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ORIGINAL ARTICLE

The All Wales Medicines Strategy Group: 18 years' experience of a national medicines optimisation committee

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Aims: To review the medicines optimisation activities of the All Wales Medicines Strategy Group (AWMSG), a committee established in 2002 to advise the Welsh Government on "all matters related to prescribing". Although AWMSG conducts other activities (e.g., health technology appraisal for medicines), we focus here on its role in advising on medicines optimisation.

Methods: Prescribing indicators have been used in Wales to measure change, together with data on volumes and costs of medicines dispensed. A range of improvement strategies have been categorised under the "four Es", namely educational initiatives, economic incentives, "engineering" and "enforcement".

Results: AWMSG has helped health professionals in NHS Wales to reduce harm and waste, and to reduce inappropriate local or regional duplication and variation. Specific initiatives include the achievement of major cost savings by supporting increased generic prescribing and an "invest to save" approach related to prescribing of hypnotics and tranquillisers, non-steroidal anti-inflammatory drugs (NSAIDs) and proton pump inhibitors. AWMSG also successfully commissioned the introduction of a single national in-patient medication chart for Wales in 2004. Ongoing priorities include a focus on reducing prescribing of certain medicines deemed "low value for prescribing" and on optimising the use of biosimilar medicines.

Conclusions: Since 2002, AWMSG has acted as a national medicines optimisation committee in Wales. From the outset, pharmacists and clinical pharmacologists have collaborated closely and shared their complementary expertise to make a much greater contribution to the safe, effective and cost-effective use of medicines than either group could have achieved by working separately.

KEYWORDS
All Wales Medicines Strategy Group, medicines optimisation

1 | INTRODUCTION

1.1 | History, structure and roles of AWMSG

In 1998, responsibility for the running of the NHS in Wales was transferred to the Welsh Government as part of the political process of devolution. A Task and Finish Group on Prescribing was established (chaired by Dr Norman Mills, a hospital Chief Executive and public health physician), and in 2001 it recommended that there should be an all-Wales committee to advise the Welsh Government on medicines issues.[1] The All Wales Medicines Strategy Group (AWMSG) was then established in 2002 as a statutory advisory Welsh Assembly-sponsored public body under the 1977 NHS Act, and it met for the first time in October 2002 in Wrexham. The new group's initial roles were to advise the Welsh Government on "all matters related to prescribing" and to conduct health technology appraisal (HTA) of certain high-cost medicines in Wales. It is supported professionally in its medicines optimisation and HTA activities by pharmacists, pharmacy technicians, clinical pharmacologists, life scientists and administrative staff who now work within the All Wales Therapeutics and Toxicology Centre (AWTTC), formerly the Welsh Medicines Partnership which receives funding from the Welsh Government for these activities.[2]

AWMSG was also tasked with advising the Welsh Government on future developments in healthcare and on the development of a prescribing strategy for Wales. Members of AWMSG include health professionals, senior managers (e.g., Finance Director) drawn from the seven health boards (HBs) and one trust across Wales, a health economist, lay representative and an Association of British Pharmaceutical Industries (ABPI) member representing the UK pharmaceutical industries. Health professional representation includes a Medical Director, clinical pharmacologist, consultant in public health medicine, general practitioner with a prescribing lead role, hospital consultant, managed sector hospital and primary care pharmacist, pharmacist with an interest in public health, senior nurse, and a member from the other professions eligible to prescribe.

AWMSG published guidance for partnership working between NHS organisations, primary care contractors, the pharmaceutical industry and allied commercial sector organisations in Wales in 2004,[3] and since 2006, the ABPI has provided one of the 16 voting members on AWMSG. From the first meeting, the Group has met (normally 10 times per year in venues around Wales) in public to ensure transparency of the processes used to formulate advice. The minutes of the AWMSG meetings are in the public domain and available on the AWMSG website.

AWMSG is supported in its medicines optimisation considerations by a sub-group, the All Wales Prescribing Advisory Group (AWPAG) which has broad geographical/multi-professional representation from the HBs as well as lay representation, in the same manner as AWMSG. AWPAG meets quarterly and develops documents (normally after wide all Wales consultation) for further consideration and final sign-off by AWMSG. Another sub-group, the New Medicines Group contributes to AWMSG's health technology appraisal (HTA) processes.[4]

What is already know about this subject

- Regional Medicines Optimisation Committees (RMOCs) were established in England in 2018 to encourage good prescribing practice and to highlight unwarranted variation in their regions and more widely in the NHS in England.
- In 2002, Welsh Government established the All Wales Medicines Strategy Group (AWMSG) to conduct health technology appraisals of certain new medicines, and to advise on medicines optimisation issues in the NHS in Wales.

What this study adds

- It demonstrates that AWMSG has been able to promote prudent prescribing and help to reduce harm, waste, and inappropriate variation over a sustained period of almost two decades. Examples include the introduction of a single national in-patient medication chart (2004), and a successful "invest to save" prescribing initiative (beginning in 2009).
- It highlights how pharmacists and clinical pharmacologists, working together on medicines optimisation issues can make a greater contribution to the safe, effective, and cost-effective use of medicines than either group could have achieved by working separately.

1.2 | Demography of health and healthcare in Wales

Wales shares a land border with England but is very much smaller, with a population of 3.152 million (mid-year 2019) compared with 56.286 million for its immediate neighbour.[5] The gross domestic product (GDP) per head in Wales in 2018 was £23 866 compared with £32 875 in England. The only English region with a lower GDP than Wales was the North-East of England (at £23 569).[6] In 2011, 23% of people living in Wales had an activity-limiting health problem compared with 17% in England (22% in the North-East of England).[7] Because of the demographic similarities between the North-East of England and Wales, it has sometimes been used as a comparator for Wales in relation to prescribing.[1,8]

In 2002 there were 22 local health boards (LHBs) across Wales, but in 2009 this was reduced to seven larger health boards (HBs), and one Trust focusing on cancer services (Velindre NHS Trust). The present configuration of HBs in Wales in 2020 is shown in Figure 1. The rate of prescribing per resident of Wales has been historically consistently greater than in England, with 26% more items prescribed per

FIGURE 1 Health boards (HBs) in Wales from 1 April 2019

head in 1999.[1] The prescribing rate also then correlated positively with deprivation, so there were 15 items prescribed per person per year in Merthyr Tydfil in 1999/2000 compared with less than 10 in Cardiff and Powys.[1] In this paper, we describe the Group's medicines optimisation role and related activities over the last 18 years. The HTA activities of AWMSG have been described in detail elsewhere.[4]

2 | METHODS

2.1 | Driving change: The 4 E's of medicines optimisation

In the context of outpatient medication safety, Budnitz and Layde identified three main improvement strategies, categorised under the headings of *education*, *engineering* and *enforcement*.[9] These (with the addition of a fourth, *economic*) were subsequently applied to the rational use of medicines by Krska and Godman.[10] *Educational activities* include the production and dissemination of prescribing guidance, including intensive strategies such as educational outreach. *Engineering activities* can include organisational or managerial interventions, such as application of prescribing and quality targets (e.g., national prescribing indicators). They may involve the introduction of standardised processes (e.g., standardised prescribing charts) but may also include the use of software solutions such as decision support systems, or processes to optimise the managed entry of new medicines.

Economic interventions include financial and non-financial incentives/disincentives to prescribing (including co-payments for patients). *Enforcement* in health systems internationally may include legally enforced regulations, restrictions in prescribing or dispensing certain medicines (e.g., by applying prior authorisation schemes), compulsory generic substitution, or compulsory prescribing by international non-proprietary (INN) name.[11]

An advisory committee like AWMSG does not have enforcement powers but it can advise the Welsh Government in relation to guidance contained in relevant Welsh Health Circulars (WHCs) in NHS Wales (see Table 1). A range of educational, economic and engineering activities are often required to be used over a sustained period and some of the policies and actions used in Wales to effect change over the last 18 years are outlined in this article and listed in Table 1.

2.2 | Measuring change: Prescribing data and national prescribing indicators (NPIs)

Primary care prescribing data was extracted from NHS Wales Shared Services Partnership's Comparative Analysis System for Prescribing Audit (CASPA) in Wales and from NHS Business Services Authority's Electronic Prescribing Analysis and Cost Tool (ePACT) in England.

TABLE 1 The "4E-s" of improvement strategies employed in Wales (2002–2020)

Driver	Examples used in Wales
Education	• Highlighting NICE guidelines and MHRA guidance • Production and dissemination of AWMSG guidelines and resources • Delivery of case-based learning workshops • Annual best practice days • Supporting implementation of recommendations in the Auditor General for Wales' report "Managing medicines in primary and secondary care (2016)[42]
Economics	• Financial incentives: e.g. Clinical Effectiveness Prescribing Programme (CEPP), NHS Wales outcome framework and measures, new treatment Fund in Wales & Welsh Government's "Invest to save" schemes • Removal of financial disincentives (e.g., removal by Welsh Government of prescription charges in 2007)
Engineering	• Information via decision support systems • "Server for prescribing information reporting and analysis" (SPIRA) dashboards (low value for prescribing, national prescribing indicators, biosimilar efficiencies, medicine safety dashboard & national prescribing indicator reporting tool)
Enforcement	• Highlighting MHRA guidance • Highlighting UK legislative changes in medicines/prescribing • Welsh Health Circulars (e.g., WHC/2003/73,[20] WHC/2017/026)

Hospital prescribing data was extracted from the NHS Wales Informatics Service's Medusa prescribing system.

Prescribing indicators are quantitative measures of prescribing, which allow benchmarking comparisons between prescribers, regions and countries and changes in the prescribing patterns. They can be used (with associated targets) to encourage peer pressure to influence prescribing behaviour and to inform prescribing incentive schemes, but do not indicate reasons for any changes observed.[10] For some NPIs in Wales, AWMSG has agreed a "threshold" rate of performance, which is not a target as such but indicates a nationally agreed aspirational performance level.

Prescribing indicators were initially chosen by AWMSG based on published indicators that had been selected to have face validity for measuring quality or cost minimisation, using existing prescribing analysis and cost data. Twelve such indicators had previously been rated as valid by leading prescribing advisers in England via a two-stage Delphi process,[12] and AWMSG initially based the national indicators in Wales on one of the five related to cost minimisation (generic prescribing rate [%]) and two of the seven relating to quality and safety (antibiotic items and hypnotics/anxiolytic items).

The NPIs are reviewed annually after full consultation and added to, modified or replaced when deemed appropriate. Information concerning their rationale, the associated targets and the supporting evidence are sent to HBs regularly together with feedback on performance and associated learning resources. Several of the NPIs have also been included in relevant prescribing incentive schemes in Wales. Similar NPIs are used in each of the other three countries of the UK, and NPIs have been developed internationally, including by the World Health Organization.

2.3 | Strategies for change

From 2003 until 2008, AWMSG worked to implement as many as possible of the 96 recommendations contained in the 2001 Task and Finish Report on Prescribing.[1] Thereafter, AWMSG has published its own prescribing strategies in 2008, 2013 and 2018. Each strategy was agreed after wide consultation across Wales. The strategy documents and the annual reports of AWMSG contain further details of the medicine's optimisation activities implemented in Wales since 2002. These documents are all available on the AWMSG website at http://www.awmsg.org/

3 | RESULTS

3.1 | Impact of the prescribing indicators

The first national prescribing indicator (NPI) agreed by AWMSG was to further promote generic prescribing. A report from the Office of Fair Trading in 2007 noted that the policy across the UK to encourage GPs to prescribe generically (by approved name) was based on both safety and cost issues.[13] The report stated that medication errors may be reduced if all doctors use the same (approved) name for a medicine, some of which may have a variety of brand names. In relation to cost, generic equivalents which appear in the market when the patent for a branded medicine expires are usually less expensive for the NHS to procure. However, a prescription must be written using the medicine's approved name for the pharmacist to be allowed to dispense it generically.[13]

In 2001, the average rate of generic prescribing across LHBs in Wales was 69% (range 63–77%), compared with 74% in England.[14] GP practices were given regular feedback on their data relative to others and were also given a prescribing decision-support software solution purchased by HBs in Wales to provide technological support to help make generic prescribing easier in primary care. In 2004–5, the NPI was also included in a national prescribing incentive scheme. The generic prescribing rate increased year-on-year and, by 2008–9, it had reached 85%.[15] This released significant efficiencies within the NHS Wales budget. If there is a demonstrable difference in clinical

effect between each manufacturer's version of the formulation, patients should always receive the same brand, and generic substitution is inappropriate. It was therefore also encouraging to note that the level of another NPI, "inappropriate generic" prescribing fell from 15% as a percentage of items in an agreed drug basket (an agreed list of medicines used as a comparator in relation to a specific indicator) in 2002–3 to 2% by 2007–8, indicating marked concomitant improvement in the appropriateness of prescribing over the same period that generic prescribing had risen overall.[15]

After a 2010 report from the Bevan Commission and 1000 Lives Plus, NHS Wales has sought to focus even more closely on reducing inappropriate variation, as well as harm and waste.[16] NPIs can be a useful tool for comparative purposes, one example being the NPI for tramadol. In 2012, the UK Advisory Committee on Misuse of Drugs (ACMD) raised concerns that tramadol-related deaths were increasing in England and Wales.[17] They noted that data from the Office for National Statistics (ONS) for 2011 showed 154 deaths where tramadol had been mentioned on the death certificates, compared with 83 such mentions in 2008. Most tramadol-related deaths were in circumstances where it had been obtained through non-prescribed means. However, prescribing of tramadol had increased in line with the increase in deaths over the same period in both England and Wales. AWMSG approved a tramadol prescribing NPI, and a national survey, national audits and other educational resources were produced by a range of organisations in Wales in 2013–14. There was subsequently a levelling off, then fall in the previously consistent rise in prescribing, even before the reclassification of tramadol as a category 3 medicine in the UK in June 2014.[18] The tramadol NPI is still active in Wales and a continuing decline in prescribing rates in Wales towards levels closer to the rate in England up until March 2020 is shown in Figure 2.

Other NPIs around medicines safety include the prescribing of hypnotics and anxiolytics, opioid burden, prescribing of gabapentin and pregabalin and rate of spontaneous reporting of suspected adverse drug reactions via the UK Yellow Card scheme.[19] Others focus on antimicrobial stewardship. In 2018–19, some of the prescribing measures used in the "pharmacist-led information technology intervention for medication errors" (PINCER) trial were also adopted.[19]

3.2 | Prescribing committees and guidelines

When AWMSG was established in 2002, the structure of the existing LHB prescribing committees in Wales was not uniform and their role and influence were also variable. AWMSG therefore provided guidance to the Welsh Government on the proposed future structure and function of prescribing committees in Wales (WHC 2003/73).[20] The main recommendations were aimed at ensuring that the new LHB/Trust partnership Medicines and Therapeutics Committees (MTCs) and AWMSG complemented each other's work and avoided duplication. MTCs were asked to reach consensus, based on available evidence, regarding the place in treatment of new medicines/formulations or of existing medicines with new indications. They would then ensure the advice was disseminated to stakeholder organisations in a timely fashion. They were also judged best able to advise on prescribing issues at the interface between primary and secondary care (e.g., by agreeing shared-care guidelines), with AWMSG advising on the rare occasions when national consensus was difficult to achieve.

In 2002, there were also relatively few NICE guidelines so AWMSG developed all-Wales guidelines in several areas where there were challenging prescribing issues for which clear advice was deemed necessary. These included advice on the safe and effective use of statins and antiplatelet agents (in 2004). AWMSG's aim has been to complement and support the work of NICE and avoid duplication wherever possible. As NICE produced more guidelines, these were adopted in Wales and AWMSG then concentrated on developing resources to complement them and support their implementation. Over 60 AWMSG documents covering a wide range of medicines optimisation issues are now available on the AWMSG website.

3.3 | Community prescribing resources

The Common Ailments Formulary was first approved by AWMSG in 2013 to support the Common Ailments Service (CAS) in the community, initially in two pathfinder sites in Wales. It sought to provide consistency of advice between GPs and pharmacists across Wales and contained treatment options (with associated patient information

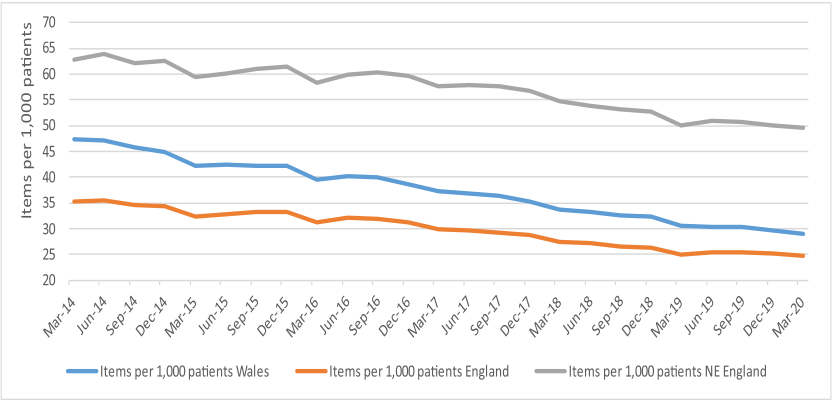

FIGURE 2 Trend in tramadol items dispensed in Wales (quarters ending March 2014 to March 2020). Data Sources: NHS Wales Shared Services Partnership's Comparative Analysis System for Prescribing Audit (CASPA) and NHS Business Services Authority, Electronic Prescribing Analysis and Cost Tool (ePACT), 2020

leaflets) for a range of minor health conditions. It supported community pharmacists as they advised people on therapeutic options, many of which could prevent an unnecessary GP visit. As a result of the success of the pathfinder scheme, the second edition of the All-Wales Common Ailments Formulary (covering 27 conditions) was approved in 2018 and the scheme rolled out across every HB in Wales.[21] AWMSG also worked in partnership with the Royal Pharmaceutical Society (RPS) to produce an all-Wales version of the existing RPS handbook to support the safe and effective delivery of homecare services.[22]

3.4 | Patient safety resources

Medication errors can occur in hospital practice, and standardisation of prescribing charts and processes is one important approach to reducing them.[23] In March 2004, AWMSG endorsed the introduction of a single harmonised standard in-patient medication administration record across Wales. It was produced by a subgroup of the Welsh Chief Pharmacists Committee and, after approval by AWMSG, was rolled out across Wales in autumn of that year in conjunction with agreed all-Wales Prescription Writing Standards and an e-learning training package.[24] In Australia, the introduction of a single national chart was associated with a reduction of prescribing errors of almost one-third.[25] We believe that this initiative is one of the most important ones supported by AWMSG, since all future health professionals in training in Wales now learn to prescribe using the same chart (a student version was developed for this purpose) and will be familiar with it as they move between hospitals in Wales during their training.

In 2015, AWMSG also approved an all-Wales syringe driver chart for use in the community and secondary care. The *All-Wales Policy for Medicines Administration, Recording, Review, Storage and Disposal (MARRS)* was approved in 2015 and sets out the minimum standards of practice that must be adopted by all healthcare employees involved in the administration, recording, review, storage and disposal of medicines in Welsh hospitals. A standardised All Wales Paediatric Steroid Replacement Therapy Card to support the emergency treatment of children with adrenal insufficiency was also approved in 2013.

High-risk medicines for which AWMSG has approved guidelines include anticoagulants and opioids. AWMSG has also produced guidance focusing on prescribing in the at-risk and frail older person and the use of medicines in other high-risk situations. Other medicines safety advice approved by AWMSG concerns safeguarding users of opioid patches by standardising patient/caregiver counselling, the safe use of proton pump inhibitors, guidance to support the safe use of long-term oral bisphosphonate therapy, and materials to support appropriate prescribing of hypnotics and anxiolytics across Wales.

Dosulepin is a tricyclic antidepressant that has been associated with an increased risk of toxicity in overdose compared with some other antidepressants. In the UK, the MHRA and NICE issued advice on the prescribing of dosulepin, but these were not associated with significant changes in the trend in dosulepin usage in Wales. In 2011, AWMSG agreed an NPI to monitor usage and highlight the issues to prescribers in Wales. The trend in dosulepin usage in Wales altered significantly (downwards) following the introduction of the NPI. This association, and the observation of no significant change in North-East England over the same period, suggested that the NPI and associated focus on the issue may have contributed to the effect seen.[26]

3.5 | Antimicrobial prescribing and stewardship

AWMSG first adopted an NPI measuring total volume of antibiotic prescribing in 2014 to encourage the appropriate prescribing of all antibiotics in primary care. To support health care practitioners to address this issue, AWMSG approved 12 national audits linked to a primary care prescribing incentive scheme, as part of the Therapeutic Priorities and Clinical Effectiveness Prescribing Programme in 2014–15. These were designed to promote antibiotic prescribing in accordance with existing guidelines, and to support clinicians in promoting quality improvement by reviewing antimicrobial prescribing within their teams. Items (per 1000 specific therapeutic group age-sex-related prescribing units [Star-PUs]) began to fall in 2015–16 for the first time and by 2019–20, the volume dispensed was 19% lower than in 2014–15.[19]

3.6 | Prescribing efficiencies and optimisation

In 2018–19, prescribing expenditure in NHS Wales totalled £0.91 billion which represented 5.9% of total Welsh Government expenditure.[27] It is important that these resources are used wisely by ensuring that clinically- and cost-effective medicines are available for prescribing in a timely fashion in Wales.

In 2009–10, the Welsh Government provided resources under its "Invest to Save" scheme to support prescriber training in Wales to reduce primary care prescribing costs in three main areas (proton pump inhibitor, benzodiazepine and NSAID prescribing). An investment of around £600 000 over a three-year period was associated with savings of £5.8 million in prescribing costs alone (an approximate £10 saving per £1 of investment).[28] We consider this to be one of the most important milestones in medicines optimisation in Wales, since it showed that a relatively modest investment in professional expertise and data analytics could make a much greater impact on savings, whilst at the same time, further promote rational and safe prescribing by reducing overprescribing. Additionally, the Welsh Government consequently agreed recurrent funding of the Welsh Analytical Prescribing Support Unit (WAPSU) within AWTTC to work with AWMSG in its goal of encouraging prudent and value-based prescribing.[28]

To ensure that prescribing of biological medicines is cost-effective in primary and secondary care in Wales, an NPI measuring the quantity of biosimilar medicines prescribed as a percentage of total "reference" product plus biosimilar was adopted by AWMSG in April 2016. HBs were provided with information (including a PowerPoint slide presentation) for prescribers on why the NPI had

been chosen and how implementation could occur. This was accompanied by quarterly feedback on their prescribing relative to each other. In 2017, biosimilars were part of a Best Practice Day where an early adopting HB shared its experience. In addition, a dedicated national Biosimilars Best Practice Day took place in January 2019 to further discuss strategies already shown to be effective in Wales and England. The prescribing of biosimilars as a percentage of the total biological use (i.e., "reference" product plus biosimilar) in Wales for four widely used biologicals between 2016–17 and 2019–20 is shown in Figure 3.[19]

AWMSG has more recently approved advice relating to groups of medicines which they considered "low priority for funding" (low value for prescribing). The first group of medicines (agreed in 2017) included five medicines; co-proxamol, doxazosin modified-release tablets, lidocaine plasters, liothyronine and tadalafil once-daily preparations. In all seven HBs in Wales, the spend for this bundle of medicines had fallen in the financial year 2018–19 compared with 2016–2017.[29,30] A further four medicines; omega-3 fatty acid compounds, oxycodone and naloxone combination product(s), paracetamol and tramadol combination product(s) and perindopril arginine, were added in 2018.

3.7 | Understanding the patient experience

Medicines optimisation must be inclusive, patient-focused and seek insights from patients, their families and carers, patient organisations and the public. Wales applies the principles of prudent healthcare to inform its approach to delivery of health and social care. One of those four principles highlights the need for "co-production", an approach built around people, where people and professionals share power and work together in an equal partnership.[31] AWMSG set up a Patient and Public Interest Group (PAPIG), which held its first meeting in October 2013. The group consists of patients, carers, representatives from patient organisations and community health councils, and members of the public. Meetings are held four times a year and are well attended. Based on the group's discussions, a patient and public engagement strategy was developed.

PAPIG members helped to develop the role and responsibilities of lay members in AWMSG and AWPAG. Members regularly contribute to AWMSG's work, by commenting on resources being developed or out for consultation, or by proposing ideas for new ways to improve information-sharing. PAPIG members also attend AWMSG events, such as the annual Best Practice Day and Training Day. These events often include presentations by patients and/or carers.

PAPIG members were involved in arranging AWMSG's first Citizen's Jury, held over one week in July 2016, which focused on the problem of antibiotic resistance. This event, facilitated by the University of South Wales, allowed 14 members of the public to interrogate the evidence around antimicrobial stewardship. The jury made ten recommendations, which were sent to the Welsh Government and formed the basis for a wider discussion about addressing antibiotic stewardship in Wales.[32]

During 2018–19, PAPIG supported two public health campaigns: "Your Medicines Your Health" and "Making Choices Together". Both campaigns aimed to reduce medicines waste, in line with AWMSG's 2018 strategy. In 2019, collaboration was agreed with HealthWise Wales to promote patient and public involvement. In one of the projects, 1606 members of the public in Wales completed a questionnaire about their understanding of the UK Yellow Card scheme for reporting suspected adverse drug reactions. Immediately after watching a brief information video, 71% of the respondents reported knowing how to report via the scheme compared with 18% beforehand.[33]

Some further details of the AWMSG work programme and milestones over the last 18 years are shown in a timeline (see Figure 4).

4 | DISCUSSION

Wales, like the other UK countries, continues to face significant health challenges. It has a higher proportion of people aged over 60 years than any of the other UK countries. The steady increase in life expectancy seen since the Second World War began to stall around 2011.

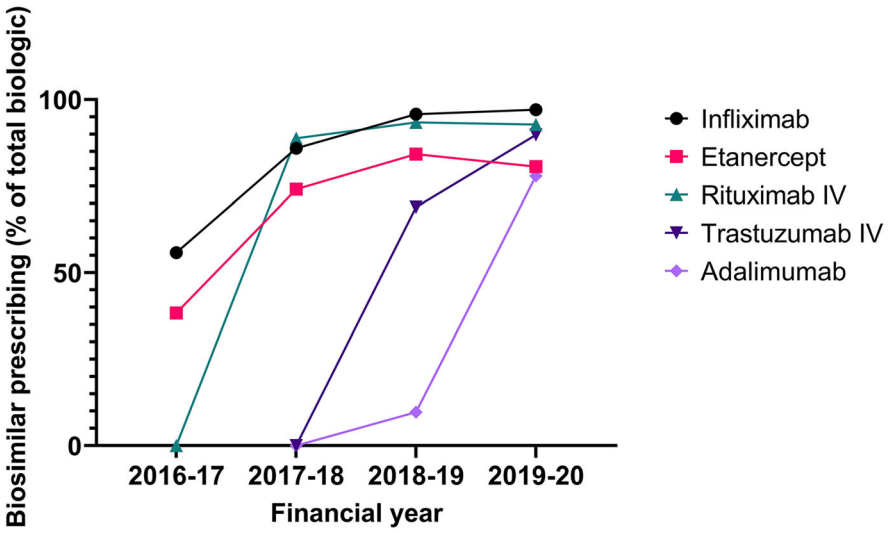

FIGURE 3 Prescribing of biosimilar as a percentage of the total biologic use (i.e., "reference" product plus biosimilar) 2016–17 to 2019–20. Data source: NHS Wales Shared Services Partnership, Comparative Analysis System for Prescribing Audit (CASPA), 2020

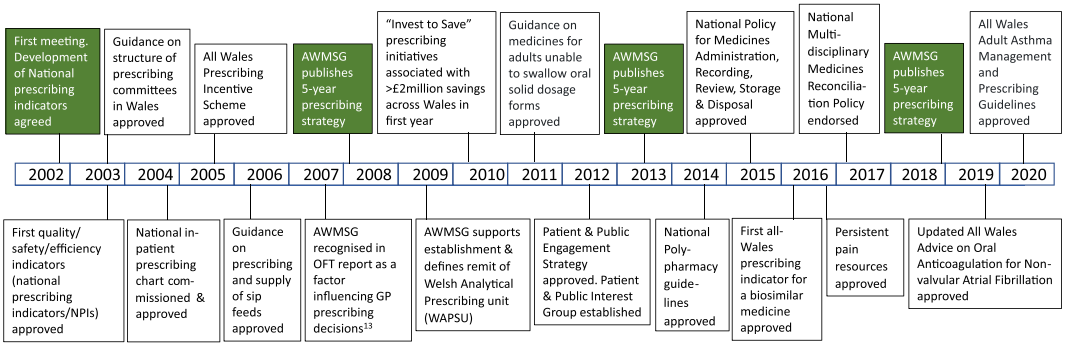

FIGURE 4 Timeline showing selected activities of the All Wales Medicines Strategy Group between 2002 and 2020

For example, the all-cause mortality rate for Wales decreased by almost 20% between 2002 and 2011, but there has been very little change since 2011.[34]

There is a recognition in Wales that ready access to effective medicines for all who could benefit from them is important in seeking to achieve the best outcomes for patients. As a long-term investment in health and to prevent the cost of prescriptions being a barrier to access to care, the government in Wales gradually reduced (from 2004) and then, in 2007, abolished, all prescription charges[8,35] Northern Ireland and Scotland also subsequently abolished charges.[35] In Wales, the rise in number of prescription items dispensed per head of population since 2007 has been broadly comparable with the gradual rise that had been taking place prior to the abolition of prescription charges in 2007.[35,36]

A New Treatment Fund providing an additional £16 million annually for HBs and the trust in Wales to support the faster introduction of new medicines deemed clinically- and cost-effective (i.e., those approved by NICE or AWMSG) was introduced by the Welsh Government in November 2017.[37] Although HBs and the trust had a 60-day deadline to make a newly recommended medicine available for prescription, by 2019 they were being made available in their formularies in an average of 17 days.[38]

Although much has been achieved by coordination via AWMSG of medicines optimisation initiatives in Wales since 2002, significant challenges remain. The recently published data for 2019–20 based on prescriptions dispensed in the community in Wales shows that the number of items prescribed per person in Wales (26.0, including prescriptions dispensed in the community) remains higher than in England (19.9), Scotland (19.0) and Northern Ireland (22.5).[36] However, the net ingredient cost (NIC) per head of population in Wales (£188.39) was lower than in Scotland (£209.06) and Northern Ireland (£229.79), but higher than England (£161.29). The NIC per item prescribed was lower in Wales (£7.23) than in England (£8.11), Northern Ireland (£10.23) and Scotland (£11.01).[36]

AWMSG has aligned its strategy going forward up to 2023 with the principles of prudent healthcare,[31] the aims of the Welsh Government programmes of "Taking Wales Forward"[39] and "Prosperity for All: The National Strategy"[40] and the recommendations in the Parliamentary Review of Health and Social Care in Wales, "A Revolution from Within: Transforming Health and Care in Wales".[41] These reports emphasise the importance of taking advantage of digital technologies to ensure better interconnectedness. The existing AWMSG strategy was also informed by the report of the Auditor General for Wales on managing medicines in primary and secondary care, which highlighted the need to improve measurement of outcomes from the use of medicines.[42]

In terms of the balance between HTA and medicines optimisation, NICE has recently been conducting more HTAs of medicines, so AWMSG/AWTTC are able to focus on medicines optimisation challenges to an even greater extent. Since March 2020, AWTTC staff have also spent considerable time developing a repository of information so that health care professionals in Wales can readily access authoritative advice on the management of situations occurring during the COVID-19 pandemic. The repository can be accessed on the AWTTC website at www.awttc.org/covid-19.

In England, an operating model for Regional Medicines Optimisation Committees (RMOCs) was published in 2017 and a second version of the model was made available in 2020.[43] RMOCs aim to improve patient outcomes and ensure the NHS gets the best value for the taxpayer through the provision of timely and credible advice on medicines optimisation issues, for use and implementation by local decision makers. They also aim to reduce local and regional duplication and variation by identifying and addressing medicines optimisation issues that would benefit from a coordinated approach; and to promote awareness and support regional implementation of national policies and initiatives relating to medicines, including supporting national guidance. These aims closely resemble those of AWMSG, and over the last 18 years, AWMSG has shown in Wales that they are realistic and achievable over a sustained period.

There are presently four RMOCs (South, London, Midlands/East and North) although it is hoped that seven will be established in due course. AWMSG has always closely followed medicines optimisation initiatives in England, Scotland and Northern Ireland and values any opportunities for greater sharing of ideas and outcomes with the RMOCs in England and similar groups in the other nations of the UK.

In 2016, the British Pharmacological Society (BPS) proposed that a clinical pharmacologist should be a core member of the committee structure of the proposed RMOCs in England and this is now the case. A clinical pharmacologist has been a core member of AWMSG since it

was established in 2002, and all the clinical pharmacologists in Wales are involved either in AWMSG or its sub-committees, or in providing professional support to AWMSG via AWTTC. Working collaboratively with their pharmacist colleagues, they share their complementary expertise. Professor Roger Walker, a former Chief Pharmaceutical Officer for Wales observed that "By bringing their unique yet complementary knowledge and skills to these collaborations, both professions have made a much greater contribution to patient care than either could have achieved by working alone".[44]

ACKNOWLEDGEMENTS

We are very grateful to all the Chairs and members of AWMSG and its subcommittees, the Medicines and Therapeutics Committees and prescribers across Wales and the AWTTC staff, who have offered their expertise and commitment unstintingly to medicines optimisation activities since 2002. We thank the WAPSU team in AWTTC for advice on prescribing data and Carolyn Hughes for her comments on AWMSG's patient involvement activities.

COMPETING INTERESTS

P.A.R. chaired AWMSG from 2006 to 2014. P.A.R., R.B., K.S. and K.H. have served on other committees concerned with the safe, rational and cost-effective use of medicines. There are no other competing interests to declare.

CONTRIBUTORS

All authors led the AWTTC teams which worked to implement AWMSG's recommendations. P.A.R. wrote the first draft of the manuscript and all authors contributed by reviewing and editing. All authors agreed to the final version of the manuscript prior to submission.

DATA AVAILABILITY STATEMENT

Research data are not shared.

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