of payments to pharmacists are set out in the Drug Tariff, a statement compiled and published by the Assembly under Regulation 18. The Drug Tariff includes other things such as the list of appliances approved under section 41 of the Act, the list of "borderline substances" (foods and toilet preparations which may be ordered under NHS pharmaceutical services in certain circumstances), notes on NHS charges and the lists of preparations that may be ordered under the NHS by nurses and dentists.

It appears that the Assembly can modify any of the provisions in these Regulations or in the Drug Tariff, or introduce new provisions, after consultation with pharmacists' or doctors' representatives, as the case may be.

NHS Prescription Charges

NHS prescription charges fall outside the Task and Finish Group's remit, but are included here for completeness. Sections 41, 42, 77, 83, 83A and paragraph 1 of Schedule 12 to the Act enables the Assembly to make Regulations for the making and recovery of charges, and for pre-payment certificates. Under Schedule 12, no charges can be made for supply under Part I to patients who are for the time being resident in hospital, for the treatment of venereal disease, for appliances for children under 16 (or under 19 and in full-time education) or for replacement or repair of appliances because of a product defect. These restrictions do not however apply to supply under Part II.

The present rules are contained in the National Health Service (Charges for Drugs and Appliances) Regulations 1989.

Section 83A of the Act enables the Assembly to make regulations for the remission or repayment of NHS charges and for the payment of travelling expenses incurred by patients making use of the NHS. The present rules, contained in the National Health Service (Travelling Expenses and Remission of Charges) Regulations 1988, include

the arrangements for the NHS Low Income Scheme which is administered on the Assembly's behalf by the Health Benefits Unit at Newcastle.

It appears that the Assembly can modify any of the provisions in these Regulations, or introduce new provisions, subject to the restrictions set out in the primary legislation.

GP PRESCRIBING PATTERNS IN WALES**1. Analysis of prescribing**

Data for prescriptions dispensed during 12 months ending June 1999. Source, HSW "Popularity" table.

Table i below gives a broad overview of expenditure on GP prescribing in Wales. Each of the drug category shown corresponds with a chapter in the British National Formulary, a standard reference work published twice a year by the British Medical Association and the Royal Pharmaceutical Society of Great Britain. Tables ii to xii that follow give a more detailed breakdown of the larger categories. It is intended to publish all-Wales prescribing data on the internet later this year.

Note that these tables show only GP prescribing. They do not include hospital in-patient or out-patient prescribing. Drugs which are prescribed mainly or exclusively by specialists (for example, for some cancers) will therefore be under-represented in these tables.

Drug Category	Cost, £ million	PERCENTAGE OF TOTAL
1.Cardiovascular system	78.7	21.3
2.Central Nervous system	61.0	16.5
3.Gastro-intestinal system	46.7	12.7
4.Respiratory system	46.0	10.9
5.Endocrine system	29.7	8.1
6.Musculoskeletal & Joint disease	16.8	4.9
7.Infections	14.9	4.0
8.Skin	12.3	3.3
9.Nutrition and blood	11.7	3.2
10.Malignant disease & immunosupression	11.7	3.2
11.Obstetrics, gynaecology & urinary tract	7.3	2.0
12.Dressings	6.9	1.9
13. Stoma Appliances	6.5	1.8
14.Eye	4.9	1.3
15.Immunological products & vaccines	4.8	1.3
16.Ear, Nose and Oropharynx	3.2	0.9
17.Appliances (Catheters etc)	3.1	0.8
18.Incontinence appliances	1.9	0.5
19.Other drugs and appliances	<1	0.2

Table ii Cardiovascular drugs

CARDIOVASCULAR DRUG CATEGORY	Used for treating ...	Cost, £ million	Percentage of total
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Nitrates etc.	Angina, high blood pressure	25.6	6.9
Antihypertensive drugs (ACE inhibitors etc)	High blood pressure	22.2	6.0
Lipid-lowering drugs (Statins, etc)	High cholesterol	16.0	4.3
Beta-blockers	High blood pressure, angina, heart attacks etc	5.9	1.6
Diuretics	Heart failure, high blood pressure	4.9	1.3
Antiplatelet drugs (including aspirin)	Prevention of strokes etc	1.4	0.3
Anticoagulants (including warfarin)	Prevention of thrombosis etc	1.2	0.3
Anti-arrhythmic drugs	Irregular pulse	1.0	0.3
Other		<1	0.1

Table iii Central nervous system drugs

Central nervous system drug category	Used for treating ...	Cost, £ million	Percentage of total
Antidepressant drugs	Clinical depression	23.7	6.4
Analgesics	Pain	15.8	4.3
Antiepileptics	Epilepsy	5.8	1.6
Antipsychotics	Schizophrenia, etc	5.3	1.4
Hypnotics & Anxiolytics (includes benzodiazepines)	Insomnia, anxiety	3.3	0.9
Parkinsonism	Parkinson's disease and related disorders	3.0	0.8
Nausea and Vertigo	Motion sickness, effects of anti-cancer therapy etc	3.0	0.8
Other		1.2	0.3

Table iv Gastro-intestinal

Gastro-intestinal drug category	Used for treating ...	Cost, £ million	Percentage of total
Ulcer-healing drugs	Gastric and duodenal ulcers, acid-related	35.1	9.5

	heartburn & indigestion		
Laxatives	Constipation	3.3	0.9
Chronic diarrhoea		2.8	0.8
Antacids	Acid-related heartburn and indigestion	2.0	0.5
Antispasmodics	Non-ulcer dyspepsia, irritable bowel syndrome, etc	1.9	0.5
Other		1.6	0.4

Table v Respiratory drugs

Respiratory drug category	Used for treating ...	Cost, £ million	Percentage of total
Corticosteroids	Asthma	21.3	5.8
Bronchodilators	Asthma	19.2	5.3
Allergic disorders	Hay fever, etc	2.8	0.8
Oxygen	Chronic obstructive pulmonary disease etc	1.1	0.3
Cromoglycate etc	Asthma	1.0	0.3
Other	Coughs, blocked noses etc	<1	--

Table vi Endocrine drugs.

Endocrine drug category	Used for treating ...	Cost, £ million	Percentage of total
Diabetes		12.5	3.4
Sex hormones	Mainly Hormone replacement therapy	9.7	2.6
Bone metabolism	Osteoporosis	2.8	0.8
Hypothalamic and pituitary hormones	.. include infertility drugs and human growth hormone	2.2	0.6
Thyroid and anti-thyroid drugs		1.1	0.3
Other		1.3	0.4

Table vii Musculoskeletal drugs

Musculoskeletal drug category	Used for treating ...	Cost, £ million	Percentage of total
Drugs used in rheumatic diseases (mainly non-steroidal anti-inflammatory drugs)	Pain and inflammation in joints	13.9	3.8

Drugs for relief of soft-tissue inflammation (mainly topical NSAIDs)	Painful muscles, tendons etc	2.4	0.7
Other		<1	--

Table viii Infections.

Drugs for infections	Used for treating ...	Cost, £ million	Percentage of total
Antibacterial drugs	...	11.5	3.1
Antifungal drugs	...	1.8	0.5
Antiviral drugs	...	1.3	0.4
Other		<1	--

Table ix Skin.

Drugs for skin conditions	Used for treating ...	Cost, £ million	Percentage of total
Topical corticosteroids	Eczema, etc	2.7	0.7
Emollients etc	Eczema, psoriasis	2.6	0.7
Anti-infective skin preparations	Impetigo, ringworm, athlete's foot etc	2.4	0.7
Preparations for eczema & psoriasis	(.. apart from emollients and topical corticosteroids)	1.8	0.5
Preparations for acne	..	1.3	0.4
Other		1.4	0.4

Table x Nutrition and blood.

Drugs for nutrition and blood	Used for treating ...	Cost, £ million	Percentage of total
Oral nutrition	People needing special diets, severely ill patients etc	7.1	1.9
Anaemias and other blood disorders	.. mainly epoetin, for patients having kidney dialysis.	1.7	0.5
Vitamins	Specific deficiency states. May not be prescribed as dietary supplements.	1.2	0.3
Other		1.6	0.4

Table xi Malignant disease & immunosuppression

Malignant disease & immunosuppression	Used for treating ...	Cost, £ million	Percentage of total
Sex hormones and hormone antagonists	Mainly prostate cancer	7.4	2.0
Drugs affecting the immune response	Mainly ciclosporin, for transplant patients	4.6	1.2
Cytotoxic drugs	Mainly methotrexate, for	<1	--

	leukaemia and other cancers.		
--	------------------------------	--	--

Table xii Obstetrics, gynaecology & urinary tract

Obstetrics, gynaecology & urinary tract	Used for treating ...	Cost, £ million	Percentage of total
Drugs for genito-urinary disorders	Mainly urinary retention, incontinence and impotence	4.2	1.1
Contraceptives	..	2.6	0.7
Other		<1	--

2. Prescribing trends

Over the last quarter-century prescribing costs have tended to increase by some 4-5% above the prevailing rate of inflation. This difference is very largely due to the increase in the number of prescriptions being issued. Various explanations have been offered for this, including the increase in the proportion of elderly and very elderly in the population. The simplest explanation for the increase though is in the number of medical conditions that can now be effectively treated in the community by drugs, which affects both the volume and the mix of drugs prescribed. Table xiii below illustrates this by comparing relative spend on the top 10 drug categories in Wales, in 1999 and in 1973.

Table xiii Changes over the last 26 years

Rank	1999	% of total spend	1973	% of total spend	% of total spend, 1999
1.	Ulcer-healing drugs	9.5	Antibacterials	15.5	3.1
2.	Nitrates etc	6.9	Hypnotics and tranquillisers	7.6	0.9
3.	Antidepressant drugs	6.4	Rheumatic disease	5.8	3.8
4.	Antihypertensive therapy	6.0	Antihypertensives	5.4	6.0
5.	Corticosteroids	5.8	Dressings etc	4.6	1.9
6.	Bronchodilators	5.2	Analgesics	4.5	4.3
7.	Lipid-lowering drugs	4.3	Diuretics	4.4	1.3
8.	Analgesics	4.3	Topical corticosteroids	3.9	0.7
9.	Rheumatic disease	3.8	Preparations relaxing bronchial spasm	3.5	5.3
10.	Diabetes	3.4	Vasodilators, vasoconstrictors	3.3	--

The mix of drugs prescribed continues to change, with increasing emphasis at present on treating heart disease, on treating mental illness in the community,

and on effective pain management. Table xiv below shows the drug categories with the largest cost growth through 1999.

Table xiv Growth, 1998-99

Rank	Drug category	Increase, year ending June 1999 – year ending June 1998, £ million
1.	Lipid-lowering drugs	4.5
2.	Antihypertensive therapy	3.4
3.	Antidepressant drugs	2.8
4.	Analgesics	1.9
5.	Drugs used in diabetes	1.5
6.	Antipsychotics	1.3
7.	Genito-urinary disorders	1.3
8.	Nitrates etc	1.3
9.	Diuretics	1.2
10.	Bronchodilators	1.2

3. Patterns of Prescribing Across Wales

By and large we would expect patterns of prescribing in Wales to follow patterns of morbidity. It does not follow that material variations between adjacent practices or practices sharing premises are necessarily down to factors other than morbidity, because where patients in a particular area have a choice of GPs there may be significant differences between patient list profiles. Nevertheless there are some differences between practice prescribing which are difficult to explain except in terms of differences between the doctors themselves. Following Welsh Office guidance issued in 1993 (WHC(93)32) Health Authorities in Wales have pioneered the development of prescribing indicators which aim to separate the quality of prescribing from other matters outside the GP's control.

The Audit Commission have presented the Task and Finish group with evidence on the geographical variability of a range of quality prescribing indicators. 10 charts prepared by the Commission are reproduced following this report. It is evident that there are no consistent patterns of geographical variation. Because of this, the Commission have advised the Task and Finish Group that priorities and strategies for influencing prescribing patterns should differ locally.

4. Prescribing in Wales – Comparison with England

The cost of primary care prescribing per capita of population in Wales has been consistently 20% higher than in England. The number of prescriptions received by each Welsh resident is just under 30% greater than for English residents. The average cost per prescription is some 8% lower. Generally, this pattern is replicated for most of the major therapeutic groups, with the notable

exception of those used for treating asthma, rheumatic disease, and anti-bacterials.

While several studies have identified a propensity for GPs in Wales to prescribe higher price products than their peers in England, the underlying reason for the Welsh “premium” is simply that on average GPs in Wales issue more prescriptions per patient than GPs in England for most categories of drug. Table xv illustrates this, based on data for England published by the Prescription Pricing Authority and data for Wales supplied by Health Solutions Wales, for the calendar year 1998. This shows the top 15 categories ranked by their contribution to the cost “premium”.

Table xv England, Wales Comparison

Drug Category	Cost per prescription, £		Prescriptions per 1,000 population (OPCS)		Cost per head, £	
	Wales	England	Wales	England	Wales	England
Ulcer-healing drugs	26.49	28.60	443	308	11.73	8.80
Nitrates etc	11.98	13.22	705	477	8.44	6.30
Bronchodilators	9.54	9.10	658	493	6.28	4.48
Antidepressants	15.55	15.14	477	375	7.42	5.68
Corticosteroids (inhaled)	24.13	22.52	294	242	7.09	5.44
Rheumatic disease	8.30	8.01	543	428	4.51	3.42
Analgesics	3.86	4.50	1260	845	4.86	3.81
Antihypertensive therapy	15.10	18.13	444	314	6.71	5.71
Dressings & appliances	14.69	16.58	411	304	6.04	5.04
Diabetes	12.61	13.16	310	259	3.91	3.40
Sex hormones (anti-cancer)	50.10	53.08	46	35	2.28	1.80
Hypnotics & anxiolytics	1.72	1.77	599	330	1.03	0.59
Lipid-lowering drugs	26.26	31.76	163	122	4.28	3.87
Nausea & vertigo	6.49	5.52	144	102	0.94	0.56
Antibacterial	4.03	3.82	915	868	3.69	3.32

OHP 1

OHP 2

OHP 3

OHP 4

OHP 5

OHP 6

OHP 7

OHP 8

OHP 9

ADVISORY COMMITTEES AND THEIR POTENTIAL

Suggested Core Membership for All-Wales Medicines Strategy Group

Chairman

Chief Medical Officer (or representative)

Chief Pharmaceutical Adviser (or representative)

Director of Public Health Medicine) HA

Director of Pharmaceutical Public Health)

GP)

Nurse) LHG

Pharmacist)

Medical Director)

Nurse Director) NHS Trust

Chief Pharmacist)

Consultant Microbiologist

Clinical Pharmacologist

Medicines Information Pharmacist

Patients Representatives

Health Economist

Representatives of ABPI Industry Group for Wales

**Administrative support via Welsh National Prescribing
Support Service**

NAW officials in attendance

NOTE: Members to be co-opted for specialist subjects

Sample Terms of Reference for an All-Wales Medicines Strategy Group

In principle, the Strategy Group should aim to take a strategic and advisory approach to medicines management issues, which informs rather than governs local policy. The central principles of rational prescribing and medicines use, namely clinical and cost effectiveness, appropriateness (including convenience) and safety, should guide the thinking and outputs of the group.

The Group should seek to achieve such aims through adopting appropriate Terms of Reference:

Terms of Reference (example)

- **To forecast developments in healthcare which involve the use of medicines and provide effective advice on the local implications of such developments and their management.**
- **To reach a consensus, based on the available evidence, regarding the place in treatment locally of relevant new drugs/formulations, or of existing drugs with new indications, and to work to ensure that such advice is endorsed and then disseminated to all stakeholder organisations.**
- **To advise and assist the HA, LHG's and NHS trusts in the development and implementation of plans for the introduction of new treatments, local policies and national guidance involving medicines.**
- **To advise on the formation, development and implementation of medicines management policies/formularies and guidelines co-ordinated across primary and secondary care.**
- **To make recommendations to assist in the resolution of problems relating to prescribing at the interface between primary, secondary, tertiary and social care.**
- **To respond promptly to national changes in NHS policy that will affect prescribing and medicines management locally, including NICE guidance and NSFs.**
- **To act as a focus for developing and refining local professional opinion on drugs, therapeutics and associated pharmaceutical issues, and to convey such opinions to all relevant organisations and bodies, including those not directly represented on the Group.**

Good management points for an effective Strategy Group (example)

- **The agreed Terms of Reference, plus the list of members should be readily available to any relevant party on request.**

- **All members should have nominated deputies who can attend in their absence.**
- **The Group should decide, in advance, about the level and balance of members and at what number/mix meetings are considered quorate.**
- **The Group should democratically elect the Chairman and this appointment should be reviewed on an annual basis.**
- **Resignation from the Group may be made at any time by notice to the Chairman, in writing.**
- **The appointed administrator should keep records (e.g. minutes) of the proceedings, decisions and advice of the Group. Agreement should be reached as to how long such documentation should be kept.**
- **If any member has financial or personal interests, whether pecuniary or otherwise, in any related matter that is the subject of consideration, they should declare such interest, in advance. All declarations of interest made as a result of this provision, and any action taken, should be noted in the minutes of the meeting.**
- **All discussions taking place in meetings should be confidential, unless stated otherwise, and not disclosed to any unauthorised person; in particular no view or opinion expressed should be attributed to any member by name.**
- **A voting system may be required on occasions in order to come to a majority decision. This process should be defined in advance and members should agree to abide by the outcome of such votes.**

SUGGESTED CORE MEMBERSHIP LHG PRESCRIBING COMMITTEE

Chairman x 1

Prescribing Lead x 1

Clinical Governance Lead x 1

GP x

Nurse Prescriber x

Community Pharmacist x

Prescribing Adviser for LHG x 1

Finance Director for LHG x 1

Consultant Microbiologist x 1

Representative from Trust D & T Committee x 1

Patients Representative x 1

Social Service Representatives x 1

NOTE: Members to be co-opted for specialist subjects

LHG PRESCRIBING COMMITTEE

AIM

To facilitate the effective, efficient and safe use of medicines within the LHG

	FUNCTION	INPUT NEEDED	HOW
Effectiveness	New Drugs & Clinical Trials	DI, NICE, Ethics Committee, LHG, HA NHS Trust	Comments: DI Formulary Pharmacist Special Consultants Received minutes LHG/HA Rep. NHS Trust
Efficiency	Acquisition cost Knock on effect:- - Community - total health care	LHG Health Authority Benchmarking	- LHG Prescribing Lead - LHG GP - Pharmaceutical Advisor - Health Economist?
Safety	Risk assessment <ul style="list-style-type: none"> • Product <ul style="list-style-type: none"> - Inherent risk - Licensed/unlicensed - Presentation • Systems <ul style="list-style-type: none"> - Patient's medication history - Choice of drug - Supply process - Administration process - Discharge - Communication - Training for staff - Training for patients - Protocol/Guidelines • Monitoring <ul style="list-style-type: none"> - ADR - Critical incidents concerning medication - Audit 	Users of product Users of systems Review & authorisation for LHG Reports on ADRs Medication Errors and audits to go to Clinical Governance Lead	Representation from main prescribers: - GP's - Dentists - Nurses - Pharmacists Prescribing Lead Clinical Governance Lead Pharmaceutical Adviser Patients representatives Social Services Co-option as appropriate

Propose core group with members co-opted for specialist subjects

**SUGGESTED CORE GROUP
NHS TRUST'S DRUGS AND THERAPEUTICS COMMITTEE**

Chairman x 1

Medical Director x 1

Clinical Directors x ?

GPs x 1 per LHG

Consultant Microbiologist x 1

Chief Pharmacist x 1

Clinical Services Pharmacist x 1

**Formulary Pharmacist x 1
(or Medicines Information)**

Nurses x 2

Patient Representative x 1

HA Representative x 1

NOTE: Members to be co-opted for specialist subjects

THE NHS TRUST'S DRUG AND THERAPEUTICS COMMITTEE

AIM

To facilitate the effective, efficient and safe use of medicines within the Trust

	FUNCTION	INPUT NEEDED	HOW
Effectiveness	New Drugs & Clinical Trials	DI, NICE, Ethics Committee, LHG, HA	Comments: DI Formulary Pharmacist Special Consultants Received minutes LHG/HA Rep.
Efficiency	Acquisition cost Knock on effect:- - Community - total health care	Drug Contract LHG Health Authority Benchmarking	- Chief Pharmacist - LHG GP - Pharmaceutical Advisor - Health Economist?
Safety	Risk assessment <ul style="list-style-type: none"> • Product <ul style="list-style-type: none"> - Inherent risk - Licensed/unlicensed - Presentation • Systems <ul style="list-style-type: none"> - Patient's medication history - Choice of drug - Supply process - Administration process - Discharge - Communication - Training for staff - Training for patients - Protocol/Guidelines • Monitoring <ul style="list-style-type: none"> - ADR - Critical incidents concerning medication - Audit 	Users of product Users of systems Review & authorisation for Trust Reports on ADRs Medication Errors and audits to go to D & T	- Specialist Consultant representation from main prescribing disciplines eg Anaesthetics/ITU - General Medicine - Microbiology - Psychiatry - Chief Pharmacist - Principal Pharmacist Clinical Services - Co-option as appropriate - Chairman/Chief Pharmacist with Specialist input as appropriate - Nursing

Propose core group with members co-opted for specialist subjects

SKILLS OF THE COMMUNITY PHARMACIST

<i>Title</i>	<i>Status</i>
North Wales Development of the role of the Primary Care Pharmacist as a member of the Primary Healthcare Team	Ongoing Well accepted by surgery and pharmacist. Cost savings indicated. 20 new Practice pharmacists employed.
North Wales Supervised self-administration of methadone in the Community	Completed 155 out of 729 patients reduced therapy
Wrexham Medicines management for patients with mental illness	Ongoing
Flintshire Promote wider use of pharmacists providing prescription advice to GP's	Completed Formulary developed and implemented
Wrexham Development of terminal care services within 12 Community Pharmacies	Completed Formulary and stock control systems developed.
Carmarthen Prescribing support to GP practices by Community Pharmacists	Completed Qualitative feedback – service well accepted. Quantitative data delay from Health Solution Wales
Carmarthen Medicine management in Nursing homes by pharmacists	Completed £1,000 savings per month (18% total drug budget)
Carmarthen Providing safe and secure systems within services to substance misusers	Completed Reduction in methadone related deaths. 18 in 1996/97 to 3 in 1998

<i>Title</i>	<i>Status</i>
<p>Carmarthen</p> <p>Enhanced medicines information (former Drug Information) services to meet the needs of primary care</p>	<p>Ongoing</p> <p>Qualitative assessment of service and resource needs in primary care.</p>
<p>Carmarthen</p> <p>To facilitate closer working arrangements between Community Pharmacies and GP's</p>	<p>Locally agreed referral protocols for minor ailments well received by GPs Two-way referral was formalised and value of Community Pharmacist recognised.</p>
<p>Carmarthen</p> <p>Multi-disciplinary review of computer generated repeat prescriptions, to improve patient compliance and reduce prescribing costs</p>	<p>Completed</p> <p>Effectiveness of joint working identified</p>
<p>Swansea and Carmarthen</p> <p>Clinical Pharmacy Services of an NHS Trust providing prescribing support to GP's</p>	<p>Completed</p> <p>Savings of £30K per year identified</p>
<p>Carmarthen</p> <p>To increase patient knowledge, enabling the patient to self-medicate and thereby reduce unnecessary GP consultations</p>	<p>Completed</p> <p>Educated group shown to appropriately self-medicate or go to pharmacist, compared with GP, more frequently than control group</p>
<p>Swansea</p> <p>Repeat prescribing joint working Project</p>	<p>Ongoing</p> <p>Network established. Qualitative and quantitative improvements being assessed.</p>
<p>Swansea</p> <p>Domicillary Medication Management scheme</p>	<p>Ongoing</p> <p>Additional primary care funding secured</p>

<i>Title</i>	<i>Status</i>
<p>Neyland</p> <p>Neyland lifestyle prescription clinic</p>	<p>Ongoing</p> <p>Data so far indicates major improvements in various lifestyle parameters</p>
<p>Swansea</p> <p>Pharmacist prescribing of head lice treatment within multi-disciplinary team</p>	<p>Ongoing</p> <p>Welcomed by surgery, pharmacist and patients. Qualitative analysis to be assessed.</p>
<p>North Wales</p> <p>Clinical effectiveness and the clinical pharmacist in primary care</p>	<p>Recommended clinical pharmacist services to all GP practices and collaboration with local pharmacists to ensure continuity of care</p>
<p>Bro Taf Health Authority</p> <p>Antibiotic prescribing and antibiotic resistance in Community practice – retrospective study</p>	<p>Collaborative study indicating links between prescribing practices and Community resistance. Published BMJ.</p>

Other Initiatives Include:

The following list gives a flavour of some of the initiatives that are currently underway at LHG level in Wales:

Initiatives to address the problems of out of hours supply of pharmaceutical products

Bro Taf

Repeat prescribing initiative. Proposal for pharmacist intervention to verify, with the patient, that all the items ordered are, in fact, needed at that time. Perceived benefit: Savings to the prescribing budget, plus valuable clinical feedback to the GP about what is actually supplied. (Anecdotal evidence that patients regularly request that routinely prescribed medicines be not dispensed leading to the potential for incomplete and, possibly, misleading record keeping at the surgery.)

Wrexham

- *Service Level Agreements with Trust for the provision of pharmaceutical support to the prescribing adviser. Perceived Benefit: Ensures that Trust pharmacy informs the development of LHG*
- *prescribing guidelines etc.*

Pembroke, Bridgend

- *Audit Packs have been developed which include protocols, evidence based messages and data collection forms*
- *Perceived benefit: Standardised formats for pharmaceutical support across the LHG. Facilitates measurable outcomes.*

Caerphilly

- *Development of prescribing forum. Examples of issues covered: Primary/Secondary prescribing interface, Gastroenterology and NICE Guidelines, Antibiotics*

Conwy

- *Support for practice prescribing leads, providing protected time for GPs to take forward agreed practice initiatives to improve the quality and cost effectiveness of prescribing.*
- *Perceived benefit: provides time within the practice to address key prescribing issues.*

Neath Port Talbot, Swansea

- *Medicines Management Project being developed with Community Pharmacists to support the provision of advice and support to patients.*
- *Perceived benefit: Maximises skills and opportunities to improve patient compliance and understanding of prescribed and non prescribed drugs.*

Purchase of Medicines in Wales

The Constitution of the All-Wales Drugs Contracting Committee was changed by the Welsh Office in 1996 to reflect the interests of the new NHS following a report by the previous Committee
viz:

6 Chief Pharmacists
2 Directors of Pharmaceutical Public Health
1 Independent Pharmaceutical Advisor
1 Medical Representative Primary Care
1 Medical Representative Secondary Care
1 All-Wales Quality Assurance Pharmacist
1 Technical Services Pharmacist
1 Director of Finance
1 WHCSA Representative
Chief Pharmaceutical Advisor

Due to possible influence on prescribing in the Community the Committee have refused to place various products on contracts over the past few years e.g. IMDUR and TYLEX.

PRESCRIBING INFORMATION SYSTEMS

Data Capture

In General Practice prescriptions are written on forms FP10 or printed by general practice computer systems.

Each prescription bears an identifier of the prescriber in the form of a six-digit cipher.

There is provision to identify prescriptions written by registrars in training for general practice by using their trainer's cipher followed by a code letter "d" in red ink. Prescriptions written by a deputising service can be distinguished in a similar way.

The majority of prescriptions are presented to a pharmacist for dispensing but some rural GPs are dispensing doctors for some or all of their list and the drugs are supplied directly to the patients

Every FP10 that is written and handed into a pharmacy, or dispensed or personally administered in the surgery ends up at the prescription pricing service (PPS) which is a division of Health Solutions Wales

At present all forms are priced manually, and the results collected in a prescribing database, which is then the basis of a number of reports, some of them paper based, some electronic.

Many pharmacists now have their own computer systems that hold patient records, have "expert systems" for identifying possible interactions and printing labels and instructions and assist in stock control. There is therefore the possibility for data to pass from the dispenser to PPS electronically.

Computer Database

Prescribing Management Support system (PMSS) is the transaction driven computer database at Health Solutions Wales supplies information to other analysis systems. It runs on a mainframe.

The data on this machine is required to produce all the PARC material. It contains data that includes all prescriptions priced up to that moment and can produce data down to individual GP

The prescribing information pricing service (pips) transfers information from the mainframe to a local area network system and then produces CDs that can be used by several existing programs. The CDs are distributed to LHGs Has and those practices that have contracted to receive them.

Paper Based Reports (PARC)

PARC is the acronym for prescribing audit reports and catalogues. The audit reports are generated for practices Local Health Groups, Health Authorities and the National Assembly for Wales monthly and fuller reports are generated quarterly

Special comparison charts are added to relate to the current bulletin of the Welsh Medicines Resource Centre. (WeMeReC)

The catalogues are more detailed analyses which can show every single item prescribed and dispensed within a given period, month or quarter or year, and is available on request. It can be supplied for the practice or by individual GP, or for an LHG or Health authority area.

Both types of report relate to British National Formulary classification rather than disease state. Some care is needed in interpreting the data, as for example prescribing for infections are in chapter 5, but topical antibiotics, antifungals and antiviral preparations would be included in chapter 13 along with parasitical preparations.

Access to a current BNF is essential in interpreting the PARC. An electronic version of the BNF is now available.

Volume Measures

At present the prescribing tools refer to prescribing units (pus). This is to reflect the relatively greater prescribing that occurs for older age groups. One unit is given per patient under 65, 3 units for each patient over 65 and an addition is made for the number of temporary residents.

There are a variety of other weighting systems in use in the UK but currently Wales has not developed the capacity to take advantage of these systems.

Computer Systems

Prescribing Analysis (micros) System PAMS

This product allowed the analysis of prescribing trends by authority, practice, and groups of GP fundholders and non-fundholders

It is a source of information about projected out-turns against allocation, prescribing trends, and prescribing performance by BNF chapter.

It is an older dos product that is being considered for re-writing for windows and is not currently supported

The main functions it is used for are:

- List size trends
- Analysis of age bands and temporary residents
- Month by month performance by practice by therapeutic group

- Ability to sift out practices with certain specified parameters, such as over or under budget, over or under therapeutic average, difference between this period and last period.

League

This is a windows product giving a league table of practices within an authority LHG or any other grouping of practices specified by a set of parameters, which are:

- Overall
- Cost
- Items
- Percentage generic prescribing
- Cost per 1000 pus
- Items per 1000 pus
- Cost per 1000 patients
- Items per 1000 patients

League allows the examination of the prescribing of any drug or group of drugs specified by the examiner, which can be saved as groups.

They can be examined by quarter, and each member of the league can have a two-year trend shown as a graph, and their performance against the rest of the table members in table or graph form.

Tables can be exported to be used in other windows spreadsheets or databases. This can allow the production of tables with the identity of practices removed or disguised.

Popularity

This product can analyse specified groups of drugs to determine which are taking most resource and which are increasing or decreasing by volume or cost most rapidly at any specific time.

It also allows the export of tables to a spreadsheet or database that can import comma-separated values.

Prescribing information and analysis system (PIAS)

This tool is currently a dos based system but is being re-written for a windows environment.

It can provide comparisons of data covering the last 8 quarters for the prescribing of all practices in on health authority or LHG area, together with aggregated data for the other authorities in Wales, and an all-Wales aggregate.

There is a facility to group practices, and select groups to compare to each other. It is widely used to provide feedback to practices on their prescribing patterns and in particular to facilitate peer review.

Audit Commission Thematic Analysis of Prescribing ACTAP

The Audit Commission produced this originally as part of their work in producing their report

"A Prescription for Improvement - Towards More Rational Prescribing In General Practice".

It provided a series of tabulations that helped identify potential savings, and some quality issues.

These tables are now out of date, but the prescribing advisers in Wales have always indicated their desire to encourage the development of similar facilities.

Practice Based Computer Systems

Most GPs now generate at least the repeat prescriptions by their computer systems. The latest versions of GP software can be used to influence product choice using a system known as Prodigy. The systems can also be harnessed to produce prescribing pattern reports though the number of practices who currently have the necessary skills is probably quite small.

Summary

Existing systems can determine the pressure points in prescribing trends determine which areas or practices are the focus of that pressure and can with some effort be made to calculate both potential savings and prescribing ratios that are guides to the quality of prescribing. PIAS feeds back to practices peer comparisons. Practice systems can be used to generate prescribing information. Pharmacy systems could be used to generate prescribing information. Hospital systems could be further developed to produce comparative prescribing information.

GLOSSARY OF TERMS

Allocation Formula	An equation used to establish a fair share of resources for a budget.
Association of British Pharmaceutical Industry (ABPI)	The trade association representing manufacturers of prescription medicines.
British National Formulary (BNF)	A joint publication of the British Medical Association and the Royal Pharmaceutical Society of Great Britain, providing key information on the selection, prescribing, dispensing and administration of medicines.
Clinical Freedom	The historic freedom enjoyed by doctors to prescribe for, or treat in other ways, patients who had consulted them, in the way they felt most appropriate for the patient. Increasingly this 'freedom' is being subordinated to the constraint imposed on all health professionals to use treatments that have been shown by scientific evidence to be effective and safe.
Clinical Governance	The managing of and taking responsibility for clinical practice by health professionals and its consequences for patients in the area for which a health manager has control. The ultimate Responsibility in, say, an NHS Trust lies with the Chief Executive, (accountable to the Trust Board) but appropriate responsibility rests at all intermediate levels, including with individual clinicians and their clinical managers.
Commission for Health Improvement (CHI)	The Commission for Health Improvement.
Concordance	Optimisation of health gain from the best use of medicines, compatible with what the patient desires and is capable of achieving.
CPD	Continuing Professional Development. This is a determined, life-long process of refreshing and extending professional skills and of keeping up-to-date with developments in one's field of work.
Dispensing Contractors	Pharmacists, Appliance Contractors and General Medical Practitioners providing pharmaceutical services under the National Health Service.

Doctor's Rotational Training	The holding of an arranged series of different, fixed-term training posts by qualified doctors, in the same or in different health bodies, designed to give a wide but predetermined range of experience and training towards accreditation as suitable for a career post carrying full personal responsibility, such as GP or Consultant.
Formulary	A published list of drugs in medical use which has been agreed by an appropriate group of responsible doctors and other health professionals for use in their area of practice
FP 10	NHS Prescription form used by GPs
FP10HPs	NHS Prescription form used by hospitals for medicines to be dispensed in the Community.
General Sales List (GSL)	The list of medicinal products exempt from the restrictions on sale or supply that apply to prescription-only medicines.
Health Improvement Planning	The process of developing a plan involving the whole community in gaining improvements in the length and quality of life.
Junior Doctors/Junior Medical Staff	Medical Staff other than General Medical Practitioners (GPs), hospital Consultants and other doctors in substantive (career) posts). They are in training for 'Career Posts' such as GP or Consultant.
Local Health Groups	These are, at present, advisory sub-committees of Health Authorities, based largely on local authority areas, and charged with developing primary care, advising on effective commissioning of local services, encouraging inter-agency co-operation, developing the introduction of clinical governance and facilitating the progressive provision of a wider range of local services.
Medication	Treatment by the use of medicines and drugs
Medicines Management System	Systematic process which links decisions about treatment at policy and individual level to decision support, audit and review, information analysis and reporting.
Medicines Round	Term commonly used within hospitals/nursing homes to describe the system used to supply and administer medicines to individual patients in a ward or residential setting. (i.e. 'taking them round' the ward).

Monthly Index of Medical Specialities (MIMS)	A monthly update of all prescribable medicines in the United Kingdom.
National Institute for Clinical Excellence (NICE)	A Special Health Authority charged with providing patients, health professionals and the public with authoritative, robust and reliable guidance on current “best practice”.
National Service Frameworks (NSFs)	National Service Frameworks set national standards and define service models for a specific service or care group, put in place programmes to support implementation and establish performance measures against which progress within an agreed timescale will be measured.
Non-formulary Drugs	Medicines not included within a Formulary.
Patient Packs	medicines supplied for individual patients in the manufacturers’ original packs, or in similar packs created by a pharmacy.
PGEA	Post Graduate Educationally Approved
Prescription for Exercise	The prescribing of approved exercise routines where deemed by the doctor to be more appropriate than medication, or to be done in conjunction with medication.
Prescription Pricing Authority	The Special Health Authority responsible for pricing and checking prescriptions dispensed in England, for remunerating dispensing contractors in England, and other related functions.
Primary Care Medical Advisers	Experienced general medical practitioners required by statute to be appointed by health authorities to make enquiries of GPs about prescriptions and referrals. Often now involved in primary care strategy development, quality improvement and probity checks.
Primary Care Organisations	In England this term encompasses reference to Primary Care Groups and Primary Care Trusts.
Primary Care Support Pharmacists	Pharmacists working within the primary care setting providing support to other healthcare professionals, and GPs in particular, in respect of medicines management from prescribing support through to aspects of concordance.
Prescription Only Medicines	Medicinal products (other than veterinary products) which cannot be sold except in accordance with a prescription given by an appropriate practitioner, and which cannot be

administered to another person except by an appropriate practitioner or someone acting under an appropriate practitioner's directions.

PRODIGY	A computerised clinical decision support system for general practice.
Pump Prime	To provide temporary additional funding to facilitate the reprioritisation of services.
Repeat Prescribing	A system operated by a general practice, which defines how repeated prescriptions may be generated, approved and issued. It may also define patient review arrangements.
Ring-Fenced Funding	Funding allocated for a specified purpose, that can be used for no other.
Schedule 10	The list of drugs and other substances that GPs may not prescribe under the National Health Service.
Self-medication	The process of an individual choosing for and administering medicaments to themselves.
“Specials”	Products manufactured under Specials Manufacturing Licence, they tend to be products which are not commercially viable and are made to order.
Treatment Regimens	A programme of treatment for an individual which may or may not include medicines.