Integrated Impact Assessment Report for Clinical Commissioning Policies

Policy Reference Number	D04X03		
Policy Title	Fampridine for multiple sclerosis (adults)		
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Section K - Activity Impact			
Theme	**Questions**	**Comments** (Include source of information and details of assumptions made and any issues with the data)	
K1 Current Patient Population & Demography / Growth	K 1.1 What is the prevalence of the disease/condition?	K1. 1 This policy proposes a **non-routine commissioning** position for fampridine for adults with multiple sclerosis. **Multiple sclerosis** (MS) is a neurological condition and has a prevalence of around 165 per 100,000 in England.[i] There may be around 90,000 people in England with MS.[ii] The MS Trust estimated in 2012 that there were 107,000 people with MS in the UK.[iii]	

	K1.2 What is the number of patients currently eligible for the treatment under the proposed policy?	K1.2 As there was insufficient evidence to support a routine commissioning position for fampridine, the number of patients eligible under the policy is provided as a point of reference.[iv] The **eligible population** refers to the number of patients suitable for treatment and is a subset of the prevalent population. To be suitable for fampridine patients must meet the following criteria:[v] • have an Expanded Disability Status Scale (EDSS) score between 4 and 7; and • require a second or third line therapy. Out of the c. 90,000 people in England with MS, around 57% of patients have an EDSS score 4-7.[vi] There may therefore be over c. 51,000 suitable based on disability.
	K1.3 What age group is the treatment indicated for?	K1.3 The treatment is indicated for adults (aged 18 and over).
	K1.4 Describe the age distribution of the patient population taking up treatment?	K1.4 MS generally appears in patients aged between 20 and 40, and is very uncommon during adolescence.[vii] Incidence of MS peaks between the ages of 40 and 50, with prevalence at its highest between the ages of 55 and 60.[viii]
	K1.5 What is the current activity associated with currently routinely commissioned care for this group?	K1.5 It is difficult to estimate the number of patients that currently receive fampridine for MS. Based on Pharmex data there may be c.35 patients that currently receive fampridine.[ix] [x] However, as this may include off-licence treatment for other indications such as LEMS,[xi] the

		current activity may therefore be less than 35.[xii] Apart from fampridine, there are currently no pharmacological therapies that aim to improve the walking speed for those with MS.[xiii] Patients that do not currently receive fampridine may be treated with disease modifying therapies such as beta interferons.[xiv] In terms of treatments that aim to improve balance and walking problems associated with MS, the following treatments include:[xv] • functional electrical stimulation (FES) • equipment and adaptions • exercise and physiotherapy
	K1.6 What is the projected growth of the disease/condition prevalence (prior to applying the new policy) in 2, 5, and 10 years?	K1.6 The prevalence of MS increased by roughly 2.4% per year between 1990 and 2010 in the UK; this was due to a decline in mortality rates in the population.[xvi] If this trend (of 2.4% p.a.) were to continue over time, the **number of people with MS** in England is estimated to be in the region of:[xvii] • ~94k in 2016/17 (year 1) • ~96k in 2017/18 (year 2) • ~103k in 2020/21 (year 5) If this trend (of 2.4% p.a.) were to continue over time, the **number of people in the eligible population** is estimated to be in the region of:[xviii] • ~53k in 2016/17 (year 1) • ~55k in 2017/18 (year 2) • ~59k in 2020/21 (year 5)

	K1.7 What is the associated projected growth in activity (prior to applying the new policy) in 2,5 and 10 years?	K1.7 In future, activity is estimated to remain similar to the current activity noted in K1.5 although it would grow in line with the target population.
	K1.8 How is the population currently distributed geographically?	K1.8 There is evidence that indicates a significant variation in the incidence and prevalence of MS between the regions in the UK; one study found significantly higher MS admissions in more northern regions of England after adjusting for other factors.[xix]
K2 Future Patient Population & Demography	K2.1 Does the new policy: move to a non-routine commissioning position / substitute a currently routinely commissioned treatment / expand or restrict an existing treatment threshold / add an additional line / stage of treatment / other?	K2.1 This policy proposes a **non-routine commissioning position** for fampridine for MS.

	K2.2 Please describe any factors likely to affect growth in the patient population for this intervention (e.g. increased disease prevalence, increased survival).	K2.2 No single exposure has been identified as causing MS; however, a number of potential causal factors have been suggested including:[xx] • infection • immunisations • physical and emotional stressors • climate • diet • occupational exposures The impact that these factors have on growth are unknown.
	K 2.3 Are there likely to be changes in geography/demography of the patient population and would this impact on activity/outcomes? If yes, provide details.	K2.3 No evidence of changes.
	K2.4 What is the resulting expected net increase or decrease in the number of patients who will access the treatment per year in year 2, 5 and 10?	K2.4 The proposed policy establishes a 'not routinely commissioned' position for the relevant population (the specific cohort set out in K1.2). The number of patients who fall outside of the cohort covered by the proposed policy, or for whom exceptionality might be demonstrated, is likely to be very small. As the number of patients currently estimated to be on the treatment could not be confirmed, there is expected to be no net change in the number of patients accessing the treatment under the policy as compared to the 'do nothing' scenario.

K3 Activity	K3.1 What is the current annual activity for the target population covered under the new policy? Please provide details in accompanying excel sheet.	K3.1 Current annual activity is identified in K1.5.
	K3.2 What will be the new activity should the new / revised policy be implemented in the target population? Please provide details in accompanying excel sheet.	K3.2 As the policy is to not routinely commission, the activity under the policy would be similar to the 'do nothing' scenario as described in K1.7.
	K3.3 What will be the comparative activity for the 'Next Best Alternative' or 'Do Nothing' comparator if policy is not adopted? Please details in accompanying excel sheet.	K3.3 The activity in the 'do nothing' scenario is as described in K1.7
K4 Existing Patient Pathway	K4.1 If there is a relevant currently routinely commissioned treatment, what is the current patient pathway? Describe or include a figure to outline associated activity.	K4.1 NHS England commissions disease modifying drugs (beta interferon, glatiramer acetate, natalizumab and fingolimod) for MS. Beta interferon and glatiramer acetate are first line treatment options for patients with a walking disability due to multiple sclerosis. Patients must be under the care of a designated MS centre which is registered to take part in the national risk share scheme involving these drugs *[Policy for disease modifying therapies for patients with MS D04/P/b].* The pathway could also include non-drug therapies as set out in K1.5.
	K4.2. What are the current treatment access criteria?	K4.2 For beta interferon treatment, all of the following criteria must be met. The patient: - has had at least 2 clinically significant relapses in previous 2 years (neurologists may, in certain other circumstances where the evidence for efficacy is less secure, also consider advising treatment after

		discussion with the patient concerning the risks and benefits) - is able to walk 10m or more (for patients who can walk between 10 and 99 m (aided or unaided, EDSS 6.0 to 6.5), treatment with DMTs is permitted bur recommended less strongly than for patients able to walk more than 100m unaided (EDSS 5.5 or less)) - is not pregnant or attempting conception - is aged over 18 years - has no contra-indications *[Policy for disease modifying therapies for patients with MS D04/P/b]*
	K4.3 What are the current treatment stopping points?	K4.3 Treatment should be stopped if one or more of the following criteria are met: - No reduction in frequency or severity of relapses compared with pre-treatment phase following a minimum 6 month period of beta interferon treatment, unless the frequency and/or severity of relapses necessitates an earlier change of therapy (e.g. natalizumab) - Intolerable adverse effects of the drug - The patient is pregnant, breast feeding or attempting conception - Development of inability to walk, persistent for more than 6 months, unless unable to walk for reasons other than MS. - Confirmed secondary progressive disease with an observable increase in disability over a 6 month period (see beta interferon secondary progressive criteria for definitions) - Stopping criteria should be made known to patients and agreed before treatment is begun. [*Policy for disease modifying therapies for patients with MS D04/P/b]*
K5 Comparator (next best alternative treatment) Patient Pathway	K5.1 If there is a 'next best' alternative routinely commissioned treatment what is the current patient pathway? Describe	K5.1 and K5.2 There is no direct routinely commissioned comparator. See K4 for current patient pathway and stopping points.

	or include a figure to outline associated activity. K5.2 Where there are different stopping points on the pathway please indicate how many patients out of the number starting the pathway would be expected to finish at each point (e.g. expected number dropping out due to side effects of drug, or number who don't continue to treatment after having test to determine likely success). If possible please indicate likely outcome for patient at each stopping point.	
K6 New Patient Pathway	K6.1 Describe or include a figure to outline associated activity with the patient pathway for the proposed new policy. K6.2 Where there are different stopping points on the pathway please indicate how many patients out of the number starting the pathway would be expected to finish at each point (e.g. expected number dropping out due to side effects of drug, or number who don't continue to treatment after having test to determine likely success). If possible please indicate likely outcome for patient at each stopping point.	K6.1 Not applicable – no change to patient pathway proposed. K6.2 Not applicable – no change to patient pathway proposed.

K7 Treatment Setting	K7.1 How is this treatment delivered to the patient? ○ Acute Trust: Inpatient/Daycase/ Outpatient ○ Mental Health Provider: Inpatient/Outpatient ○ Community setting ○ Homecare delivery	K7.1 Fampridine would be provided via homecare delivery.
	K7.2 Is there likely to be a change in delivery setting or capacity requirements, if so what? *e.g. service capacity*	K7.2 No
K8 Coding	K8.1 In which datasets (e.g. SUS/central data collections etc.) will activity related to the new patient pathway be recorded?	K8.1 As fampridine is a high cost drug, activity may be recorded in the high cost drug dataset.
	K8.2 How will this activity related to the new patient pathway be identified?(e.g. ICD10 codes/procedure codes)	K8.2 Not applicable.
K9 Monitoring	K9.1 Do any new or revised requirements need to be included in the NHS Standard Contract Information Schedule?	K9.1 – K9.7 Not applicable.

	K9.2 If this treatment is a drug, what pharmacy monitoring is required?	
	K9.3 What analytical information /monitoring/ reporting is required?	
	K9.4 What contract monitoring is required by supplier managers? What changes need to be in place?	
	K9.5 Is there inked information required to complete quality dashboards and if so is it being incorporated into routine performance monitoring?	
	K9.6 Are there any directly applicable NICE quality standards that need to be monitored in association with the new policy?	
	K9.7 Do you anticipate using Blueteq or other equivalent system to guide access to treatment? If so, please outline. *See also linked question in M1 below*	
Section L - Service Impact		

Theme	**Questions**	**Comments** (Include source of information and details of assumptions made and any issues with the data)
L1 Service Organisation	L1.1 How is this service currently organised? (i.e. tertiary centres, networked provision)	L1.1 Prescribed centres.
	L1.2 How will the proposed policy change the way the commissioned service is organised?	L1.2 No change.
L2 Geography & Access	L2.1 Where do current referrals come from?	L2.1 Patients must be under the care of a designated multiple sclerosis centre [D04/P/b].
	L2.2 Will the new policy change / restrict / expand the sources of referral?	L2.2 No
	L2.3 Is the new policy likely to improve equity of access?	L2.3 – L2.4 Yes, through a consistent commissioning position across the country.
	L2.4 Is the new policy likely to improve equality of access / outcomes?	
L3 Implementation	L3.1 Is there a lead in time required prior to implementation and if so when could implementation be achieved if the policy is agreed?	L3.1 No

	L3.2 Is there a change in provider physical infrastructure required?	L3.2 No change required.
	L3.3 Is there a change in provider staffing required?	L3.3 No new requirements.
	L3.4 Are there new clinical dependency / adjacency requirements that would need to be in place?	L3.4 No change required.
	L3.5 Are there changes in the support services that need to be in place?	L3.5 No change required.
	L3.6 Is there a change in provider / inter-provider governance required? (e.g. ODN arrangements / prime contractor)	L3.6 No change required.
	L3.7 Is there likely to be either an increase or decrease in the number of commissioned providers?	L3.7 No change in the number of providers anticipated.
	L3.8 How will the revised provision be secured by NHS England as the responsible commissioner? (e.g.	L3.8 Not applicable.

	publication and notification of new policy, competitive selection process to secure revised provider configuration)	
L4 Collaborative Commissioning	L4.1 Is this service currently subject to or planned for collaborative commissioning arrangements? (e.g. future CCG lead, devolved commissioning arrangements)	L4.1 Not applicable.
Section M - Finance Impact		
Theme	**Questions**	**Comments** (Include source of information and details of assumptions made and any issues with the data)
M1 Tariff	M1.1 Is this treatment paid under a national prices*, and if so which?	M1.1 Fampridine is listed as a high cost drug and would therefore not be paid under a national tariff.
	M1.2 Is this treatment excluded from national prices?	M1.2 The drug is excluded from national tariff.
	M1.3 Is this covered under a local price arrangements (if so state range), and if so are you confident that the costs are not also attributable to other clinical services?	M1.3 As a high cost drug, fampridine may be subject to local price negotiations. Fampridine is sold in 10mg modified-release tablet form and the price as listed on the dictionary of medicines is: - £181 - 28 x 10mg tablets (excluding VAT)[xxi] - £362 - 56 x 10mg tablets (excluding VAT)[xxii] The estimated cost per patient per year is set out in M2.1.

	M1.4 If a new price has been proposed how has this been derived / tested? How will we ensure that associated activity is not additionally / double charged through existing routes?	M1.4 Not applicable.
	M1.5 is VAT payable (Y/N) and if so has it been included in the costings?	M1.5 VAT could be recoverable as the drug is for delivery via a homecare arrangement, and therefore has not been included in the costs below.[xxiii]
	M1.6 Do you envisage a prior approval / funding authorisation being required to support implementation of the new policy?	M1.6 No.
M2 Average Cost per Patient	M2.1 What is the revenue cost per patient in year 1?	M2.1 The revenue cost per patient per year would be zero under a non-routine commissioning policy. As a point of reference, the revenue cost per patient per year is estimated to be c. £4,660. This assumes that a patient consumes two tablets per day.[xxiv]
	M2.2 What is the revenue cost per patient in future years (including follow up)?	M2.2 The revenue cost per patient is not anticipated to change with a non-routinely commissioned policy. For reference, the patent for fampridine is set to expire in 2021.[xxv] Following the expiration of the patent, the price for fampridine may

		change.
M3 Overall Cost Impact of this Policy to NHS England	M3.1 Indicate whether this is cost saving, neutral, or cost pressure to NHS England.	M3.1 Cost neutral. Fampridine is currently not routinely commissioned, and the policy will not change this position.
	M3.2 Where this has not been identified, set out the reasons why this cannot be measured.	M3.2 Not applicable.
M4 Overall cost impact of this policy to the NHS as a whole	M4.1 Indicate whether this is cost saving, neutral, or cost pressure for other parts of the NHS (e.g. providers, CCGs).	M4.1 Cost neutral.
	M4.2 Indicate whether this is cost saving, neutral, or cost pressure to the NHS as a whole.	M4.2 Cost neutral.
	M4.3 Where this has not been identified, set out the reasons why this cannot be measured.	M4.3 Not applicable.
	M4.4 Are there likely to be any costs or savings for non NHS commissioners / public sector funders?	M4.4 None identified.

M5 Funding	M5.1 Where a cost pressure is indicated, state known source of funds for investment, where identified. *e.g. decommissioning less clinically or cost-effective services*	M5.1 Not applicable.
M6 Financial Risks Associated with Implementing this Policy	M6.1 What are the material financial risks to implementing this policy?	M6.1 Not applicable.
	M6.2 Can these be mitigated, if so how?	M6.2 Not applicable.
	M6.3 What scenarios (differential assumptions) have been explicitly tested to generate best case, worst case and most likely total cost scenarios?	M6.3 Not applicable.
M7 Value for Money	M7.1 What evidence is available that the treatment is cost effective? *e.g. NICE appraisal, clinical trials or peer reviewed literature*	M7.1 The original cost–utility analysis undertaken for the NICE guidance on Multiple Sclerosis (2014) found that fampridine was not cost effective compared to placebo for treating mobility problems in people with MS who have had been categorised as responders to fampridine treatment following a four week trial. QALYs were estimated by mapping MSWS-12 data from the clinical review to EQ-5D utility (health-related quality of life). Fampridine costed £160,884 per QALY gained compared to placebo. In addition it was noted that fampridine would likely to be even less cost effective taking into consideration the need to establish the subgroup that responds to treatment as that would mean including additional costs for the initial assessment and treatment for up to four weeks without additional patient benefits. Currently the manufacturer covers the drug costs of this trial but there will still likely be costs in terms of healthcare professional time.

	M7.2 What issues or risks are associated with this assessment? *e.g. quality or availability of evidence*	M7.2 No further cost effectiveness studies including those on specific subgroups were identified in the current review.
M8 Cost Profile	M8.1 Are there non-recurrent capital or revenue costs associated with this policy? *e.g. Transitional costs, periodical costs*	M8.1 None identified.
	M8.2 If so, confirm the source of funds to meet these costs.	M8.2 Not applicable.

[i] MS Trust, (2016). Prevalence and incidence of multiple sclerosis. [online] Available at: https://www.mstrust.org.uk/a-z/prevalence-and-incidence-multiple-sclerosis [Accessed 7 Jan. 2016].

[ii] This applies the prevalence rate for MS in England to that of the England population in 2014. ONS (2012) population projections.

[iii] Based on figures excluding cases where there was a doubt surrounding diagnosis. MS Trust, (2016). Prevalence and incidence of multiple sclerosis. [online] Available at: https://www.mstrust.org.uk/a-z/prevalence-and-incidence-multiple-sclerosis [Accessed 7 Jan. 2016].

[iv] Please refer to the policy proposition and clinical evidence review for further information.

[v] Based on discussions with the policy working group.

[vi] NHS Regional Drug & Therapeutics Centre (Newcastle). (2012) Fampridine (Fampyra®) in multiple sclerosis. [online] Available at http://www.netag.nhs.uk/files/appraisal-reports/Fampridine%20in%20MS%20-%20NETAG%20appraisal%20report%20-Mar2012.pdf [Accessed 7 Jan. 2016].

[vii] Amador-Patarroyo, M., Rodriguez-Rodriguez, A. and Montoya-Ortiz, G. (2012). How Does Age at Onset Influence the Outcome of Autoimmune Diseases?. Autoimmune Diseases, 2012, pp.1-7.

[viii] Mackenzie, I., Morant, S., Bloomfield, G., MacDonald, T. and O'Riordan, J. (2013). Incidence and prevalence of multiple sclerosis in the UK 1990-2010: a descriptive study in the General Practice Research Database. Journal of Neurology, Neurosurgery & Psychiatry, 85(1), pp.76-84.

[ix] Pharmex data relates to the purchasing volumes by NHS providers, with the data covering approximately 95% of trusts. This may understate the true activity.

[x] This assumes that each patient consumes two tablets per day and there is no wastage.

[xi] Lambert Eaton myasthenic syndrome.

[xii] Fampridine (Fampyra) was included within a report as a potential comparator treatment for LEMS. NHS North East Treatment Advisory Group. Amifampridine phosphate (Firdapse®) for the symptomatic treatment of Lambert-Eaton Myasthenic Syndrome (LEMS). [Online] available at: http://www.netag.nhs.uk/files/appraisal-reports/Firdapse%20-%20NETAG%20appraisal%20report%20-%20Nov%202011%20-WEB%20VERSION.pdf [Accessed 25. Jan 2016].

[xiii] Mssociety.org.uk, (2016). Treatments for balance and walking problems | Multiple Sclerosis Society UK. [online] Available at: https://www.mssociety.org.uk/what-is-ms/signs-and-symptoms/balance-and-dizziness/coping-with-balance-problems [Accessed 7 Jan. 2016].

[xiv] Based on discussions with the policy working group.

[xv] As listed by the MS society.

[xvi] Mackenzie, I., Morant, S., Bloomfield, G., MacDonald, T. and O'Riordan, J. (2013). Incidence and prevalence of multiple sclerosis in the UK 1990-2010: a descriptive study in the General Practice Research Database. *Journal of Neurology, Neurosurgery & Psychiatry*, 85(1), pp.76-84.

[xvii] After applying the stated per annum growth rate to the figures set out in K1.1. Based on ONS (2012) population estimates, for England, prevalence rates, Mackenzie et. al. (2013), and discussions with the policy working group.

[xviii] After applying the stated growth rate to prevalence and using the assumption set out in K1.2 that the target population could be 57% of this figure.

[xix] Mackenzie, I., Morant, S., Bloomfield, G., MacDonald, T. and O'Riordan, J. (2013). Incidence and prevalence of multiple sclerosis in the UK 1990-2010: a descriptive study in the General Practice Research Database. *Journal of Neurology, Neurosurgery & Psychiatry*, 85(1), pp.76-84.

[xx] Marrie., R. (2004). Environmental risk factors in multiple sclerosis aetiology. Lancet Neurol 2004; 3: 709–18. [Online] available at: http://www.direct-ms.org/sites/default/files/MarrieRiskFactors.pdf [Accessed 7 Jan. 2016].

[xxi] Dmd.medicines.org.uk, (2016). Dictionary of Medicines and Devices Browser Portal. [online] Available at: http://dmd.medicines.org.uk/DesktopDefault.aspx?AMPP=22106111000001106&toc=nofloat [Accessed 7 Jan. 2016].

[xxii] Dmd.medicines.org.uk, (2016). Dictionary of Medicines and Devices Browser Portal. [online] Available at: http://dmd.medicines.org.uk/DesktopDefault.aspx?AMPP=22106211000001100&toc=nofloat [Accessed 7 Jan. 2016].

[xxiii] Based on discussions with NHS pharmacists and finance leads. Section 3.2, When can goods being provided on prescription be zero-rated for VAT purposes? https://www.gov.uk/government/publications/vat-notice-70157-health-professionals-and-pharmaceutical-products/vat-notice-70157-health-professionals-and-pharmaceutical-products. [Accessed 16/12/11].

[xxiv] MS Trust, (2016). Fampridine. [online] Available at: https://www.mstrust.org.uk/a-z/fampridine-fampyra [Accessed 7 Jan. 2016].

[xxv] 10 year market exclusivity set by European Commission to expire in 2021. Ir.acorda.com, (2016). Acorda Therapeutics Inc - Acorda Therapeutics Announces European Patent Office Upholds Fampridine (FAMPYRA®) Patent. [online] Available at: http://ir.acorda.com/investors/investor-news/investor-news-details/2013/Acorda-Therapeutics-Announces-European-Patent-Office-Upholds-Fampridine-FAMPYRA-Patent/default.aspx [Accessed 7 Jan. 2016].