Enclosure No:	XX/XXXXXX/XXXX
Agenda item No:	X.X - Items Identified as Low Priority for Funding in NHS Wales – Paper 3 – Proposal
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1.0 ACTION FOR CONSULTEES

Consultees are asked to consider and comment on *Items Identified as Low Priority for Funding in NHS Wales – Paper 3.*

2.0 PURPOSE

In 2018–2019 prescribing expenditure in NHS Wales totalled £0.91 billion. This represented 5.9% of total Welsh Government expenditure. It is therefore vital that a prudent approach is taken to review what items are prescribed within general practice.

The NHS Chairs and Chief Executives of NHS Wales have provided a collective response to the Cabinet Secretary for Health and Social Services regarding the financial and performance challenges facing the NHS. Part of this improvement programme includes a commitment to identify opportunities to improve primary care prescribing with opportunities for disinvestment being examined and guidance provided for NHS Wales.

This action has been progressed via the Pharmacy Directors peer group and the All Wales Prescribing Advisory Group.

2.1 Process

- June 2019 – AWPAG meeting
- September 2019 – AWPAG meeting
- October 2019 - Consultation
- *December 2019 – AWPAG meeting*
- *February 2020 – AWMSG meeting*

2.2 Stakeholders

- Medicines and Therapeutics Committee Chairs and Secretaries
- Chief Pharmacists
- Directors of Finance
- Medical Directors
- Assistant Medical Directors
- Local Medical Committees
- Directors of Public Health
- General Practitioners Committee Wales
- Royal College of General Practitioners
- Community Health Councils
- Welsh Government
- Community Pharmacy Wales
- All Wales Primary Care Delivery Group

3.0 SUMMARY

The aim of this document is to minimise the prescribing of items that offer low clinical effectiveness to patients or where more cost-effective treatments are available. Thirteen items/item groups have been identified for the purposes of this document. These are:

- Items of low clinical effectiveness:
    - amiodarone
    - bath and shower emollients
    - chloral hydrate and cloral betaine
    - dronedarone
    - minocycline
    - probiotics
    - rubefaciants
    - silk garments
    - vitamins and minerals.
- Items where more cost-effective alternatives are available:
    - alimemazine
    - aliskiren
    - blood glucose testing strips
    - silver dressings.

The recommendations are based on the NHS England document: *Items which should not be routinely prescribed in primary care: Guidance for CCGs*, with agreed additions from the All Wales Prescribing Advisory Group (AWPAG) meeting held in June 2019.

This proposed advice aims to reduce inappropriate variation in prescribing of items identified as low priority for funding across NHS Wales. This will ensure that health boards and clinicians are able to make the most efficient use of the resources available to them. Implementation will be monitored via the Welsh Analytical Prescribing Support Unit (WAPSU) using the existing *Low Priority for Funding Medicines* dashboard developed and updated by All Wales Therapeutics and Toxicology Centre (AWTTC).

CONTENTS

1.0 INTRODUCTION

The purpose of this document, the third phase in an ongoing series, is to encourage effective use of resources at a time when there are real pressures on the NHS. This document provides advice to clinicians and health boards in Wales, with the aim of reducing unwarranted variation in the use of items that should not routinely be prescribed.

As well as providing recommendations, this document also details both general and specific exceptions. However, it will be for health boards to interpret the advice and determine how it is best implemented; this will include determining the circumstances in which these items should or should not be prescribed.

Prescribers are expected to have due regard for this advice when deciding whether or not to prescribe these items. However, the guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.

2.0 BACKGROUND

In 2018–2019, prescribing expenditure in NHS Wales totalled £0.91 billion*. This represented 5.9% of total Welsh Government expenditure. Welsh Government, NHS Wales Chairs, and Chief Executives and Medical Directors have agreed a National Improvement Programme, which includes a commitment to identify opportunities to improve prescribing and develop a list of items for restricted use. It is therefore vital that a prudent approach is taken to reviewing the prescribing of items considered as not suitable for routine prescribing.

This paper is the third of a series aimed at decreasing the prescribing of items identified as a low priority for funding in NHS Wales. The first *Medicines Identified as Low Priority for Funding in NHS Wales* paper was published in October 2017, and the second in December 2018[1,2]. As detailed within *A Healthier Wales: our plan for Health and Social Care* published by the Welsh Government in 2018, one of the ten national design principles to drive change and transformation is that of "Higher Value"[3]. This can be applied through achieving better outcomes and a better experience for people at reduced cost, with less variation and no harm.

Health Board/Trust access to the advice contained within this document will enable a more equitable process for making decisions about organisational policies for prescribing. Health boards/trusts will need to make decisions on local implementation individually, ensuring they take into account their legal duties to advance equality and reduce health inequalities.

In June 2019, NHS England published the document *Items which should not be routinely prescribed in primary care: Guidance for CCGs*[4]. This provided an update to the previous guidance from 2017. Selected items and item groups have been taken from the updated guidance, in conjunction with some suggested additions based upon requests made from health boards within NHS Wales.

* This figure is a combined calculation of primary care and secondary care spends taken from CASPA (NHS Wales Shared Services Partnership) and Medusa (NHS Wales Informatics Service) systems respectively.

3.0 RECOMMENDATIONS

The aim of this document is to minimise the prescribing of items that offer low clinical effectiveness to patients or where more cost-effective treatments are available. Thirteen items/item groups have been identified for inclusion within this paper. These are:

- Items of low clinical effectiveness:
  - amiodarone
  - bath and shower emollients
  - chloral hydrate and cloral betaine
  - dronedarone
  - minocycline
  - probiotics
  - rubefaciants
  - silk garments
  - vitamins and minerals.
- Items where more cost-effective alternatives are available:
  - alimemazine
  - aliskiren
  - blood glucose testing strips
  - silver dressings.

A summary of the classification criteria used for item inclusion within this phase of the initiative is provided within Appendix 1.The nine items considered to be of low clinical effectiveness, due to a lack of robust evidence to support their widespread use, are detailed in Table 1. Four of these items listed are also considered for inclusion due to the associated risks of patient harm from their use. The items which are clinically effective but where more cost-effective alternatives are available, are detailed in Table 2. In both tables a specific recommendation has been made for each of these items/item groups, as well as the rationale for the recommendation, and any guidance on patient exemptions. These recommendations were agreed at the All Wales Prescribing Advisory Group meeting held in June 2019. Where appropriate, PrescQIPP and other resources have been used to provide further support to the recommendations. PrescQIPP is an NHS funded, not-for-profit organisation supporting quality, optimised prescribing for patients[5].

The 2018–2019 NHS Wales expenditure for each of the identified items/item groups is provided within Tables 1 and 2. However, this does not necessarily represent the potential savings available as alternative products may need to be substituted. Appendix 2 provides a primary care breakdown of this expenditure for 2018-2019 by health board, and Appendix 3 provides the primary care spend per 1,000 patients for each health board in 2018–2019. These data are reflective of the health board structure that was in place up to the end of March 2019. Further data updates will be reflective of the new health board structure introduced in April 2019.

All health boards and Velindre Trust will be expected to action this advice and put mechanisms in place to ensure these areas are reviewed, with direction given by Medical Directors working with their Chief Pharmacists. Where necessary, medicines management teams should work closely together with relevant specialist teams to ensure patients identified as part of these recommendations are supported appropriately.

As part of this process it is recommended that the formulary status of each of these items is reviewed and that the items are incorporated into the local Interventions Not Normally Used (INNU) policies. These items should not be routinely prescribed or initiated for any new patients unless this is specified in the recommendations or associated patient exemptions listed herein. Patients currently prescribed these items

should be reviewed and switched to an alternative product where appropriate. Access to these items outside of these recommendations should only be via the Individual Patient Funding Request (IPFR) process.

Resources to help support the implementation of these recommendations are detailed in Appendix 4.

Appendix 5 provides an overview of the progress made with the items contained within the previous *Medicines Identified as a Low Priority for Funding in NHS Wales* papers.

A dashboard hosted within the Server for Prescribing Information Reporting and Analysis (SPIRA), accessible to all users who are on the NHS Wales Network, provides more detailed analysis for the usage of items/item groups identified within the *Medicines Identified as a Low Priority for Funding in NHS Wales* papers. Data within this paper, as indicated in Tables 1 and 2, have been sourced from either CASPA or PrescQIPP. Where PrescQIPP data has been utilised it has not been verified against the data that is also held within Comparative Analysis System for Prescribing Audit (CASPA), therefore inconsistencies may exist. Following endorsement, the dashboard will be updated with the included items; the data for which will be verified and sourced from that held within CASPA only.

Table 1. Items considered to be of low clinical effectiveness and therefore identified as low priority for funding within NHS Wales and not recommended for routine prescribing

Recommendation rationale	NHS Wales expenditure 2018–2019
Amiodarone	
Explanation: Amiodarone is indicated for the treatment of arrhythmias, particularly when other drugs are ineffective or contra-indicated, including paroxysmal supraventricular, nodal and ventricular tachycardias, atrial fibrillation and flutter, ventricular fibrillation, and tachyarrhythmias associated with Wolff-Parkinson-White syndrome (initiated in hospital or under specialist supervision)[6]. It has potential major toxicity and its use requires monitoring both clinically and via laboratory testing[6]. Amiodarone has an important place in the treatment of severe cardiac rhythm disorders where other treatments either cannot be used or have failed. However, NICE clinical guideline 180 (CG 180) on Atrial Fibrillation puts greater emphasis on rate rather than rhythm control and has clarified the place of amiodarone in the treatment pathway[7]. NICE have issued the following "Do not do" recommendation: Do not offer amiodarone for long-term rate control[8]. ***Recommendation:*** • Advise health boards that prescribers should not initiate amiodarone in primary care for any new patient. • Advise health boards that if, in exceptional circumstances, there is a clinical need for amiodarone to be prescribed, this should be undertaken in a shared care arrangement with a multi-disciplinary team and/or other healthcare professional. ***Patient exemptions:*** Amiodarone must be initiated by a specialist and only continued in primary care under a shared care arrangement for patients where other treatments cannot be used, have failed, or is in line with NICE CG180[7]. It may also be suitable in patients prior and post cardioversion, patients undergoing cardiothoracic surgery, or in specific patients who also have heart failure or left ventricular impairment.	**£63,068** (This figure is the expenditure in primary care as per PrescQIPP data).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

Recommendation rationale	NHS Wales expenditure 2018–2019
Bath and shower emollients	
Explanation: Emollient bath and shower preparations are routinely prescribed for dry and pruritic skin conditions including eczema and dermatitis. There is a current lack of evidence supporting the use of bath and shower emollients in dermatological conditions[9]. A multicentre pragmatic parallel group randomised controlled trial looking at emollient bath additives for the treatment of childhood eczema (BATHE) showed that there was no evidence of clinical benefit for including emollient bath additives in the standard management of childhood eczema[10]. It is recognised that the BATHE trial looked at use of these items in children, however, in the absence of other good quality evidence, it has been deemed acceptable to extrapolate this to apply to adults until good quality evidence emerges[4]. "Leave-on" emollient moisturisers can be used as soap substitutes for treating eczema[11]. Many standard emollients can be used in this way, though products that are completely immiscible with water (such as 50:50 white soft paraffin and liquid paraffin ointment) are not suitable[9]. Patients should be counselled on the use of emollients as soap substitutes and the risk of their use in the bath or shower should be fully explained. ***Recommendation:*** • Advise health boards that prescribers in primary care should not initiate bath and shower preparations for any new patient. • Advise health boards to support prescribers in deprescribing bath and shower preparations in this category and substitute with "leave-on" emollients and, where appropriate, to ensure the availability of relevant services to facilitate this change. ***Patient exemptions:*** In cases of severe disease and under the care of a specialist, certain circumstances may necessitate the use of a bath and shower emollient. This should be reviewed on a regular basis. Bath and shower preparations containing an antibacterial may still have a place in treatment where there is an infection present or infection is a frequent complication.	**£327,932** (This figure is the expenditure in primary care as per PrescQIPP data).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

Recommendation rationale	NHS Wales expenditure 2018–2019
Chloral hydrate (cloral betaine)	
Explanation: Chloral hydrate is indicated for the short-term treatment of severe insomnia which is interfering with normal daily life and where other therapies have failed; as an adjunct to non-pharmacological therapies[12]. Cloral betaine is the active ingredient in the tablet form which is converted by the body to chloral hydrate, where 707mg chloral betaine is equivalent to 414mg chloral hydrate. Chloral hydrate/cloral betaine is classified within the British National Formulary as being less suitable for prescribing in insomnia[13]. It has a narrow therapeutic index and has been associated with patient fatalities[14]. The Medicines and Healthcare products Regulatory Agency (MHRA) provided a drug safety update on the use of chloral hydrate elixir in 2009. This stated that although the product is licensed in children aged two years or older, treatment should be as an adjunct to behavioural therapy and sleep-hygiene management; and should not usually exceed two weeks[12]. **Recommendation:** • Advise health boards that prescribers should not initiate chloral hydrate or cloral betaine in primary care for any new patient. • Advise health boards that if, in exceptional circumstances, there is a clinical need for chloral hydrate or cloral betaine to be prescribed, this should be undertaken in a cooperation arrangement with a multidisciplinary team and/or other healthcare professional. **Patient exemptions:** Must be initiated by a specialist and is only indicated for short-term treatment.	**£195,082** (This figure is the expenditure in primary care as per CASPA data [NWSSP]).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	
Dronedarone	
Explanation: Dronedarone is used for the maintenance of sinus heart rhythm after cardioversion in clinically stable patients with paroxysmal or persistent atrial fibrillation, when alternative treatments are unsuitable (initiated under specialist supervision)[15]. It has potential major toxicity and its use requires monitoring both clinically and via laboratory testing[16]. Following a Medicines and Healthcare products Regulatory Agency (MHRA) Drug Safety Update licensed use of dronedarone has been restricted to the above indication from a wider license. Dronedarone should not be given to patients with left ventricular systolic dysfunction, or to patients with current or previous episodes of heart failure[16]. NICE clinical guideline 180 (CG 180) on Atrial Fibrillation puts greater emphasis on rate rather than rhythm control and has clarified the place of dronedarone in the treatment pathway[7]. ***Recommendation:*** • Advise health boards that prescribers should not initiate dronedarone in primary care for any new patient. • Advise health boards that if, in exceptional circumstances, there is a clinical need for dronedarone to be prescribed, this should be undertaken in a shared care arrangement with a multidisciplinary team and/or other healthcare professional. ***Patient exemptions:*** Must be initiated by a specialist and only continued under a shared care arrangement for patients where other treatments cannot be used, have failed, or it is in line with NICE CG180.	**£22,569** (This figure is the expenditure in primary care as per PrescQIPP data).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

Recommendation rationale	NHS Wales expenditure 2018–2019
Minocycline for acne	
Explanation: Minocycline is a tetracycline antibiotic that is primarily used for the treatment of acne[17]. However a Cochrane review found that there is no evidence to support the use of one tetracycline over another in terms of efficacy for the treatment of acne vulgaris, and alternative once-daily products are available[18]. There are various safety risks associated with the use of minocycline. The British National Formulary states that minocycline is less suitable for prescribing when compared with other tetracyclines, as it is associated with a greater risk of lupus-erythematosus-like syndrome and it sometimes causes irreversible pigmentation. It is also associated with hepatotoxicity and use for greater than six months requires monitoring every three months for this[19]. The evidence does not support the claim that the extended-release preparations are safer than the standard release preparations[18]. ***Recommendation:*** • Advise health boards that prescribers in primary care should not initiate minocycline for any new patient with acne. • Advise health boards to support prescribers in deprescribing minocycline in all patients with acne and, where appropriate, ensure the availability of relevant services to facilitate this change. ***Patient exemptions:*** No routine exceptions have been identified.	**£28,227** (This figure is the expenditure in primary care as per PrescQIPP data).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	
Probiotics	
Explanation: Probiotics are live micro-organisms that, when administered in adequate amounts, confer a health benefit on the host[20]. The Advisory Committee on Borderline Substances recently reviewed the probiotic products VSL#3® and Vivomixx™ and concluded that the evidence available did not sufficiently demonstrate that the products are clinically effective. Subsequently both products have been removed from the Drug Tariff[21]. ***Recommendation:*** • Advise health boards that probiotics should not be prescribed in primary care due to limited evidence of clinical effectiveness. ***Patient exemptions:*** No exceptions have been identified.	**£58,540** (This figure is the expenditure in primary care as per PrescQIPP data).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

Recommendation rationale	NHS Wales expenditure 2018–2019
Rubefacients (excluding NSAIDs and capsaicin)	
Explanation: Rubefacients are topical preparations that cause irritation and reddening of the skin due to increased blood flow. They are used to relieve pain in various musculoskeletal conditions and are available on prescription and in over-the-counter remedies[22]. Rubefacients act by counter-irritation. Pain, whether superficial or deep-seated, is relieved by any method that itself produces irritation of the skin. Topical rubefacient preparations may contain nicotinate and salicylate compounds, essential oils, capsicum, and camphor. The evidence available does not support the use of topical rubefacients in acute or chronic musculoskeletal pain[23]. NICE have issued the following "Do not do" recommendation: Do not offer rubefacients for treating osteoarthritis[24]. ***Recommendation:*** • Advise health boards that prescribers in primary care should not initiate rubefacients (excluding topical non-steroidal anti-inflammatory drugs [NSAIDs] and capsaicin) for any new patient. • Advise health boards to support prescribers in deprescribing rubefacients (excluding topical non-steroidal anti-inflammatory drugs [NSAIDs] and capsaicin) in all patients and, where appropriate, ensure the availability of relevant services to facilitate this change. ***Patient exemptions:*** No routine exceptions have been identified.	**£196,259** (This figure is the expenditure in primary care as per PrescQIPP data).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	
Silk garments	
Explanation: Silk garments are typically prescribed for eczema or dermatitis. These products are knitted, medical-grade silk clothing which can be used as an adjunct to normal treatment for various forms of dermatitis, eczema and allergic skin conditions[25]. The evidence relating to the use of silk garments for eczema and atopic dermatitis is weak and of low quality[25]. A randomised controlled trial of silk therapeutic garments for the management of atopic eczema in children (the CLOTHES trial) concluded that the addition of silk garments to standard atopic eczema care is unlikely to improve severity, or to be cost-effective compared with standard care alone, for children with moderate or severe atopic eczema[26]. ***Recommendation:*** • Advise health boards that prescribers in primary care should not initiate silk garments for any patient. • Advise health boards to support prescribers in deprescribing silk garments in all patients and, where appropriate, ensure the availability of relevant services to facilitate this change. ***Patient exemptions:*** No routine exceptions have been identified.	**£36,993** (This figure is the expenditure in primary care as per PrescQIPP data).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

Recommendation rationale	NHS Wales expenditure 2018–2019
Vitamins and minerals	
There is insufficient high quality evidence to demonstrate the clinical effectiveness of vitamins and minerals. Vitamins and minerals are essential nutrients which most people can and should get from eating a healthy, varied and balanced diet. In most cases, dietary supplementation is unnecessary. Many vitamin and mineral supplements are classified as foods and not medicines; they therefore do not have to go through the strict criteria laid down by the Medicines and Health Regulatory Authority (MHRA) to confirm their quality, safety and efficacy before reaching the market[27]. For the purpose of this paper not all vitamins and minerals prescribed within primary care are considered as suitable for inclusion. General exclusion criteria applied include vitamin D and calcium preparations, and products that are suitable for patients with medically diagnosed deficiency, and/or malnutrition. Patients suitable to receive Healthy Start vitamins for pregnancy or children between the ages 6 months to their fourth birthday are exempted from these recommendations. This is in keeping with the approach taken by NHS England in their guidance on the use of over the counter items from 2018[27].	
Vitamins and minerals – Ascorbic acid	
Explanation: The Department of Health and Social Care recommends that people should be able to get all the vitamin C they need by eating a varied and balanced diet[28]. Ascorbic acid (vitamin C) tablets are indicated for the prevention and treatment of scurvy[29]. Epidemiologic data have shown a correlation between dietary and supplemental vitamin C intake and oxalate kidney stones in men, especially at high doses. Therefore, routine supplementation in men and any patients with a predisposition to form oxalate stones is not recommended[30]. Although there is some evidence to indicate a minor benefit in using ascorbic acid in the prevention and treatment of the common cold, routine supplementation cannot be justified[31]. Vitamin C supplementation has also been associated with a reduced risk of cardiovascular disease, however there is currently no evidence to support this[32]. ***Recommendation:*** • Advise health boards that prescribers in primary care should not initiate ascorbic acid tablets for any new patient. ***Patient exemptions:*** Medically diagnosed deficiency, including for those patients who may have a lifelong or chronic condition or have undergone surgery that results in malabsorption. However, continuing need should be reviewed on a regular basis. Use of ascorbic acid to prevent and/or treat scurvy.	**£147,792** (This figure is the expenditure in primary care as per CASPA data [NWSSP]).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

Recommendation rationale	NHS Wales expenditure 2018–2019
Vitamins and minerals – Cyanocobalamin	
Explanation: Cyanocobalamin is an oral version of vitamin B_{12}[33]. Apart from dietary deficiency, all other causes of vitamin B_{12} deficiency are attributable to malabsorption. Therefore, there is little place for the use of low-dose vitamin B_{12} orally. In light of this, hydroxocobalamin by injection has replaced cyanocobalamin as the vitamin B_{12} formulation of choice[34]. Cyanocobalamin is considered by the British National Formulary as less suitable for prescribing[35]. ***Recommendation:*** • Advise health boards that prescribers in primary care should not initiate cyanocobalamin tablets for any new patient. ***Patient exemptions:*** Treatment of pernicious anaemia when parenteral administration is not possible or not advised.	**£757,770** (This figure is the expenditure in primary care as per CASPA data [NWSSP]).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	
Vitamins and minerals – Ketovite®	
Explanation: Ketovite® is a branded preparation of vitamins with minerals and trace elements. It is available in two forms; liquid and tablets. Both forms are indicated for the prevention of vitamin deficiency in disorders of carbohydrate or amino-acid metabolism; and as an adjunct in restricted, specialised, or synthetic diets[36]. However, the two forms contain different ingredients with the manufacturer recommending that, in order to achieve complete vitamin supplementation, Ketovite® liquid should be used in conjunction with Ketovite® tablets[37]. Ketovite® liquid contains cyanocobalamin (vitamin B_{12}). Current guidance states there is no justification for prescribing multiple-ingredient vitamin preparations containing vitamin B_{12}[34]. ***Recommendation:*** • Advise health boards that prescribers in primary care should not initiate Ketovite® tablets or liquid for any new patient. ***Patient exemptions:*** Medically diagnosed deficiency, including for those patients who may have a lifelong or chronic condition or have undergone surgery that results in malabsorption. However, continuing need should be reviewed on a regular basis.	**£19,996** (This figure is the expenditure in primary care as per CASPA data [NWSSP]).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

Recommendation rationale	NHS Wales expenditure 2018–2019
Vitamins and minerals – Selenium	
Explanation: Selenium deficiency can occur as a result of inadequate diet or prolonged parenteral nutrition[38]. Good dietary sources of selenium are seafood, kidney and liver[39]. A selenium supplement should not be given unless there is good clinical evidence of deficiency[38] A 2018 Cochrane review concluded that, although there have been well-designed and well-conducted randomised controlled trials investigating selenium supplements for reducing cancer risk, there has been no beneficial effect demonstrated[40]. A Cochrane review from 2013 reported that the limited trial evidence available did not support the use of selenium supplements in the primary prevention of cardiovascular disease[41]. A separate Cochrane review in the same year found that the objective evidence is insufficient to support the use of selenium supplementation for the treatment of patients with Hashimoto's thyroiditis[42]. Selenium has been suggested as having a role in protecting against overwhelming tissue damage and infection in critically ill adults. However, a Cochrane review from 2004, which was updated in 2015, concluded that the evidence supporting supplementation in these patients is disputable[43]. ***Recommendation:*** • Advise health boards that prescribers in primary care should not initiate selenium for any new patient. ***Patient exemptions:*** Supplementation in patients requiring total parenteral nutrition. Medically diagnosed deficiency, including for those patients who may have a lifelong or chronic condition or have undergone surgery that results in malabsorption. Continuing need should however be reviewed on a regular basis.	**£17,004** (This figure is the expenditure in primary care as per CASPA data [NWSSP]).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

Table 2. Items considered to be clinically effective but with more cost-effective options being available, and therefore these items are identified as low priority for funding within NHS Wales and not recommended for routine prescribing

Recommendation rationale	NHS Wales expenditure 2018–2019
Alimemazine	
Explanation: Alimemazine is a sedating antihistamine used for urticaria or pruritus. There is no published literature available to state that alimemazine is superior to other sedating antihistamines[44]. However, alternative first generation antihistamines, such as chlorphenamine or promethazine, offer a more cost-effective option. Pricing from the August 2019 online Drug Tariff states that a box of 28 tablets of alimemazine costs £112.88, compared to 28 tablets of chlorphenamine costing just 78p[45]. ***Recommendation:*** • Advise health boards that prescribers in primary care should not initiate alimemazine for any new patient. • Advise health boards to support prescribers in deprescribing alimemazine in all patients and, where appropriate, ensure the availability of alternative treatment options. ***Patient exemptions:*** As a premedication to anaesthesia in children 2 to 6 years old[46].	**£436,317** (This figure is the expenditure in primary care as per CASPA data [NWSSP]).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	
Aliskiren	
Explanation: Aliskiren is a renin inhibitor which inhibits renin directly; renin converts angiotensinogen to angiotensin. It is indicated for essential hypertension either alone or in combination with other antihypertensives[47]. From a review of evidence in 2016, NICE states that there is insufficient evidence of the effectiveness of aliskiren to determine its suitability for use in resistant hypertension[48].Whilst aliskiren has shown comparable efficacy to other antihypertensive agents in terms of blood pressure reduction, its effects on mortality and long-term morbidity are currently unknown[49]. AWMSG guidance states that aliskiren is not recommended for use within NHS Wales for the treatment of essential hypertension as the clinical and cost effectiveness data presented was insufficient for AWMSG to recommend its use[50]. A Medicines and Healthcare products Regulatory Agency (MHRA) Drug Safety Update reported that when aliskiren is combined with ACE inhibitors or angiotensin receptor blockers, especially in diabetic patients and those with impaired renal function, there is a risk of adverse outcomes such as hypotension, syncope, stroke, hyperkalaemia and changes in renal function including acute renal failure. Further recommendations were made by the MHRA, that for all patients where aliskiren treatment is continued or initiated, estimated glomerular filtration rate (eGFR) and glucose tolerance should be monitored at appropriate intervals[51]. ***Recommendation:*** • Advise health boards that prescribers in primary care should not initiate aliskiren for any new patient. • Advise health boards to support prescribers in deprescribing aliskiren in all patients and, where appropriate, ensure the availability of relevant services to facilitate this change. ***Patient exemptions:*** No routine exceptions have been defined.	**£33,027** (This figure is the expenditure in primary care as per CASPA data [NWSSP]).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

Recommendation rationale	NHS Wales expenditure 2018–2019
Blood glucose testing strips	
Explanation: The intention of this recommendation is not that patients be de-prescribed blood glucose testing strips or not initiated on them. It is intended to encourage health boards and prescribers to consider more cost-effective alternatives. There are currently over 40 different types of blood glucose testing strips available in the UK. They range in price from £5.45 to £16.40 per 50 strips[45], therefore promoting use of more cost-effective testing strips first line will enable savings to be made whilst not affecting patient care. In 2018-2019, approximately 62% of the total spend on blood glucose testing strips in primary care was on those costing greater than £10 for 50 strips[45,52]. Rationalising the number of readily available meters and testing strips also facilitates improved education of healthcare professionals in their use, who in turn can better assist patients with their testing. NICE guidance outlines specific criteria for when self-monitoring of blood glucose may be suitable in patients with type 2 diabetes[53]. ***Recommendation:*** In patients with type 2 diabetes: • Advise health boards that prescribers in primary care should not initiate blood glucose testing strips that cost greater than £10 for 50 strips for any new patient • Advise health boards to support prescribers in de-prescribing blood glucose testing strips that cost greater than £10 for 50 strips and where appropriate, ensure the availability of relevant services to facilitate this change. ***Patient exemptions:*** Patients with type 2 diabetes who have been trained in carbohydrate counting and utilise an appropriate carb counting meter.	**£10,250,398** (This figure is the expenditure in primary care as per CASPA data [NWSSP]).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

Recommendation rationale	NHS Wales expenditure 2018–2019
Silver dressings	
Explanation: There is considerable variation in the cost of dressings, both between categories of dressings and within each dressing category. Silver dressings are considered as relatively high cost items and should only be used when clinical signs or symptoms of infection are present[54,55]. Silver ions exert an antimicrobial effect in the presence of wound exudate; therefore, the volume of wound exudate as well as the presence of infection should be considered if deciding on the use of a silver-containing dressing[55]. Several Cochrane reviews have been undertaken in relation to the use of silver dressings for wound care. From the review entitled "Topical silver for treating infected wounds" conducted in 2007 it was found there was insufficient evidence to recommend the use of silver dressings in the treatment of infected or contaminated wounds[56]. Three years later the review entitled "Topical silver for preventing wound infection" stated there was also insufficient evidence to support the use of silver-containing dressings, as generally they did not promote wound healing or prevent wound infections[57]. Guidance from the Scottish Intercollegiate Guidelines Network (SIGN) states that silver dressings are not recommended in the routine treatment of patients with venous leg ulcers[58]. Several health boards have already introduced various restrictions on the use of silver dressings in an attempt to decrease their use. These range from limiting the supply quantity, to designating them as non-formulary items and restricting supply for exceptional use on a case-by-case basis only[59,60]. ***Recommendation:*** Advise health boards that prescribers in primary care should not routinely initiate silver dressings. ***Patient exemptions:*** If silver dressings are considered necessary their use should be decided upon in collaboration with wound care specialists.	**£452,680** (This figure is the expenditure in primary care as per PrescQIPP data).
The guidance contained herein does not remove the clinical discretion of the prescriber in accordance with their professional duties.	

REFERENCES

1. All Wales Medicines Strategy Group. Medicines Identified as Low Priority for Funding in NHS Wales - Paper 1. 2018. Available at: http://www.awmsg.org/awmsgonline/docs/awmsg/medman/Medicines%20Identified%20as%20Low%20Priority%20for%20Funding%20in%20NHS%20Wales.pdf. Accessed August 2019.
2. All Wales Medicines Strategy Group. Medicines Identified as Low Priority for Funding - Paper 2. 2018. Available at: http://www.awmsg.org/awmsgonline/docs/awmsg/medman/Medicines%20Identified%20as%20Low%20Priority%20for%20Funding%20in%20NHS%20Wales%20-%20Paper%202.pdf. Accessed August 2019.
3. Welsh Government. A Healthier Wales: our Plan for Health and Social Care. 2018. Available at: https://www.basw.co.uk/system/files/resources/180608healthier-wales-mainen.pdf. Accessed August 2019
4. NHS England and NHS Improvement. Items which should not routinely be prescribed in primary care: Guidance for CCGs. 2019. Available at: https://www.england.nhs.uk/wp-content/uploads/2019/08/items-which-should-not-routinely-be-prescribed-in-primary-care-v2.1.pdf. Accessed August 2019.
5. PrescQIPP. About PrescQIPP. 2019. Available at: https://www.prescqipp.info/about-prescqipp/. Accessed August 2019.
6. British National Formulary. Amiodarone hydrochloride. 2019. Available at: https://bnf.nice.org.uk/drug/amiodarone-hydrochloride.html Accessed August 2019.
7. National Institute for Health and Care Excellence. Clinical Guideline 180. Atrial fibrillation: management. 2014. Available at: https://www.nice.org.uk/guidance/cg180. Accessed August 2019.
8. National institute for Health and Care Excellence. Do Not Do Recommendation: Do not offer amiodarone for long-term rate control. 2014. Available at: https://www.nice.org.uk/donotdo/do-not-offer-amiodarone-for-longterm-rate-control. Accessed August 2019.
9. PrescQIPP. Bulletin 76: Cost effective prescribing of emollients. 2015. Available at: https://www.prescqipp.info/our-resources/bulletins/bulletin-76-emollients/. Accessed August 2019.
10. Santer M, Ridd M, Francis N et al. Emollient bath additives for the treatment of childhood eczema (BATHE): multicentre pragmatic parallel group randomised controlled trial of clinical and cost effectiveness. *British Medical Journal.* 2018;361. Available at: https://www.bmj.com/content/361/bmj.k1332 Accessed August 2019.
11. Tarr A, and Iheanacho I. Should we use bath emollients for atopic eczema? *British Medical Journal.* 2009;339. Available at: https://www.bmj.com/content/339/bmj.b4273.full. Accessed August 2019.
12. Medicines and Healthcare products Regulatory Agency. Chloral hydrate (Welldorm) and Triclofos. 2014. Available at: https://www.gov.uk/drug-safety-update/chloral-hydrate-welldorm-and-triclofos. Accessed August 2019.
13. British National Formulary. Chloral hydrate. 2019. Available at: https://bnf.nice.org.uk/drug/chloral-hydrate.html. Accessed August 2019.
14. Institute for Safe medication Practices. Chloral Hydrate: Is it still being used? Are there safer alternatives? 2016. Available at: https://www.ismp.org/resources/chloral-hydrate-it-still-being-used-are-there-safer-alternatives. Accessed August 2019.
15. British National Formulary. Dronedarone. 2019. Available at: https://bnf.nice.org.uk/drug/dronedarone.html. Accessed August 2019.
16. Medicines and Healthcare products Regulatory Agency. Dronedarone (Multaq®): cardiovascular, hepatic and pulmonary adverse events - new

restrictions and monitoring requirements. 2014. Available at: https://www.gov.uk/drug-safety-update/dronedarone-multaq-cardiovascular-hepatic-and-pulmonary-adverse-events-new-restrictions-and-monitoring-requirements. Accessed August 2019.
17. National Institute for Health and Care Excellence. Key Therapeutic Topic: Minocycline. 2015. Available at: https://www.nice.org.uk/advice/ktt11/resources/minocycline-pdf-58757947696069. Accessed August 2019.
18. Garner S, Eady A, Bennett C et al. Minocycline for acne vulgaris: efficacy and safety. *Cochrane Database of Systematic Reviews.* 2012. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD002086.pub2/full. Accessed August 2019.
19. British National Formulary. Minocycline. 2019. Available at: https://bnf.nice.org.uk/drug/minocycline.html. Accessed August 2019.
20. Hill C, Guarner F, Reid G et al. The International Scientific Association for Probiotics and Prebiotics consensus statement on the scope and appropriate use of the term probiotic. *Nature Reviews Gastroenterology & Hepatology.* 2014;11:506-514. Available at: https://www.nature.com/articles/nrgastro.2014.66. Accessed August 2019.
21. UK Medicines Information. Probiotics VSL#3 and Vivomixx have been removed from the Drug Tariff, following review by Advisory Committee on Borderline Substances (ACBS). 2019. Available at: https://www.medicinesresources.nhs.uk/en/Medicines-Awareness/Guidance-and-Advice/Drug-Prescribing/Probiotics-VSL3-and-Vivomixx-have-been-removed-from-the-Drug-Tariff-following-review-by-Advisory-Committee-on-Borderline-Substances-ACBS-/. Accessed August 2019.
22. Derry S, Matthews P, Wiffen P et al. Salicylate-containing rubefacients for acute and chronic musculoskeletal pain in adults. *Cochrane Database of Systematic Reviews.* 2014. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD007403.pub3/full. Accessed August 2019.
23. British National Formulary. Soft-tissue disorders. 2019. Available at: https://bnf.nice.org.uk/treatment-summary/soft-tissue-disorders.html. Accessed August 2019.
24. National Institute for Health and Care Excellence. Do Not Do Recommendation: Do not offer rubefacients for treating osteoarthritis. 2014. Available at: https://www.nice.org.uk/donotdo/do-not-offer-rubefacients-for-treating-osteoarthritis. Accessed August 2019.
25. PrescQIPP. Bulletin 160: Silk and antimicrobial garments. 2017. Available at: https://www.prescqipp.info/our-resources/bulletins/bulletin-160-silk-and-antimicrobial-garments/. Accessed August 2019.
26. Thomas K, Bradshaw L, Sach T et al. Randomised controlled trial of silk therapeutic garments for the management of atopic eczema in children: the CLOTHES trial. *National Institute for Health Research.* 2017. Available at: https://www.journalslibrary.nihr.ac.uk/hta/hta21160/#/abstract. Accessed August 2019.
27. NHS England. Conditions for which over the counter items should not routinely be prescribed in primary care: Guidance for CCGs. 2018. Available at: https://www.england.nhs.uk/wp-content/uploads/2018/03/otc-guidance-for-ccgs.pdf. Accessed August 2019.
28. NHS website. Vitamin C. 2017. Available at: https://www.nhs.uk/conditions/vitamins-and-minerals/vitamin-c/. Accessed August 2019.
29. British National Formulary. Ascorbic acid (Vitamin C). 2019. Available at: https://bnf.nice.org.uk/drug/ascorbic-acid.html. Accessed August 2019.
30. Pazirandeh S and Burns D. Overview of water-soluble vitamins. 2019. Available at: https://www.uptodate.com/contents/overview-of-water-soluble-

vitamins?search=ascorbic%20acid&source=search_result&selectedTitle=2~148&usage_type=default&display_rank=1#H54. Accessed August 2019.

31. Hemila H and Chalker E. Vitamin C for preventing and treating the common cold. *Cochrane Database of Systematic Reviews.* 2013. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD000980.pub4/full?highlightAbstract=acid%7Cascorbic%7Cascorb. Accessed August 2019.
32. Al-Khudairy L, Flowers N, Wheelhouse R et al. Vitamin C supplementation for the primary prevention of cardiovascular disease. *Cochrane Database of Systematic Reviews.* 2017. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD011114.pub2/full?highlightAbstract=acid%7Cascorbic%7Cascorb. Accessed August 2019.
33. Schrier S. Treatment of vitamin B12 and folate deficiencies. 2019. Available at: https://www.uptodate.com/contents/treatment-of-vitamin-b12-and-folate-deficiencies?search=cyanocobalamin&source=search_result&selectedTitle=2~148&usage_type=default&display_rank=1. Accessed August 2019.
34. British National Formulary. Megaloblastic anaemia. 2019. Available at: https://bnf.nice.org.uk/treatment-summary/anaemia-megaloblastic.html. Accessed August 2019.
35. British National Formulary. Cyanocobalamin. 2019. Available at: https://bnf.nice.org.uk/drug/cyanocobalamin.html. Accessed August 2019.
36. British National Formulary. Vitamins with minerals and trace elements. 2019. Available at: https://bnf.nice.org.uk/drug/vitamins-with-minerals-and-trace-elements.html#indicationsAndDoses. Accessed August 2019.
37. Essential Pharmaceuticals Ltd. Ketovite Liquid. Summary of Product Characteristics. 2015. Available at: https://www.medicines.org.uk/emc/product/1051/smpc. Accessed August 2019.
38. British National Formulary. Selenium deficiency. 2019. Available at: https://bnf.nice.org.uk/treatment-summary/selenium-deficiency.html. Accessed August 2019.
39. Pazirandeh S, Burns D, and Griffin I. Overview of dietary trace minerals. 2019. Available at: https://www.uptodate.com/contents/overview-of-dietary-trace-minerals?search=selenium&source=search_result&selectedTitle=2~120&usage_type=default&display_rank=1. Accessed August 2019.
40. Vinceti M, Filippimi T, Giovane C et al. Selenium for preventing cancer. *Cochrane Database of Systematic Reviews.* 2018. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD005195.pub4/full?highlightAbstract=selenium%7Cwithdrawn. Accessed August 2019.
41. Rees K, Hartley L, Day C et al. Selenium supplementation for the primary prevention of cardiovascular disease. *Cochrane Database of Systematic Reviews.* 2013. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD009671.pub2/full?highlightAbstract=selenium%7Cwithdrawn. Accessed August 2019.
42. van Zuuren E, Albusta A, Fedorowicz Z et al. Selenium supplementation for Hashimoto's thyroiditis. *Cochrane Database of Systematic Reviews.* 2013. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010223.pub2/full?highlightAbstract=selenium%7Cwithdrawn. Accessed August 2019.
43. Allingstrup M, and Afshari A. Selenium supplementation for critically ill adults. *Cochrane Database of Systematic Reviews.* 2015. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003703.pub3/full?highlightAbstract=selenium%7Cwithdrawn. Accessed August 2019.
44. Waltham Forest Clinical Commissioning Group. Position Statement on Alimemazine. 2017. Available at: http://www.walthamforestccg.nhs.uk/downloads/ourwork/Medicines-optimsation/Medicines-guidelines/Respiratory/Alimemazine.pdf Accessed August 2019.

45. NHS Business Services Authority. Drug Tariff September 2019. 2019. Available at: http://www.drugtariff.nhsbsa.nhs.uk/#/00730181-DC/DC00729671/Part%20IXR%20-%20Chemical%20Reagents%20. Accessed October 2019.
46. British National Formulary. Alimemazine tartrate. 2019. Available at: https://bnfc.nice.org.uk/drug/alimemazine-tartrate.html. Accessed September 2019.
47. British National Formulary. Aliskiren. 2019. Available at: https://bnf.nice.org.uk/drug/aliskiren.html. Accessed September 2019.
48. National Institute for Health and Care Excellence. Hypertension in adults: diagnosis and management – Evidence. 2016. Available at: https://www.nice.org.uk/guidance/cg127/evidence. Accessed August 2019.
49. Scottish Medicines Consortium. Aliskiren 150mg and 300mg film-coated tablets (Rasilez). SMC Advice No. 462/08. 2010. Available at: https://www.scottishmedicines.org.uk/media/1229/aliskiren_rasilez_resubmission_final_january_2010_for_website.pdf. Accessed August 2019.
50. All Wales Medicines Strategy Group. Aliskiren (Rasilez®) 2009. Available at: http://www.awmsg.org/awmsgonline/app/appraisalinfo/18. Accessed August 2019.
51. Medicines and Healthcare products Regulatory Agency. Aliskiren (Rasilez®): risk of cardiovascular and renal adverse reactions. 2014. Available at: https://www.gov.uk/drug-safety-update/aliskiren-rasilez-risk-of-cardiovascular-and-renal-adverse-reactions. Accessed August 2019.
52. NHS Wales Shared Services Partnership. Comparative Analysis Sytem for Prescribing Audit (CASPA). 2019. Accessed October 2019.
53. National Institute for Health and Care Excellence. Nice Guideline 28. Type 2 diabetes in adults: management. 2019. Available at: https://www.nice.org.uk/guidance/ng28/chapter/1-Recommendations#self-monitoring-of-blood-glucose. Accessed October 2019.
54. National Institute for Health and Care Excellence. Key Therapeutic Topic: Wound care products. 2019. Available at: https://www.nice.org.uk/advice/ktt14. Accessed August 2019.
55. National Institute for Health and Care Excellence. Evidence Summary: Chronic wounds – advanced wound dressings and antimicrobial dressings. 2016. Available at: https://www.nice.org.uk/advice/esmpb2/chapter/Key-points-from-the-evidence. Accessed August 2019.
56. Vermeulen H, Hattem J, Storm-Versloot M et al. Topical silver for treating infected wounds. *Cochrane Database of Systematic Reviews.* 2007. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD005486.pub2/full?highlightAbstract=withdrawn%7Cdressings%7Cdress%7Csilver. Accessed August 2019.
57. Storm-Versloot M, Vos C, Ubbink D et al. Topical silver for preventing wound infection. *Cochrane Database of Systematic Reviews.* 2010. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006478.pub2/full?highlightAbstract=withdrawn%7Cdressings%7Cdress%7Csilver. Accessed August 2019.
58. Scottish Intercollegiate Guidelines Network. Management of chronic venous leg ulcers: A national clinical guideline. 2010. Available at: https://www.sign.ac.uk/assets/sign120.pdf. Accessed August 2019.
59. Aneurin Bevan University Health Board Medicines and Therapeutics Committee. Silver dressings. 2015. Available at: http://www.wales.nhs.uk/sites3/Documents/814/SilverDressingsLetter%5B20Oct2015%5D.pdf. Accessed August 2019.
60. Swansea Bay UHB. Swansea Bay UHB Formulary: Non-formulary results – Silver 2019. Available at: https://abmformulary.wales.nhs.uk/. Accessed August 2019.

APPENDIX 1. CLASSIFICATION CRITERIA FOR ITEMS/ITEM GROUPS IDENTIFIED AS LOW PRIORITY FOR FUNDING IN WALES

Table 3. Classification criteria for inclusion of items/item groups within phase 3 of the low priority for funding initiative.

Low priority item	Items of low clinical effectiveness	Items where more cost-effective alternatives are available
Alimemazine		✓
Aliskiren	✓	✓
Amiodarone*	✓	
Bath and shower emollients	✓	
Blood glucose testing strips		✓
Chloral hydrate and cloral betaine*	✓	
Dronedarone*	✓	
Minocycline*	✓	
Probiotics	✓	
Rubefaciants	✓	
Silk garments	✓	
Silver dressings	✓	✓
Vitamins and minerals	✓	
* These items have also been identified due to specific patient safety concerns associated with their use		

APPENDIX 2. PRIMARY CARE EXPENDITURE ON THE ITEMS/ITEM GROUPS IDENTIFIED AS LOW PRIORITY FOR FUNDING IN WALES PER HEALTH BOARD IN 2018–2019

Table 4. Primary care expenditure on the items/item groups identified as low priority for funding in Wales per health board in 2018–2019

Low priority item	ABMU	Aneurin Bevan	BCU	Cardiff and Vale	Cwm Taf	Hywel Dda	Powys
Alimemazine	£187,199	£17,559	£88,821	£40,500	£22,210	£51,724	£28,304
Aliskiren	£3,410	£5,703	£3,454	£5,655	£6,088	£6,890	£1,827
Amiodarone	£7,685	£14,789	£15,143	£7,810	£7,286	£7,509	£2,847
Ascorbic acid	£26,236	£25,325	£19,140	£17,147	£30,657	£16,667	£12,620
Bath and shower emollients	£65,147	£62,903	£50,707	£60,340	£30,386	£34,977	£23,472
Blood glucose testing strips	£1,579,576	£1,700,896	£2,723,810	£1,340,751	£965,704	£1,465,199	£474,462
Chloral hydrate and Cloral betaine	£13,481	£78,440	£32,278	£16,306	£20,177	£23,546	£10,855
Cyanocobalamin	£43,881	£49,977	£500,409	£80,795	£21,219	£49,820	£11,668
Dronedarone	£62	£3,082	£6,963	£1,473	£6,934	£1,809	£2,246
Ketovite	£4,694	£3,869	£2,933	£2,881	£3,086	£2,119	£415
Minocycline for acne	£3,615	£3,410	£5,702	£5,836	£3,247	£6,040	£377
Probiotics	£20,193	£12,160	£1,811	£12,080	£1,821	£5,897	£4,578
Rubefacients (excluding topical NSAIDs and capsaicin)	£27,835	£21,270	£60,541	£24,785	£27,642	£26,791	£7,395
Selenium	£5,762	£2,809	£3,353	£3,651	£1,110	£256	£63
Silk garments	£1,369	£352	£25,310	£1,867	£158	£3,262	£4,674
Silver dressings	£76,698	£29,167	£48,997	£103,636	£148,448	£23,880	£21,854

APPENDIX 3. PRIMARY CARE EXPENDITURE PER 1,000 PATIENTS ON THE ITEMS/ITEM GROUPS IDENTIFIED AS LOW PRIORITY FOR FUNDING IN WALES PER HEALTH BOARD IN 2018–2019

Table 5. Primary care expenditure per 1,000 patients on the items/item groups identified as low priority for funding in Wales per health board in 2018–2019

Low priority item	ABMU	Aneurin Bevan	BCU	Cardiff and Vale	Cwm Taf	Hywel Dda	Powys
Alimemazine	£336	£28.67	£125	£78.04	£72.43	£131	£203
Aliskiren	£6.12	£9.31	£5.00	£10.90	£19.85	£17.49	£13.13
Amiodarone	£13.96	£24.21	£21.36	£15.19	£23.76	£19.18	£20.44
Ascorbic acid	£47.09	£41.35	£26.98	£33.04	£99.99	£42.30	£90.68
Bath and shower emollients	£118	£103	£71.52	£117	£99.10	£89.32	£169
Blood glucose testing strips	£2,835	£2,777	£3,839	£2,584	£3,150	£3,719	£3,409
Chloral hydrate and Cloral betaine	£24.20	£128	£45.49	£31.42	£65.81	£59.76	£78.00
Cyanocobalamin	£78.77	£81.61	£705	£156	£69.20	£126	£83.84
Dronedarone	£0.11	£5.05	£9.82	£2.86	£22.62	£4.61	£16.13
Ketovite	£8.43	£6.32	£4.13	£5.55	£10.07	£5.38	£2.98
Minocycline for acne	£6.56	£5.58	£8.04	£11.35	£10.59	£15.42	£2.71
Probiotics	£36.68	£19.91	£2.55	£23.49	£5.94	£15.05	£32.87
Rubefacients (excluding topical NSAIDs and capsaicin)	£50.56	£34.82	£85.40	£48.19	£90.16	£68.40	£53.10
Selenium	£10.34	£4.59	£4.73	£7.03	£3.62	£0.65	£0.45
Silk garments	£2.49	£0.58	£35.70	£3.62	£0.52	£8.33	£33.56
Silver dressings	£190	£48	£69	£201	£319	£62	£157

APPENDIX 4. SUPPORTING INFORMATION FOR IMPLEMENTATION OF THE RECOMMENDATIONS

1. Amiodarone

- https://www.nice.org.uk/guidance/cg180
- https://www.prescqipp.info/items-which-should-not-routinely-be-prescribed-patient-leaflets
- https://www.england.nhs.uk/wp-content/uploads/2018/03/responsibility-prescribing-between-primary-secondary-care-v2.pdf
- https://www.sps.nhs.uk/repositories/amiodarone-review-and-de-prescribing-in-west-hampshire-ccg-tiffany-barrett/

2. Bath and shower emollients

- https://www.prescqipp.info/items-which-should-not-routinely-be-prescribed-patient-leaflets
- https://www.england.nhs.uk/publication/items-which-should-not-be-routinely-prescribed-in-primary-care-evidence-reviews/
- https://www.prescqipp.info/media/1306/b76-emollients-20.pdf
- https://www.bmj.com/content/361/bmj.k1332

3. Chloral hydrate and cloral betaine

- https://www.gov.uk/drug-safety-update/chloral-hydrate-welldorm-and-triclofos
- https://bnf.nice.org.uk/drug/chloral-hydrate.html

4. Dronedarone

- https://www.nice.org.uk/guidance/cg180
- https://www.prescqipp.info/items-which-should-not-routinely-be-prescribed-patient-leaflets
- https://www.england.nhs.uk/wp-content/uploads/2018/03/responsibility-prescribing-between-primary-secondary-care-v2.pdf
- https://www.gov.uk/drug-safety-update/dronedarone-multaq-cardiovascular-hepatic-and-pulmonary-adverse-events-new-restrictions-and-monitoring-requirements

5. Minocycline for acne

- https://cks.nice.org.uk/acne-vulgaris#!prescribinginfosub:10
- https://www.prescqipp.info/items-which-should-not-routinely-be-prescribed-patient-leaflets
- https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD002086.pub2/full

6. Probiotics

- https://www.prescqipp.info/-probiotics/category/122-probiotics
- https://www.nice.org.uk/guidance/cg84
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/321891/Clostridium_difficile_management_and_treatment.pdf

7. Rubefacients

- https://www.prescqipp.info/media/1639/b114-rubefacients-21.pdf
- https://bnf.nice.org.uk/treatment-summary/soft-tissue-disorders.html
- https://www.prescqipp.info/our-resources/webkits/drop-list/low-value-medicines-lvm/patient-information-pdf-versions/
- https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD007403.pub3/full
- https://www.nice.org.uk/donotdo/do-not-offer-rubefacients-for-treating-osteoarthritis

8. Silk garments

- https://www.england.nhs.uk/publication/items-which-should-not-be-routinely-prescribed-in-primary-care-evidence-reviews/
- https://www.prescqipp.info/our-resources/bulletins/bulletin-160-silk-and-antimicrobial-garments/
- https://www.prescqipp.info/our-resources/webkits/drop-list/low-value-medicines-lvm/patient-information-pdf-versions/

- https://www.journalslibrary.nihr.ac.uk/hta/hta21160/#/abstract

9. Vitamins and minerals

- https://www.healthystart.nhs.uk/healthy-start-vouchers/healthy-start-vitamins/
- http://www.nhs.uk/chq/pages/1122.aspx
- https://www.nhs.uk/news/2011/05May/Documents/BtH_supplements.pdf
- https://www.prescqipp.info/-vitamins-and-minerals/send/212-vitamins-and-minerals-drop-list/2104-bulletin-107-vitamins-and-minerals-drop-list.

a. Ascorbic acid

- https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD000980.pub4/full?highlightAbstract=acid%7Cascorbic%7Cascorb
- https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD011114.pub2/full?highlightAbstract=acid%7Cascorbic%7Cascorb

b. Cyanocobalamin

- https://www.nhs.uk/conditions/vitamin-b12-or-folate-deficiency-anaemia/

c. Ketovite

- https://www.medicines.org.uk/emc/productketoviteliquid/1051/smpc
- https://www.medicines.org.uk/emc/productketovitetablets/1052/smpc

d. Selenium

- https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD005195.pub4/full?highlightAbstract=selenium%7Cwithdrawn
- https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD009671.pub2/full?highlightAbstract=selenium%7Cwithdrawn
- https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010223.pub2/full?highlightAbstract=selenium%7Cwithdrawn
- https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003703.pub3/full?highlightAbstract=selenium%7Cwithdrawn

10. Alimemazine

- https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff

11. Aliskiren

- https://www.nice.org.uk/guidance/cg127/evidence
- https://www.gov.uk/drug-safety-update/aliskiren-rasilez-risk-of-cardiovascular-and-renal-adverse-reactions

12. Blood glucose testing strips

- https://www.nice.org.uk/guidance/ng28/chapter/1-Recommendations#self-monitoring-of-blood-glucose

13. Silver dressings

- https://www.nice.org.uk/advice/ktt14
- https://www.nice.org.uk/advice/esmpb2/chapter/Key-points-from-the-evidence
- https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD005486.pub2/full?highlightAbstract=withdrawn%7Cdressings%7Cdress%7Csilver
- https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006478.pub2/full?highlightAbstract=withdrawn%7Cdressings%7Cdress%7Csilver

APPENDIX 5. TOTAL SPEND AND DIFFERENCE IN SPEND ON THE PREVIOUSLY ENDORSED MEDICINES IDENTIFIED AS LOW PRIORITY FOR FUNDING IN WALES PER HEALTH BOARD FOR 2017–2018 AND 2018–2019

Table 6. Total spend and difference in spend on the previously endorsed medicines identified as low priority for funding in Wales per health board for 2017–2018 and 2018–2019

	ABMU	Aneurin Bevan	BCU	Cardiff and Vale	Cwm Taf	Hywel Dda	Powys
Total spend 2017–2018	£1,128,700	£1,092,124	£864,302	£924,303	£618,893	£1,056,320	£305,658
Total spend 2018–2019	£852,052	£884,279	£738,259	£677,994	£599,225	£874,282	£244,353
Difference	-£276,647	-£207,845	-£126,043	-£246,309	-£19,668	-£182,037	-£61,305