

A Geographical Review of Multiple Sclerosis (MS) Patients who Access the Birmingham Functional Electrical Stimulation (FES) Service

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Introduction

MS is an autoimmune disease of the central nervous system that can lead to physical disability and decreased quality of life (1). FES is an assistive technology that can be used in the treatment of MS patients by stimulating muscles to help improve function (2). The NHS Long Term Plan and Integrated Care Systems (ICS) are prioritising healthcare inequalities, by improving access for all and outcomes for long term health conditions (3, 4). The rationale behind this poster was to establish a baseline of access to the Birmingham Community Healthcare (BCHC) FES Service for People with Multiple Sclerosis (PWMS), analysing our ICS coverage and establishing any inequalities. This active MS caseload snapshot was taken from our database in August 2022, n=863.

ICS' with BCHC FES Patients with MS.
LD or MD: ICS' that contain neighbourhoods in the top 20 in England for least deprived (LD) or most deprived (MD)

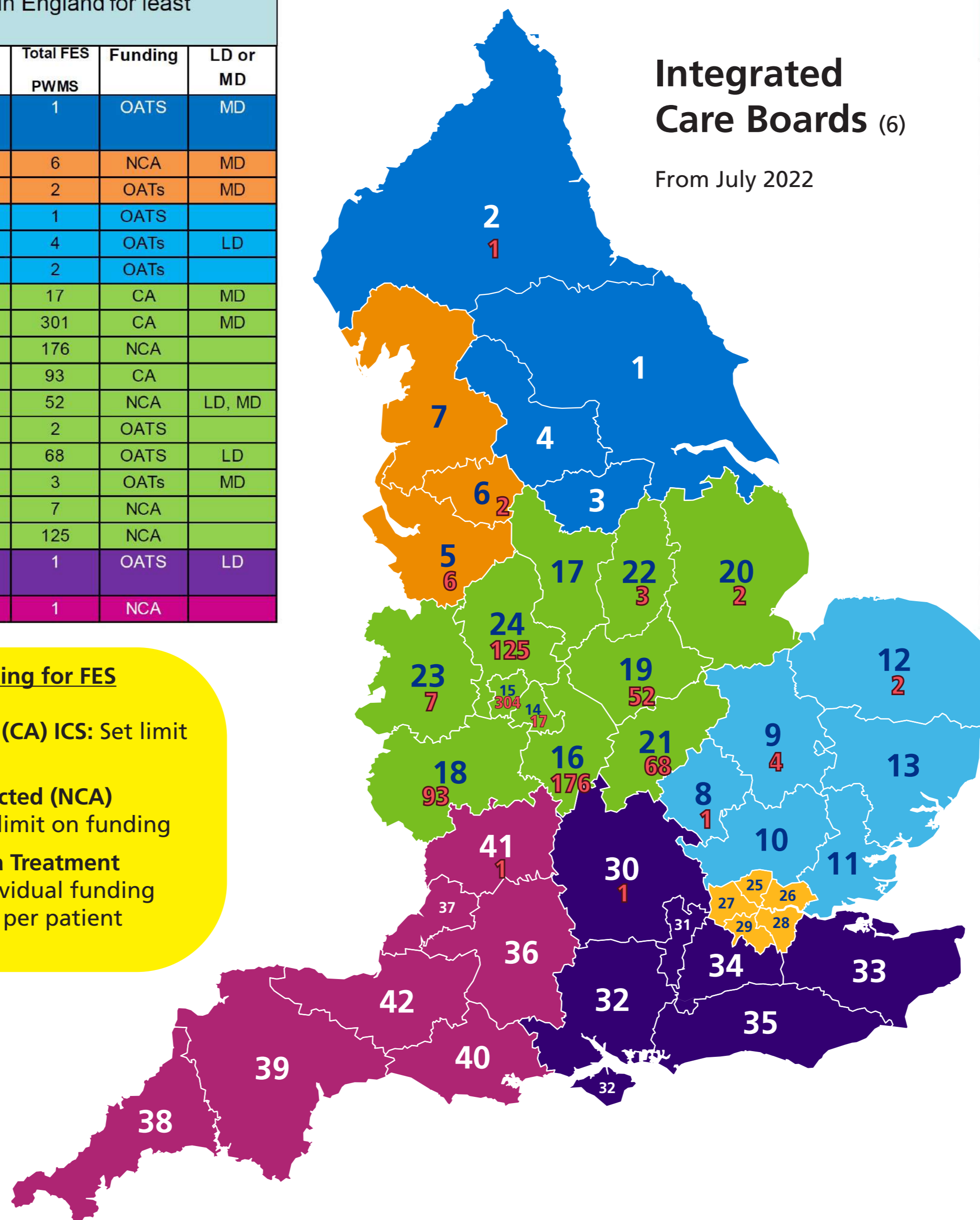
Region	Map Number	ICS	Total FES PWMS	Funding	LD or MD
North East & Yorkshire	2	NHS North East & North Cumbria	1	OATS	MD
North West	5	NHS Cheshire & Merseyside	6	NCA	MD
	6	NHS Greater Manchester	2	OATs	MD
East of England	8	NHS Bedfordshire, Luton & Milton Keynes	1	OATS	
	9	NHS Cambridgeshire & Peterborough	4	OATs	LD
	12	NHS Norfolk & Waveney	2	OATs	
Midlands	14	NHS Birmingham & Solihull	17	CA	MD
	15	NHS Black Country	301	CA	MD
	16	NHS Coventry & Warwickshire	176	NCA	
	18	NHS Herefordshire & Worcestershire	93	CA	
	19	NHS Leicester, Leicestershire & Rutland	52	NCA	LD, MD
	20	NHS Lincolnshire	2	OATS	
	21	NHS Northamptonshire	68	OATS	LD
	22	NHS Nottingham & Nottinghamshire	3	OATs	MD
	23	NHS Shropshire, Telford & Wrekin	7	NCA	
	24	NHS Staffordshire & Stoke-on-Trent	125	NCA	
South East	30	NHS Buckinghamshire, Oxfordshire & Berkshire West	1	OATS	LD
South West	41	NHS Gloucestershire	1	NCA	

ICS' without BCHC FES Patients with MS.
LD or MD: ICS' that contain neighbourhoods in the top 20 in England for least deprived (LD) or most deprived (MD)

Region	Map No.	ICS	LD or MD
North East & Yorkshire	1	NHS Humber & North Yorkshire	MD
	3	NHS South Yorkshire	
	4	West Yorkshire	
North West	7	NHS Lancashire & South Cumbria	LD, MD
East of England	10	NHS Hertfordshire & West Essex	LD
	11	NHS Mid & South Essex	
	13	NHS Suffolk & North East Essex	
Midlands	17	NHS Derby & Derbyshire	
London	25	NHS North Central London	
	26	North East London	MD
	27	North West London	
	28	NHS South East London	
	29	NHS South West London	
South East	31	NHS Frimley	LD
	32	NHS Hampshire & Isle of Wight	LD
	33	NHS Kent & Medway	
	34	NHS Surrey Heartlands	LD
	35	NHS Sussex	LD, MD
South West	36	NHS Bath & North East Somerset, Swindon & Wiltshire	
	37	NHS Bristol, North Somerset & South Gloucestershire	
	38	NHS Cornwall & The Isles of Scilly	
	39	NHS Devon	
	40	NHS Dorset	
	42	NHS Somerset	

Integrated Care Boards (6)

From July 2022



Key:

Red number is the number of BCHC FES patients with MS in that ICS

Distance Travelled to Access FES

One-way journey:
>20 miles: 457 / 863pts
>100 miles: 7 / 863 pts
>150 miles: 3 / 863 pts

Greatest distance travelled:
170 miles

Funding for FES

Contracted (CA) ICS: Set limit on funding

Non-contracted (NCA) ICS: No set limit on funding

Out of Area Treatment (OATs): Individual funding application per patient

Return Journey in Miles	Cost of Driving to First Year of Appointments	Cost of a taxi to First Year of Appointments
10	£14.86	£91.60
20	£29.72	£184
40	£59.44	£352
200	£297.24	£1,696
300	£445.85	£2,536

Discussion and Conclusion

ICS: We have PWMS in 18 ICS' across England. Derbyshire is the only Midlands ICS that has none of our MS patients but Florence Nightingale Hospital, Derby, has a FES service for gait. Ipswich and East Suffolk do not fund FES. Some of our patients have elected to remain under our care when they have moved, dependent on funding.

Distance: Access to our service is limited by funding, distance that patients can travel, availability of local services and referrer knowledge of our service. Patients attend an average of 4 FES appointments in the first year, followed by annual appointments if there are no concerns. Half of our patients with MS travel more than 20 miles to our clinic and as the cost of living rises, this may become too expensive. We already have more requests for non face to face reviews and cancellations due to cost of transport. Non face to face can reduce travel but machine maintenance and a physical review cannot be performed. Travelling long distances can be difficult for patients with MS due to fatigue and physical disability. Some patients do not have access to a local ambulance service.

Funding: 50% of our ICS' require a funding application per patient but account for only 10% of our MS caseload. These ICS' tend to be further away and funding is not always agreed, something which could increase as financial pressures rise. 33% of ICS' are non-contracted and account for 42% of our MS caseload. 17% of ICS' are contracted and account for 48% of our MS case load.

Deprivation: Current legislation is focusing on 'levelling up'. We treat PWMS in 13 of the top 20 most deprived neighbourhoods in England and 10 of the least deprived (5). Leicestershire is the only ICS that contains our MS patients that has neighbourhoods from the least and most deprived top 20.

A repeat snapshot of our MS caseload will be required to assess the effects of the financial climate and more research is required on the neighbourhoods within our ICS', not just the top 20, to determine if there is deprivation inequality for access to our service and to give time for ICS' to embed.

References

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