

Prescribing Support Unit

Annual Report 2020



Committee *for*
Health and social care

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Introduction

This Prescribing Support Unit or PSU annual report reviews the trends in prescribing cost and volumes over the year to December 31st 2020 in Guernsey and Alderney, and discusses what the reasons for significant changes may have been. The report also summarises the activities of the PSU undertaken in the past year, activities that have already been completed in 2021 and the plans for the remainder of the year.

Key Findings

- A total of 1,549,841 prescription items for drugs and medicines were dispensed as pharmaceutical benefit in Guernsey and Alderney in the year ending December 31st 2020, an increase of 1.1% on 2019.
- Of that total 1,017,125 were exempt from a prescription charge, an increase of 1.4% on 2019. There were 532,716 paid prescriptions, 0.5% more than in 2019.

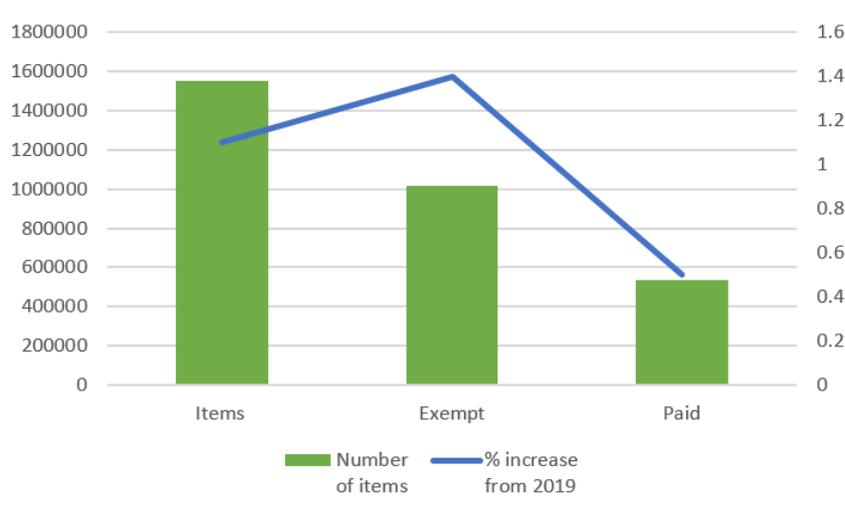


Figure 1. Prescription items for drugs and medicines dispensed as pharmaceutical benefit 2020 with % comparison to 2019

- The basic drug cost, or net ingredient cost (NIC), before any rebates or discounts, for all practices and prescribers was £15.51 million, 5.9% higher than in 2019.
- The average NIC per dispensed (drug) prescription item dispensed in 2020 was £10.01, up 4.8% on 2019.

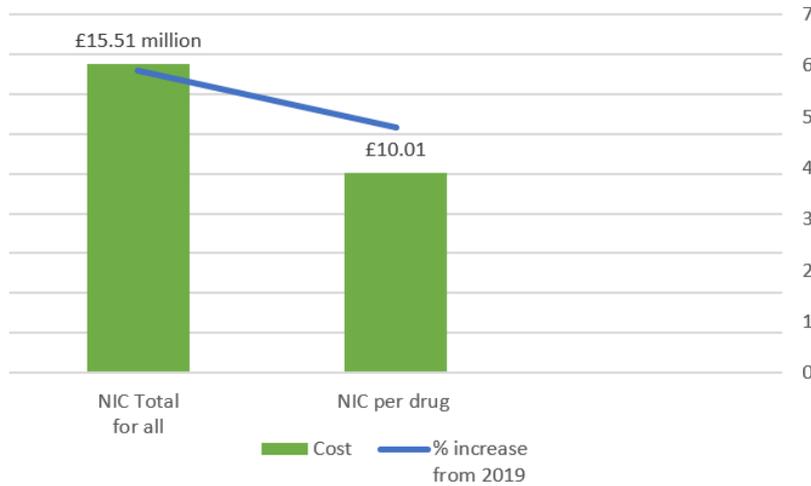


Figure 2. The basic drug cost or net ingredient cost (NIC) for all and per item 2020 with % comparison to 2019

- There were 10,417, 6.6% more than in 2019, appliance prescription items dispensed in 2020, at a total cost of £1.08 million or 4.6% more than in 2019.
- The cost of the Oxygen service was £413K, down 6.3% on 2019.
- The Monitored Dosage Systems service cost £281K in 2020, an increase of 6.1% on 2019.
- Fees for supervision of consumption of opioid substitute therapy, came to £66,795, a 105% increase on 2019.

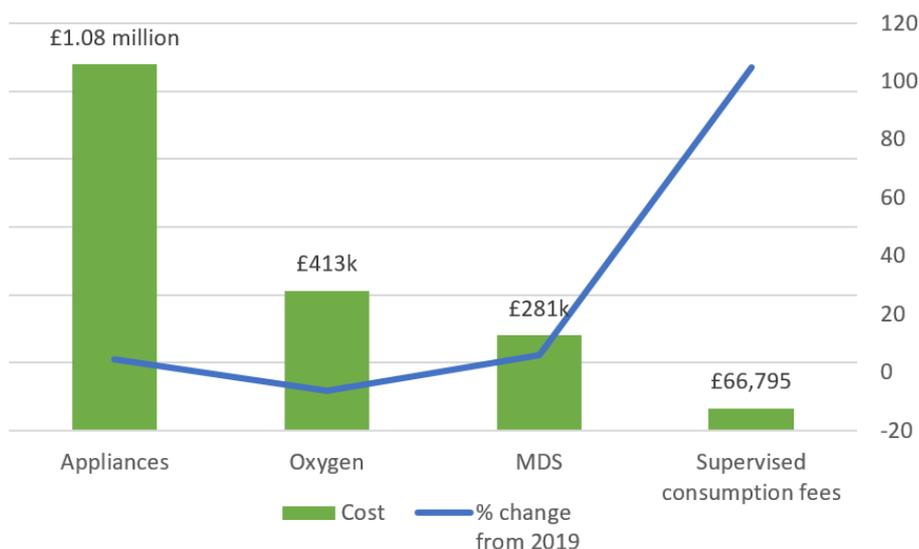


Figure 3. The basic drug cost or net ingredient cost (NIC) for all and per item 2020 with % comparison to 2019

- The annual cost before deduction of the prescription charge was £19.87 million, up 0.5% on 2019.
- Prescription charges paid by islanders amounted to £2.19 million, which was 3.9% less than in 2019.
- Rebates to CfESS on drugs dispensed in the community came to £980K in 2020 and discounts of at least as much again were obtained by CfHSC on oncology and other specialist drugs
- The total annual cost of all of the above, plus out-of-pocket claims, professional fees and uplifts to pharmacies, less prescription charges, was £17.67 million, up 1.2 % on 2019.

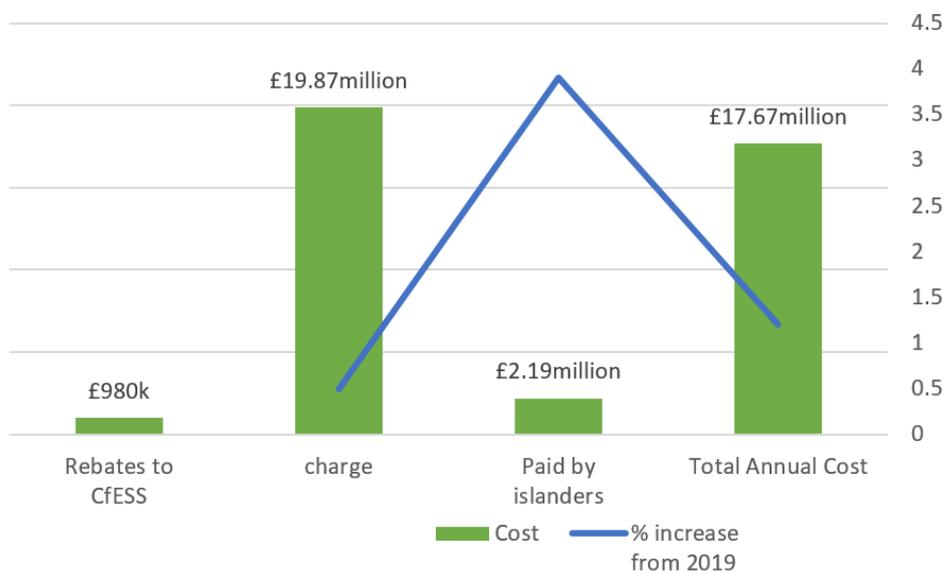


Figure 4. Total costs

Overall prescribing

The COVID 19 outbreak in March 2020 affected every aspect of the Pharmaceutical Service in the remainder of the year.

As is well known, item growth and cost increases have been modest in recent years, driven by item and cost control in Primary Care. The picture changed dramatically in 2020, with item growth of between 2.4% and 3.1% in the large Guernsey practices. This was highly likely to have been in part as a result of some over-ordering, some stock-piling and anticipatory prescribing during the Spring COVID-19 outbreak.

There were significant increases in the use of new drugs, particularly the direct-acting oral anticoagulants in cardiology and biologics. This may or may not have been related to the States vote in January 2020 to automatically adopt all NICE TA drugs by policy. In addition the costs of many older drugs which had been available generically for several years rose sharply. This is highly likely to have been as a result of the uncertainty surrounding the withdrawal of the UK from the EU.

All of these factors resulted a larger increase in Net Ingredient Cost than in previous years.

There were however some successes despite all of these challenges. The increase in drug costs of £873K over 2019 was covered by rebates to CfESS of £980K. The numbers and costs of opioids, antibacterial, hypnotics and anxiolytics and high cost and low value products all fell. The High Cost Drugs Pharmacy Technician and Prescribing Support Dietetic posts realised significant savings, which will be discussed in the following pages. Data in the following sections and tables are before the rebates to CfESS and at least a similar amount in discounts to CfHSC, have been taken into account.

Prescribing by all organisations and prescribers

As stated above, there had been modest increases or small falls in the item numbers in the three large primary care practices in Guernsey for many years. This was reversed in 2020 with item increases of between 2.6% and 3.1%. Item growth in the months of the pandemic : March, April and May were significantly higher than in previous years. For example in March 2020 there were 23,615 more prescriptions dispensed than in March 2019 (98,697 vs 75,082).

CfHSC prescribing costs fell due to the end of treatment for Hepatitis C eradication and some generic savings from patent expiries for some products for HIV. The year also saw a reverse of the downward trend in drug costs of primary care prescribing seen for many years. The three Guernsey primary care practices had cost growth rates of between 7.6% and 16.7% in 2020. Total prescribing costs were £11.95 million in these three practices combined. For example an increase in prescribing by Queen's Road of 16.7% was £582K in cash terms.

The increase in costs has been due to increases in the volume of dispensing, the use of more new drugs and due to significant increases in the cost of generics, particularly during the Spring months. The increase in generic costs is due to an element of excessive price inflation by drug companies and to lockdown in India and China, where many raw materials and products are made in high tech

facilities. For example prescriptions for the antidepressant sertraline cost £26K in March 2020 compared with £2.6K per month in March 2019.

There were modest reductions in items and in costs in Alderney.

In Mental Health there were modest increases in items and significant reductions in cost, due mostly to part-correction of the prices of generic antipsychotics and antidepressants.

However as stated earlier, the true cost of prescribing to “Guernsey PLC” shown below was reduced by rebates totalling £980K in the year to CfESS (negotiated and managed by the Prescribing Advisor) and a similar sum in discounts to CfHSC (negotiated and managed by the CfHSC pharmacy team).

Table 1, as follows, contains the details

Table 1: Prescribing by Our Organisations 2020

Table 1: Organisation	Prescription items		Total net drug cost		Average net drug cost per prescription item	
	2020	Change from 2019	2020	Change from 2019	2020	Change from 2019
HEALTHCARE GROUP	500,057	3.1%	£4,169,486	12.5%	£8.34	9.2%
QUEENS ROAD MEDICAL PRAC	430,418	2.4%	£3,982,616	16.7%	£9.25	14.0%
L'AUMONE&ST. SAMPSONS	438,160	2.6%	£3,797,751	7.6%	£8.67	4.9%
MSG	31,745	-1.2%	£1,999,545	6.2%	£62.99	7.5%
APPLIANCE Forms	10,464	7.7%	£886,776	5.2%	£84.75	-2.3%
HSC	4,164	7.7%	£500,146	-51.4%	£120.11	-54.9%
ISLAND MC Alderney	56,062	-0.9%	£440,012	-2.3%	£7.85	-1.4%
PSYCHIATRIC SERVICES	14,513	0.4%	£231,533	-12.5%	£15.95	-12.8%
SARNIA MEDICAL SERVICES LTD	21,147	-19.4%	£159,816	-22.1%	£7.56	-3.4%
CAMHS	3,005	4.8%	£76,302	-7.4%	£25.39	-11.7%

Prescribing by Therapeutic Group

Table 2, below, contains the details, which are discussed in the following pages.

Table 2: Therapeutic Group	Prescription items dispensed		Total net drug cost		Average net drug cost per prescription item	
	2020	% Change on 2019	2020	% Change on 2019	2020	% Change on 2019
Gastro-Intestinal System	133,990	1.6%	£685,272	20.3%	£5.11	15.6%
Cardiovascular System	479,334	2.8%	£2,653,841	12.0%	£5.54	8.2%
Respiratory System	95,193	4.5%	£1,429,057	17.2%	£15.01	10.8%
Central Nervous System	249,329	3.0%	£2,229,770	11.5%	£8.94	7.7%
Infections	56,793	-11.6%	£741,520	-37.1%	£13.06	-40.6%
Endocrine System	192,800	2.4%	£1,411,025	9.1%	£7.32	6.1%
Malignant Disease and Immunosuppression	9,603	4.8%	£1,785,855	13.0%	£185.97	7.2%
Nutrition and Blood	84,639	8.5%	£984,564	3.9%	£11.63	-4.4%
Musculoskeletal and Joint Diseases	54,363	1.1%	£1,636,756	3.5%	£30.11	2.3%

➤ Gastrointestinal (GI) system

There were modest increases in the number of GI items, but GI total costs were impacted by fluctuations in generic prices resulting in a 20% increase in drug costs. The anti-secretory drugs : omeprazole, lansoprazole and cimetidine, taken to reduce acid production, as well as drugs for dyspepsia and drugs for GI spasms, all had large percentage increases in prices. However, modest item growth prevented a larger increase.

Reducing polypharmacy and deprescribing remained a priority to the extent possible in 2020. Proton Pump Inhibitors or PPIs, the main anti-secretory drugs, were targeted as being particularly important as there is concern about their link to osteoporosis and increased rates of the “super bug” *C Difficile*. Item growth at 0.1% was very modest. The importance of crossing off unwanted items was highlighted to islanders on a number of occasions in 2020.

Feedback to prescribers about cost fluctuations and the costs of “specials”, controlled entry of new drugs, Scriptswitch, Clinical Guidelines, PSU workshops and bulletins have been used over many years to minimise GI cost increases where safe and appropriate to do so. Collaborative working

with secondary care meant that the best value drugs for the community as a whole were used in the hospital and when patients were discharged and / or seen by MSG Consultants.

Despite fluctuations in generic prices in 2020 and increasing use of biologics, large six figure falls in the cost of GI prescribing have been seen in recent years. This was achieved by very high rates of generic prescribing, control of entry of new drugs, use of best value treatments and increasingly the sensible use of stopping rules for biologics. For example prescribing has become much more cost-effective, with nearly twice the number of patients being treated for two thirds of the cost. In 2004 the annual cost was £1.03 million for 77,491 GI items, which gradually fell over the years to £685K for 133,990 GI items in 2020.

Table 3, as follows, contains the details of Gastrointestinal prescribing in 2020.

Table 3 GI Prescribing	Prescription items dispensed		Total net drug cost		Average net drug cost per prescription item	
	2020	Change from 2019	2020	Change from 2019	2020	Change from 2020
Antisecretory drugs and mucosal protectants	88,608	0.1%	£220,273	37.4%	£2.49	37.3%
Antispasmodics and other drugs altering gut motility	5,030	1.2%	£66,775	47.2%	£13.28	45.5%
Chronic bowel disorders	3,219	6.7%	£94,923	2.5%	£29.49	-3.9%
Drugs affecting intestinal secretions	885	0.3%	£33,579	3.0%	£37.94	2.7%
Dyspepsia and gastro-oesophageal reflux disease	4,429	10.8%	£32,444	18.8%	£7.33	7.3%
Laxatives	27,662	5.5%	£211,323	13.7%	£7.64	7.7%
All GI	133,990	1.6%	£685,272	20.3%	£5.11	18.3%

➤ Cardiovascular system

There was an increase in item numbers in 2020 of 2.9%, with a 12% increase in total cost and an 8.9% increase cost per item compared with 2019.

Fluctuations in costs of many older generic drugs increased during the pandemic months, some have now corrected. The main driver was however a significant increase in the use of the newer and more expensive direct oral anticoagulant or DOACs for atrial fibrillation and venous thromboemboli (blood clots). In the 4th quarter of 2019, the Prescribing Panel approved a DOAC protocol recommending a switch to the best value drug from all other anticoagulants including warfarin, for most people with non-valvular atrial fibrillation. This greatly reduced the numbers of patients on warfarin attending the INR clinic at the PEH. It also avoided the difficulties in NHS organisations who needed to reconfigure their INR clinics at short notice when the pandemic struck.

The cost of cardiovascular prescribing includes the dispensing of the blood product Factor 8 for people with haemophilia, where some headline savings were made. The cost per unit of Factor 8 when the products are bought via the NHS supply chain is said to be the lowest in the world. Under the High Cost Drug Scheme, three patients are now having their products dispensed by the PEH pharmacy at this reduced acquisition cost. The reduction in the actual cost of delivering Factor 8 to patients who need it is a significant six figure sum. These savings, as well as another six figure sum obtained in rebates, will not show up in headline figures.

Despite a doubling in the number of islanders treated with CV drugs and a large increase in the range, their total cost to the taxpayer is still less in 2020 than in 2000, just after the PSU was established. The cost was £2.65 million (minus rebates and discounts) for 479K items in 2020 vs £2.42 million for 239K items in 2000.

Table 4, as follows, contains the details

Table 4: Cardiovascular Prescribing	Prescription items dispensed		Total net drug cost		Average net drug cost per prescription item	
	2020	Change from 2019	2020	Change from 2019	2020	Change from 2019
Anti-arrhythmics	2,500	-0.7%	£24,971	-11.0%	£9.99	-10.4%
Anticoagulants and protamine	23,255	9.9%	£989,967	55.5%	£42.57	41.5%
Antifibrinolytic drugs	588	17.4%	£424,977	-19.6%	£722.75	-31.5%
Antiplatelet drugs	36,626	2.6%	£56,886	9.7%	£1.55	6.9%
Beta-adrenoceptor blocking drugs	54,650	3.5%	£101,975	5.1%	£1.87	1.6%

Diuretics	53,609	-1.0%	£141,091	-2.9%	£2.63	-1.9%
Hypertension and heart failure	116,740	1.2%	£390,811	1.0%	£3.35	-0.2%
Lipid-regulating drugs	107,978	4.4%	£230,928	15.2%	£2.14	10.4%
Nitrates, calcium-channel blockers & other antianginal drugs	79,653	3.4%	£256,732	-3.3%	£3.22	-6.5%
Positive inotropic drugs	3,349	4.5%	£5,307	11.0%	£1.58	6.3%
Sympathomimetics	386	10.6%	£30,196	23.5%	£78.23	11.6%
All CV	479,334	2.8%	£2,653,841	12.0%	£5.54	8.9%

➤ Respiratory system

There was a larger increase in numbers of prescriptions to treat respiratory disease in 2020 and their cost than in previous years. Prescribing of inhaled corticosteroids, as well as cromoglycate and similar drugs rose reversing trends in previous years. This may have been due to some over-ordering during the pandemic. The increased use of one new drug for the management of severe asthma, omalizumab, was the cause of the 30% increase in the cost of drugs for antihistamines, hyposensitisation and allergic emergencies.

Respiratory costs are slightly reduced by one relatively small rebate. Table 5, as follows, contains the details.

Table 5: Respiratory Prescribing	Prescription items dispensed		Total net drug cost		Average net drug cost per prescription item	
	2020	Change from 2019	2020	Change from 2019	2020	Change from 2019
Class of drug						
Antihistamines, hyposensitisation and allergic emergencies	19,386	9.0%	£114,900	30.9%	£5.93	20.1%
Bronchodilators	36,216	-0.2%	£324,961	-2.3%	£8.97	-2.1%
Corticosteroids (respiratory)	30,287	7.5%	£798,876	9.0%	£26.38	1.3%
Cromoglycate, leukotriene and phosphodiesterase type-4 inhibitors	6,263	5.8%	£21,523	-12.4%	£3.44	-17.2%
All Respiratory	95,193	4.5%	£1,429,057	17.2%	£15.01	12.1%

➤ **Central nervous system (CNS)**

CNS prescribing costs rose in 2020 by 11.5%, and item growth was 3%.

There were slightly fewer prescription items for hypnotics and anxiolytics dispensed. This was partially due to a rationalisation of the prescribing of melatonin. Melatonin item numbers fell, as did the prescribing of very high cost specials, also avoiding uplifts and carriage charges. Staff at CAMHS, Community pharmacy teams, MSG and GP colleagues were very supportive of this change. The island-wide cost of melatonin was £54,945 in 2020, compared with 2017 when costs were at their highest : £145,942.

The prices of generic quetiapine and olanzapine rose sharply in 2020, but are now corrected somewhat. However similar changes in the costs of generic antidepressants have not yet fully reversed and resulted in an increase of 72.4% to £517K. As an example the monthly cost of the SSRI antidepressant sertraline increased ten-fold from £2,293 in March 2019 to £26,861 in March 2020. In December 2020 the cost was £14,273.

Not unexpectedly, the prescribing of many drugs for the CNS rose in 2020. The only exceptions were the use of drugs for dementia and for nausea and vertigo.

One of the largest increases was in the use antidepressants. However this figure includes 19,005 items of amitriptyline and nortriptyline which are no longer recommended for depression.

Guidelines on the use of antidepressants for anxiety and depression recommend their use as part of a course of treatment. For clinically-diagnosed mild to moderate depression, prescribing is recommended only after self-help strategies such as computerised CBT, increasing exercise and reduction in alcohol consumption have not been successful. People with more severe disease would be offered talking therapy, advice on self-help as well as an anti-depressant.

It is also important to remember that antidepressants are not just used to treat anxiety and depression. They are licensed for panic disorder, obsessive-compulsive disorders, bulimia nervosa, menopausal symptoms such as hot flushes in women who have had breast cancer, post-traumatic stress disorder, diabetic neuropath, stress urinary incontinence, abdominal pain or discomfort in patients who have not responded to other treatments, neuropathic pain, migraine prophylaxis, phobia and obsessional states, added into treatment of cataplexy for people with narcolepsy. For neuropathic pain in particular, they are at least as effective, much better value and significantly safer than other drugs such as lidocaine plasters, pregabalin and opioids.

The Prescribing and Formulary Panel recommended the removal from the Prescribing List of trimipramine for depression and alimemazine for allergies, as well as liothyronine in May 2019. These were older drugs subject to excessive price inflation by the manufacturers with several better value alternatives available. The total cost of these drugs combined was £145K at their peak in 2016.

Also on the advice of the Prescribing and Formulary Panel, Lidocaine plasters were restricted to their licensed indications or when prescribed by the Pain Clinic for peripheral neuropathic pain in 2017. The cost of these plasters was £163,339 in 2016, £87,370 in 2017 and £61,510 in 2018, £70,825 in 2019 and £87,809 in 2020.

Every effort has been made in recent years to contain costs where clinically appropriate and without compromising care. Activity data on anxiolytic, hypnotic and opioid analgesic prescribing has been prepared and circulated at GP practice and doctor level for several years and is used in doctors' appraisals. Table 6, as follows, contains the details on CNS Prescribing

Table 6: CNS Prescribing	Prescription items dispensed		Total net drug cost		Average net drug cost per prescription item	
	2020	Change from 2010	2020	Change from 2019	2020	Change from 2019
Analgesics	56,639	0.7%	£587,823	6.9%	£10.38	6.1%
Antidepressant drugs	112,733	6.5%	£517,710	72.4%	£4.59	61.9%
Antiepileptic drugs	19,864	0.9%	£276,817	4.5%	£13.94	3.6%
CNS stimulants and drugs used for ADHD	2,354	3.2%	£97,382	5.1%	£41.37	1.8%
Drugs for dementia	3,730	-16.5%	£111,410	-18.4%	£29.87	-2.3%
Drugs used in nausea and vertigo	7,599	-8.4%	£64,380	-7.6%	£8.47	0.8%
Drugs used in parkinsonism and related disorders	5,683	8.8%	£185,709	15.9%	£32.68	6.6%
Drugs used in psychoses and related disorders	12,211	5.9%	£94,459	-15.0%	£7.74	-19.7%
Drugs used in substance dependence	2,903	0.3%	£158,212	-13.5%	£54.50	-13.7%
Drugs used in the treatment of obesity	413	7.6%	£11,312	9.4%	£27.39	1.7%
Hypnotics and anxiolytics	25,200	-0.3%	£124,558	3.3%	£4.94	3.6%
All CNS	249,329	3.0%	£2,229,770	11.5%	£8.94	8.3%

➤ Infections

There was another fall in the numbers of drugs used to treat all infections and in their costs.

The number of antibacterials prescribed in the Bailiwick fell by 14% in 2020, but again costs rose because older drugs that are normally cheap and are off-patent rose sharply in price. HSC Infection Control, HSC Pharmacy and PSU have all worked closely together and with colleagues in our partner organisations for many years to reduce the use of all antibiotics in general and broad spectrum antibiotics in particular, where appropriate and safe to do so.

New guidelines on antimicrobials in adults were published and were added to the Microguide app in 2019. This further fall has been highly likely due to isolation, increased working from home, possible reluctance by patients to access Primary healthcare and improved respiratory etiquette recommended as a consequence of the COVID-19 pandemic. Despite demographic changes in recent years, the number of antibiotic items dispensed by Primary Care practices in Guernsey and Alderney has fallen every year since 2014, eg from 54,550 in 2014 to 38,889 in 2020.

Costs of antiviral prescribing also fell significantly because of reduced use in 2020 of the Hepatitis C drug Maviret^R. This would suggest that most if not all of the estimated 60 Hepatitis C patients have now been treated and that the infection has effectively been eradicated on Guernsey. Approximately 60 patients were treated over 2 to 3 years and the drugs were sourced via the NHS supply chain at the significantly reduced NHS price. The cost was estimated to be £1.5 million if the discount was not made available to us. This reduced price, in-house hospital dispensing, plus efficiency savings, discounts and rebates, all managed by HSC pharmacy staff meant that no extra public funds were required to eradicate Hepatitis C. On average one in three patients with Hepatitis C eventually require a liver transplant, costing up to £300K in surgery fees alone. In the UK in March 2018 there was a reported reduction of 32% in the number of people on the transplant list compared with one year earlier. This is accepted as being as a result of these very effective oral treatments. So effectively eradicating Hepatitis C from the island will have saved the States of Guernsey a very significant further sum and prevented a number of islanders from having transplant surgery off-island.

Table 7, as follows, contains the details on prescribing for people with infections.

Table7 Prescribing for Infections	Prescription items dispensed		Total net drug cost		Average net drug cost per prescription item	
	2020	Change from 2019	2020	Change from 2019	2020	Change from 2019
Anthelmintics	169	19.0%	£261	-58.6%	£1.54	-65.2%
Antibacterial drugs	44,332	-14.0%	£272,752	12.1%	£6.15	30.3%
Antifungal drugs	4,343	-0.3%	£25,064	53.4%	£5.77	53.8%

Antiprotozoal drugs	3,544	-8.6%	£16,974	11.5%	£4.79	22.1%
Antiviral drugs	4,405	2.0%	£426,470	-52.8%	£96.81	-53.7%
All Infections	56,793	-11.6%	£741,520	-37.1%	£13.06	-28.9%

➤ Endocrine disorders

High rates of generic prescribing and limited use of new treatments kept increases in items and costs at moderate levels for many years. However in 2020 there was a significant increase in the use of new drugs to treat diabetes. There is now emerging good quality evidence that some of the new agents do improve patient-oriented outcomes, so they reduce rates of heart attacks and strokes.

Advice from the Prescribing and Formulary Panel was issued on the use of test strips for blood glucose in 2020. The cost of these strips was reduced as a consequence from £53K per quarter in 2016 to £41K per quarter in 2020, despite increases in the number of islanders being diagnosed with diabetes. The savings have part-funded the new FreeStyle Libre service.

The little-used alternative thyroid agent, liothyronine, has been subject to excessive price inflation by the manufacturer. Following advice from the PSU, prescribing had been gradually reduced over the past two years, suggesting that new patients are not being started on it and that some patients already on it are being stopped. With the strong support of the Consultant Endocrinologist and the Consultant Head and Neck Surgeon, the Prescribing Panel recommended that this product's removal from the Prescribing List in May 2019. The cost of liothyronine prescribing was £66K at its peak in 2016, which fell to zero in 2020. This covered half of the increased cost of the new diabetes drugs in 2020, about £127K.

Details on the prescribing of drugs for endocrine disorders are as follows in Table 8.

Table 8: Endocrine Prescribing	Prescription items dispensed		Total net drug cost		Average net drug cost per prescription item	
	2020	Change from 2019	2020	Change from 2019	2020	Change from 2019
Class of drug						
Corticosteroids (endocrine)	12,652	-8.5%	£78,737	-1.9%	£6.22	7.2%
Drugs affecting bone metabolism	8,996	1.9%	£139,050	4.0%	£15.46	2.0%
Drugs used in diabetes	53,665	6.4%	£762,598	21.1%	£14.21	13.9%
Hypothalamic and pituitary hormones and anti-oestrogens	586	-20.3%	£88,490	-21.5%	£151.01	-1.6%
Other endocrine drugs	132	-25.4%	£6,537	-27.6%	£49.52	-2.9%
Sex Hormones	29,285	4.2%	£170,375	0.3%	£5.82	-3.8%

Thyroid and antithyroid drugs	87,484	1.6%	£165,239	4.5%	£1.89	2.8%
All Endocrine	192,800	2.4%	£1,411,025	9.1%	£7.32	6.5%

➤ Malignant Disease and Immunosuppression

Many new drugs were approved for the treatment of cancer and the costs thereof, before discounts, rose by 13% to £1.786 million. There was a large increase in the numbers of the prescriptions of sex hormones and hormone antagonists in malignant disease. This was due to a near doubling of the prescribing of abiraterone for advanced prostate cancer. In 2019 there were 90 prescriptions dispensed at a cost of £246K, which rose to 176 prescriptions at a cost of £479K in 2020. This may have been partly due to a delay in the submission of prescriptions by the PEH pharmacy in the last quarter of 2019. However this drug is dispensed in the hospital, so is sourced at a substantially lower price via the NHS supply chain. The true cost to the taxpayer is therefore lower than shown below for all drugs for cancer. These discounts are at least 50% and can be as much as 80% of the list price. Where they exist, sourcing the drugs at these lower prices has become easier recently.

Details are in Table 9 as follows

Table 9: Malignant Disease	Prescription items dispensed		Total net drug cost		Average net drug cost per prescription item	
	2020	Change from 2019	2020	Change from 2019	2020	Change from 2019
Class of drug						
Cytotoxic drugs	1,141	1.1%	£327,041	-2.8%	£286.63	-3.8%
Drugs affecting the immune response	2,839	4.4%	£838,763	-4.2%	£295.44	-8.2%
Sex hormones and hormone antagonists in malignant disease	5,623	5.9%	£620,051	68.4%	£110.27	59.0%
All Malignant Disease Drugs	9,603	4.8%	£1,785,855	13.0%	£185.97	7.8%

➤ Nutrition and Blood

Primary and Secondary Care Pharmacy and Dietetics have for many years worked closely together to ensure that nutrition products are used appropriately and that, where there is a choice, the best value products are used. A Community Dietician was appointed in late 2018 and since then her expertise has been in great demand from colleagues to review patients, prepare guidelines and deliver presentations on all nutrition matters, including Cows' Milk Allergies in infants and enteral feeds in adults in the practices. In 2019 there were 261 prescriptions at a cost of £68,657 for the most expensive products. This fell to 183 costing £44,735 in 2020. There was greater emphasis on a "food first" approach and increased use of starter packs and lower cost shake-type products.

The cost per oral nutrition item fell by 18.1%. Possibly as a consequence of the COVID-19 pandemic more cancers seemed to have presented at more advanced stages than might have been expected. Many more patients require enteral nutrition. Therefore the number of items rose by 22%. However due to improved efficiencies described above the cost increase was just 0.2%. If the total cost had increased in line with the total nutrition items, the cost would have been £85K higher. It also means that the Community Dietician's post was entirely funded by these savings.

Table 10, as follows, contains the details

Table 10 : Nutrition and Blood	Prescription items dispensed		Total net drug cost		Average net drug cost per prescription item	
	2020	Change from 2019	2020	Change from 2019	2020	Change from 2019
Class of drug						
Anaemias	28,873	4.1%	£213,836	15.7%	£7.41	11.2%
Oral nutrition	8,141	22.6%	£429,713	0.2%	£52.78	-18.2%
All	84,639	8.5%	£984,564	3.9%	£11.63	-4.2%

➤ Musculoskeletal and joint disease

Musculoskeletal prescribing cost increases were attributable to increased cost of the biologic products. Costs increased by 22.4% in 2019 due to the use of a limited number of new drugs. There was a much smaller increase in 2020 of 3.5%. However the true cost to the Health Fund of providing islanders with these drugs was considerably lower due to rebates. In 2020 this came to over £500K.

Table 11, as follows, contains the details.

Table 11: Musculoskeletal and Joint Disease	Prescription items dispensed		Total net drug cost		Average net drug cost per prescription item	
	2020	Change from 2019	2020	Change from 2019	2020	Change from 2019
Class of drug						
Drugs for soft-tissue disorders and topical pain relief	12,856	-0.8%	£78,228	4.9%	£6.08	5.7%
Drugs used in neuromuscular disorders	1,370	7.3%	£15,128	16.4%	£11.04	8.5%
Drugs used in	40,137	1.6%	£1,543,400	3.3%	£38.45	1.7%

rheumatic diseases and gout						
All	54,363	1.1%	£1,636,756	3.5%	£30.11	2.3%

➤ Changes over time

In the first full year of operation of the Prescribing Support Unit, 2000, the cost per prescription item was £10.42. It then rose to £11.53 in 2004. In 2020 it was £10.01 per item before deduction of rebates to CfESS and NHS discounts to CfHSC.

D. Prescribing Support Unit Activities in 2020

The role of the Prescribing Support Unit is to

- Provide unbiased information on the evidence-based use of drugs to manage, influence and support cost-effective prescribing and to
- Provide feedback and prescribing data to individual prescribers and prescribing organisations and to
- Manage the entry of new drugs via the Prescribing and Formulary Panel and to
- Provide prescribing and other data to groups and individuals such as the local print, broadcast and social media, Primary Care, Immunisation and Vaccination Committee, the Drug and Alcohol Strategy Co-ordinator and the Potentially Addictive Prescription Only Drugs Committee.

All were maintained throughout the year. Details of the above, plus other projects undertaken in 2020, are as follows

➤ Prescribing Panels

In May 2018 the CfHSC and CfESS approved the formation of one island-wide panel, the Prescribing and Formulary Panel, to review and to make recommendations for approval of new drugs, to disinvest in poor value products and to agree guidelines on prescribing.

The Panel met regularly in 2020 and continued to evolve, mature and develop. Like it's sister panel, the Therapeutics Advisory Panel, and the two previous committees, PFP has become a valued source of mutual support and collaborative working.

There were 37 applications for individual products for approval in 2020, some were reconsiderations of products already considered. Of the 37 products requested, 27 were approved.

An accurate estimate of the cost avoidance of the drugs declined for prescribing is difficult to make. Alternative treatments, not all pharmacological, of varying costs and in different care settings may have been offered. There may have been extra monitoring costs associated with the new drugs or potential savings by reduced use of secondary care facilities.

The following guidelines on prescribing were produced in 2020 :

- Anticoagulation in non-valvular atrial fibrillation
- Cows' milk allergy in infants
- Methadone

➤ **Prescribing Bulletins on the Internet**

Five prescribing bulletins based on the wants and needs of the local health economy, including local prescribing data if relevant, were written by the Prescribing Advisor in 2020. These bulletins contained a mixture of clinical information and money-saving ideas. The topics covered were as follows:

- Direct Oral Anti Coagulants
- Hot topics
- Cows' milk allergy
- Low back pain
- Sciatica

➤ **NICE Medicines and Prescribing Associate Programme**

There was no reaccreditation conducted in 2020 due to the COVID-19 pandemic and the widespread disruption to all aspects of the NHS. The team at NICE continued the usual face-to-face days on-line and in abbreviated formats.

➤ **COVID-19**

Reports of a novel virus causing serious respiratory illness in the Chinese city of Wuhan began to circulate in early January 2020. This virus, about which little was understood in the early weeks, rapidly spread around the world with devastating effects. Older people and those with underlying health conditions, particularly diabetes and obesity were badly hit. On March 9th the first positive case was diagnosed in the Bailiwick and thirteen local people sadly lost their lives as a result of the virus in the weeks afterwards.

The outbreak had an enormous knock-on effect on the islands, their healthcare system and especially the pharmaceutical service. Community pharmacists and their teams worked tirelessly in the most challenging and unprecedented of circumstances to maintain this vital service for their patients.

There was a large increase in dispensing volume in March 2020 and the cost of many generic drugs escalated in price. One possible reason for the increased costs is that many raw materials for drugs are manufactured in India and many products are made in large plants in China. Both countries spent several months in lockdown, so the effect on drug cost on the islands continued throughout 2020.

To support community pharmacies, a funded prescription delivery service at the height of the pandemic was introduced. This resulted in 2,640 fewer return journeys to pharmacies and received excellent feedback from islanders and staff. The service was funded for 11 weeks from the week lockdown began until June 8th.

➤ **Prescribing and Dispensing Audits**

As in previous years audits were conducted in 2020 into all aspects of prescribing and dispensing. The NHSBSA, formerly known as the Prescription Pricing Authority, upgraded its cost and analysis system, EPACT2 in 2018. It has improved functionality to allow users to access more detailed prescribing and dispensing data. It is also gradually increasing the data set held from 5 years to 10 years. The PSU has been using EPACT data and benefiting from it since pre-1999. Close professional links with the NHSBSA Data Specialists, Pharmacists and others remained a greatly valued source of information, advice and support.

EPACT2 now provides more information and improved functionality with respect to drug pricing and charging for non-standard formulations or specials and products without a single fixed price. All prescribing was checked monthly on receipt of data from the NHSBSA. Doctors were written to with recommendations for switches to better value treatments where appropriate. Where costs were deemed excessive, the Prescribing Panel has in the past recommended changes to alternative products.

➤ **Rebates and discounts**

Costs of new drugs in the NHS are reduced by a series of complex rebates, discounts and patient access schemes. This is to satisfy patient demand for new drugs in the UK and to make them available at a price that might be affordable in the NHS. There are numerous supporting processes in the NHS including electronic prescribing, BlueTech, more hospital dispensing and dispensing Homecare Companies owned exclusively by the NHS.

Without these processes, rebates in the Bailiwick are far more complex to set up, to manage and to monitor. But every effort is always made to ensure that all of the rebates obtained in the NHS are obtained on behalf of the Bailiwick taxpayer.

However this system of commercially-confidential rebates means that there is no clarity or transparency on how much drugs exactly cost the NHS. The Bailiwick is no exception. For drugs dispensed in the community in the calendar year 2020 rebates totalling £980K were received from drug companies by CfESS.

Drug costs in CfHSC costs are less clear. Reimbursement to PEH pharmacy for prescriptions dispensed is at the full NHS list price. The NHSBSA in Newcastle will only use the list price to price prescriptions, so rebates are not captured in EPACT data. I would estimate that the saving was at least as much that obtained in community drug rebates 2020.

➤ **Inpatient Deprescribing Audits and Interface / Discharge Pharmacy Business Case**

In late 2018 the then Chief Pharmacist and a Consultant Geriatricians, conducted an audit on inpatient prescribing in Victoria Wing and Carey Ward to check what products might be appropriate for deprescribing. The report was published in early 2019. In September 2019 the audit was repeated on two surgical wards, two medical wards and the rehabilitation ward, Le Marchant. Due to time constraints and the imminent retirement of the Chief Pharmacist the second audit was less detailed than the first.

The findings of the first audit were that, in 20 patients, 30 drugs would be recommended for deprescribing. Potential savings would be £450 per month or £5,400 per year for 20 patients. In the second audit 73 patients were reviewed, 14 drugs were considered to be suitable for deprescribing. Potential savings would be £254 per month or £3,048 per year.

The reviewers calculated that if the samples seen were representative of the current position in the general population, savings generated from deprescribing would be between £185K and £1.2 million per year. The latter figure was based on the more detailed 2018 audit. The actual savings from deprescribing would be a part only of anticipated larger savings by active intervention at the interface between care settings. This would also reduce stockpiling of unwanted pharmaceuticals in homes, where it is a public health issue. The authors' recommendations included the investment in an interface pharmacy service and the sharing of the results with the wider community.

As a result of this audit, a business case for the pharmacy roles has been submitted for two pharmacists and two pharmacy technicians in late 2020.

➤ **Reducing wastage and polypharmacy**

Island-wide guidelines on Deprescribing and Polypharmacy were approved in 2015 and workshops on the topic were held. Since then every effort was made to continue with this work.

An important part of reducing wastage in the pharmaceutical service is disinvesting in high cost and low value products. Prescribing was considerably reduced or stopped all together in products such as melatonin for insomnia for adults in primary care, liothyronine for thyroid disease, trimipramine for depression, alimemazine for allergies, lidocaine plasters in chronic pain, fish oils for cardiac disease, glucosamine for OA and specials. These measures resulted in real on-going significant savings.

Patients have a central role to play in reducing wastage. Checks throughout the year showed that islanders, as well as pharmacy staff, continued to cross unwanted items off prescription forms, as advised on the back of prescription forms. The number of items per prescription form rose however in 2020, for the first time since 2015. Details are as follows, in Table 12.

Table 12 : Items per drug prescription form

Year	Items	Forms	Items per form
2015	1,471,888	682,269	2.16
2016	1,464,363	706,820	2.07
2017	1,450,609	721,442	2.01
2018	1,465,922	729,441	2.01
2019	1,485,554	746,062	1.99
2020	1,517,568	747,395	2.03

➤ **Biosimilars**

Many of the expensive biologics dispensed in the community for arthritis, inflammatory bowel disease and psoriasis are available as lower priced biosimilars. In some cases the original product is discounted to match the cost of the biosimilar. As discussed previously, a biosimilar policy was agreed in late 2014 across Primary and Secondary Care. This was considered in the NHS to be an important opportunity to save money. Biosimilar specialist pharmacists and nurses were appointed in trusts to manage their introduction. The NHS initially set a target of saving £350 million per year by the use of biosimilars. Local savings were well in excess of £600K in 2020 and were achieved without any extra expenditure on infrastructure or staff in Primary or Secondary Care.

➤ **Anticoagulation in non-valvular atrial fibrillation (AF)**

DOACs were introduced over the past few years. Unlike the older drug, warfarin, they do not require regular INR testing or frequent dose changes. The new drugs were found, in the non-inferiority trial patients, to be slightly more effective than warfarin. The margin was about a 1% ARR vs warfarin in terms of preventing strokes, meaning that for every 100 patients treated with the new agent one would avoid a stroke. Some rates of bleeding were reported as being lower with the new drugs than with warfarin. Over time the companies reduced the cost prices from over £100 per month to about £50 per month for the DOACs.

A commercial agreement was reached with the maker of one drug making it significantly better value to offer a DOAC to all patients on warfarin than previously calculated. The guideline produced was a major piece of work involving close collaboration with Pathology, Visiting Consultant Haematologists, PEH Pharmacy and the Prescribing Panel. Beginning in October 2019 several hundred AF patients on warfarin were offered the preferred DOAC if they wished. Reduction in hospital footfall by reduced attendance at INR clinics was important during lockdown. Much of the costs of this change were covered by efficiency savings elsewhere.

➤ **Brexit preparedness**

The former Chief Pharmacist, with the Head of Operations at HSC, led on preparedness for potential disruption of healthcare supplies in the event of the UK leaving the EU without a trade deal. HSC staff including the Prescribing Advisor met weekly from mid-2018 onwards to make every possible effort to ensure continuity of supplies of all medical supplies, including drugs to the

islands. Two potential leaving dates, one in March 2020 and another in October 2020 came and went without an exit. However it did mean that staff at the UK DHSC had plenty of time to make plans and then to refine those plans . Close links which had been established between the DHSC and the then Chief Pharmacist meant that the Crown dependencies were included in all of the planning and the allocation of stocks etc. This work proved absolutely invaluable during the COVID-19 outbreak in Spring 2020.

➤ **States vote on Review by Solutions for Public Health**

A States debate on the islands' drug funding policy took place in January 2020, with Deputies voting to fund all NICE Technology Appraisals via a rolling programme. A large complex piece of work preceded this. The Chief Pharmacist, the Pharmacy Services Manager and the Prescribing Advisor all provided extensive expert advice, information, comment on the design and support to the reviewers. The expert input of a local Consultant Pharmacist was obtained. Consequently 45 unfunded TAs were reviewed in detail, discounts were negotiated with the companies where they existed and the products were added to the Prescribing List by the end of Q2 2021. Work continued via the Prescribing and Formulary Panel throughout. In total, since the cut-off point for the Solutions for Public Health cost calculations, December 31st 2018, approximately 77 new drug TAs were approved.

➤ **Prison pharmacy**

Outside of lockdown, the Prescribing Advisor continued to visit the prison once per week to support the excellent work of the Prison Healthcare team, to do audits and to review the treatments of admitted people. Pharmacists' input in secure environments is being increasingly required in the UK given the complex care needs of the population and the issues of misuse of prescribed drugs.

➤ **MicroGuide**

The new Guernsey and Alderney antibacterial guidelines were added to an app in Spring 2020 by SOG pharmacists. The app was developed for use on mobile phones or tablet devices. Prescribers have said on several occasions how useful it is to have access to these complex guidelines via their personal devices on the wards.

➤ **Nutrition forum and dietetic proposal**

Prescribing of nutritional products has been a significant cost pressure, increasingly driven by the use of specialist baby milks. Guidelines, Scriptswitch and Prescribing Bulletins have been used for many years to manage cost increases. Costs have been kept under control at least as well as elsewhere by close working with the Dietetic team. But anecdotal reports that wastage was a big issue continued.

In late 2018 a Community Dietician was appointed and her expertise was in considerable demand in the Primary Care practices throughout 2020. As discussed previously there was a reduction of £53,000 in the cost of prescribing products for infants Cows' Milk Allergies compared with 2019. More savings were made in the increased use of better value products such as Aymes Shakes and Complan (or even full fat Guernsey milk with icecream) instead of more costly prescribed sip feeds.

Many areas in the UK continue to struggle with escalating costs of nutrition products, so seeing this benefit so quickly is encouraging.

➤ **Prescribing data for GP activity reports**

This was downloaded, collated and sent to Primary Care for use in doctors' appraisals in early 2020. It was encouraging to see improvements every year in the quality of antibiotic, opioid and hypnotic and anxiolytic prescribing in Primary Care. These are real benefits for the health of the community as a whole.

Island-wide, in 2020 there were 3,857 fewer prescriptions for opioids, 22,103 fewer prescriptions for antibacterials and 4,776 fewer prescriptions dispensed than in 2014, saving 30,743 dispensing fees. Despite the cost of these drugs being relatively low, considerable savings have been made. Their total costs island-wide fell from £835K plus fees in 2014 to £644K plus fees in 2020, details of which are as follows. The actual savings would have been £70K higher had the cost of generic antibacterials not increased so much.

Table 13 : Opioid Prescribing 2014 to 2020

Year	Opioid Items	Opioid NIC
2014	20,874	£350,472
2015	20,467	£351,368
2016	19,958	£351,450
2017	18,049	£305,411
2018	17,091	£286,829
2019	17,267	£267,529
2020	17,017	£248,601

Table 14: Antibacterial Prescribing 2014 to 2020

Year	Antibacterial Items	Antibacterial NIC
2012	66,435	£294,824
2013	60,733	£264,033
2014	59,386	£275,986
2015	56,765	£302,839
2016	55,969	£264,156
2017	53,689	£240,235
2018	53,472	£230,804
2019	51,535	£243,272
2020	44,332	£272,752

Table 15 : Hypnotic and Anxiolytic Prescribing 2014 to 2020

Year	Hypnotic and Anxiolytic Items	Hypnotic and Anxiolytic NIC
2014	29,976	£210,653
2015	29,563	£231,497
2016	28,852	£187,755
2017	28,294	£211,396
2018	27,059	£163,228

2019	25,280	£120,582
2020	25,200	£124,557

➤ Retirement of Chief Pharmacist

Ed Freestone, the Bailiwick's Chief Pharmacist, GPhC Pharmacy Inspector, HSC Assistant Director, and a founding member of the Prescribing Support Unit retired in December 2019 after 25 years' dedicated service to the Bailiwick. His wisdom, knowledge of the organisation, support and expert advice was greatly missed. Carolyn Zierer was Acting Chief Pharmacist during this very challenging year.

Fortunately Ed returned to help with the COVID-19 outbreak in March 2020. He led on several legal changes and extensively supported the Community Pharmacy service and the Hospital Pharmacy team at that time.

A new Chief Pharmacist was in the 4th quarter of 2020. Formerly a Pharmacist Specialist in Regulation at the Care Quality Commission, she also has extensive experience in the Ministry of Defence, Community Pharmacy, Hospital Pharmacy and Prison Pharmacy.

➤ High cost drugs

A Senior Pharmacy Technician was appointed in late 2018 to manage the transition of some very high costs drugs from community to hospital dispensing. This work realised large savings in 2020, as discussed previously.

Prescribing Support Unit Activities so far in 2021

➤ Brexit

The UK finally left the EU on January 31st 2021, having negotiated a last-minute agreement. The effects on drug supplies and transport to the islands were minimal. Processes in place to deal with stock shortages proved to be invaluable during the COVID-19 outbreak.

➤ NICE TAs

In January 2020 the States of Guernsey debated possible changes to drug funding policy. The gap between what drugs are available in the UK and those available in the Bailiwick was considered too wide to be acceptable. Deputies voted to fund all NICE TAs via a rolling programme. Deputies also voted to fund the implementation programme. Due to the COVID-19 outbreak, implementation began in November 2020. Since January 2019, approximately 82 new TAs have now been approved for use via the rolling programme and as "business as usual", and have been added to the Prescribing List or the Hospital Formulary. It is likely to be a major piece of work requiring significant improvements in hospital infrastructure in Bulstrode House and in Pharmacy and to processes, including electronic prescribing.

NICE announced a review of its processes, including TAs and Highly Specialised Technologies or HSTs, in July 2019. A target date of mid- 2021 was set for implementation of the new processes. In March 2020 in the light of the COVID-19 outbreak all the work of NICE, including the publication of most new TAs and all new national guidelines, was suspended indefinitely. A series of excellent COVID-19 rapid evidence summaries were produced and proved to be universally valued. Written by NICE MPP Medicines Implementation Consultants with input from clinical experts, they took seven to ten days to write and be published. TAs and NGs take twelve to eighteen months to produce. Simplification of the NICE outputs is highly likely in the future.

➤ **Health Benefit Transfer**

In May 2020 the States approved the transfer of responsibility for all health-related benefits, including pharmaceutical benefits, from CfESS to CfHSC. Senior pharmacy staff and others officers in both committees have been working closely together since the PSU was established in 1999. Merging budgets is a logical move which will in theory bring more clarity to the true costs of drugs to the Bailiwick taxpayer. There should be minimal if any changes to the day-to-day service given to our customers.

➤ **Prescribing data for GP activity reports**

This has been downloaded, collated and will be set to Primary Care shortly for use in doctors' appraisals. It was most encouraging to see further improvements in the quality of antibiotic, opioid and hypnotic and anxiolytic prescribing.

➤ **Priorities in 2021**

There are many uncertainties remaining about the health-related effects of the COVID-19 outbreak in Spring 2020 and the unexpected second wave in January 2021. These include the cost of managing this outbreak, whether or not a third wave occurs and its effects, whether or not the virus mutates, and if any drug treatment is approved. There are still many uncertainties about the financial implications of BREXIT.

However assuming that no third COVID-19 wave occurs, the following are the priorities for the rest of the year

- Reducing Polypharmacy and Deprescribing
- Implementing the Interface and Discharge Pharmacy Services
- Prescribing and dispensing audits
- Management of high cost drugs
- Refining the merge of primary and secondary care pharmacy services
- Implementation programme for NICE TAs
- Making NICE TA drugs available to patients

➤ **Future savings**

Reductions in the use of the products such as Fish Oils, Glucosamine, St John's Wort, Lidocaine Plasters, Opioid Analgesics, Antibiotics, Melatonin, Ezetimibe and ED drugs in the past will mean that costs in future years will be significantly lower than if this work had not been done. In the medium term there will be opportunities for savings from projects such as high cost drugs, specials, biosimilars, test strips, deprescribing and reducing polypharmacy, as well as reducing the use of drugs of concern and wastage.

Geraldine O'Riordan
Prescribing Advisor
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