Injectable methadone and diamorphine in the North West of England

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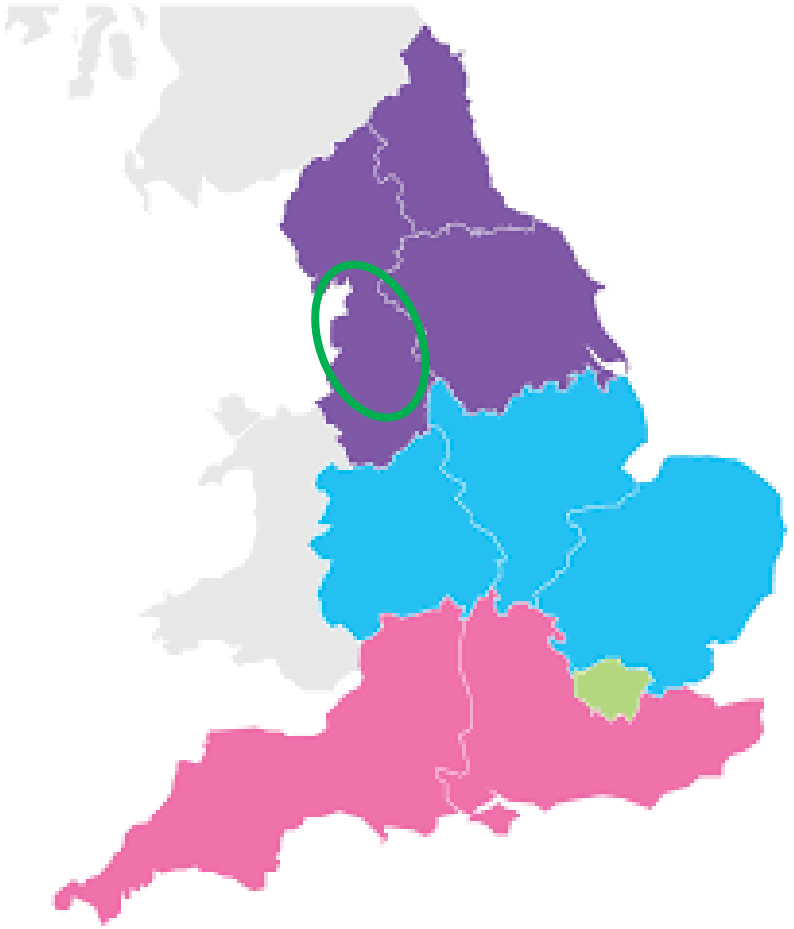
- Injectable opiate prescribing in England from early 20thC
- Diamorphine licensed; methadone “unregulated”
- Variable clinical opinion and access to injectable opiate prescribing
- Minority option
- Unsupervised consumption
- DH guidelines 1999 cautious and recommend increased restriction, regulation and evidence

Kenyon House out-patient service

- “Treatment and Rehabilitation”, ACMD 1982
- Multi-disciplinary regional drug problem team
- 1982 – 1990 development of services in the region
- 1990 local teams in each district; focus of regional services on “treatment resistance”



Regional tertiary out-patient service

- Referral from district community drug teams for multidisciplinary assessment
- Mental and physical health co-morbidity / persistent injecting
- Injectable opiate prescribing
- Tolerance testing on site (later)
- Follow up appointment weekly – two monthly
- Medication collection community pharmacy
- Liaison with other treatment services – infectious diseases, hepatology, mental health services
- Ongoing support local community drug team

2 studies of the clinic population

- Study 1 gathered data 1997 – 1998

  Louise Sell, Graham Segar, John Merrill

- Study 2 gathered data 2000

  Louise Sell, Deborah Zador

Study 1 demographics (n=125)

- 83% 103 male 18% 22 female
- Age mean 36y (21 – 49)
- White 99% (119/121)
- Living with partner 40% (48/121); living alone, in relationship 15% (18/121); single 46% (55/121)
- Sickness benefit 70% (85/121); unemployed 22% (27/121); employed 5% (6/121)

Opiate use history

- Opiate use 16.5 y (4 – 30)
- Injected 19y (11 – 35)
- Used heroin 19.3y (13 – 35)
- Injected heroin 20.7y (13 – 35)

- First drug injected;
  - heroin 38% (46/121)
  - amphetamine 37.2% (46/121)

Entry to opiate substitution treatment

• Oral methadone	25y	(16 – 43) n = 117
• Injectable methadone	29.5y	(16 – 44) n = 109
• Injectable diamorphine	28.5y	(17 – 43) n = 33
• Current treatment episode	3.5 y	(3 months – 14 yrs)

Prescription Variation – 11 opioid combinations

Injectable methadone 85.6% (107/125)			**Injectable diamorphine 12.8% (16/125)**		
88mg (20 – 200)			216mg (20 – 480)		
iv 84.1% (93/107)	im 12.1% (13/107)	sc 0.9% (1/107)	iv 75% (12/16)	im 18.8% (3/16)	sc 6.3% (1/16)
Additional medication;					
nil 30			nil 4		
55 oral methadone 42mg (10 - 135)			5 oral methadone 75mg (50 – 90)		
10 meth tablets 40mg (10 – 80);			2 methadone tablets		
2 cyclimorph ampoules			5 methadone ampoules 69mg (35 - 110) 1 morphine sulphate ampoules;		
27 benzodiazepines; 6 anti-depressants			3 benzodiazepines		

Reported drug use

Drug	Less than weekly	More than weekly	Daily
cannabis	3	6	41
heroin	9	16	4
benzodiazepine	5	7	15
amphetamine	7	11	0
crack	11	1	0
cocaine	1	0	0
cyclizine	3	10	0
smoking			109 / 121 (89.5%)
alcohol			49 / 121 (40.5%)

Continued risk behaviour

Study 1

- Intravenous injecting
  - Groin 40.5% (49/121)
  - Arm 27.5% (33 / 121)
  - Leg 21.5% (26 / 121)
  - Hand 21.5% (26/121)

Study 2

- Injectable methadone iv
- Injectable methadone femoral veins
- Injectable diamorphine hand veins

Study 2 – Injecting frequency

	Methadone	Diamorphine	total
Less than daily	3	0	3
Once daily	37	7	44
Twice daily	32	9	41
Three times daily	3	8	11
more	1	2	3
No response	2	0	2

Reason for request and good things about current treatment

	Reason for request for prescription	Good things about current treatment
To help family relationship	77 (74%)	84 (80.8%)
To avoid trouble with police	77 (74%)	78 (75.2%)
Drug supply known dose/purity	77 (74%)	78 (75.2%)
To improve my health	73 (70.2%)	72 (69.2%)
To be able to inject an opiate legally	66 (63.5%)	74 (71.2%)
To save money	64 (61.5%)	70 (67.3%)
To have a regular supply of drugs	58 (55.8%)	69 (66.3%)
To stop using drugs altogether	21 (20.2%)	57 (54.8%)
To wean myself off injecting	19 (18.3%)	20 (19.2%)
For the buzz	16 (15.4%)	8 (7.7%)
other	24 (23.1%)	13 (12.5%)

Bad things about current treatment

Dose too low	46 (44.2%)
Not prescribed desired drug *	28 (26.9%)
Did not like drug effect	12 (11.5%)
Drug effect does not last long enough	3 (2.9%)
Pharmacy pick up too frequent	26 (25%)
Having to attend clinic	12 (12.5%)
Health problems	11 (10.6%)
Hard to get drug free	24 (23.1%)

Opinions about prescription options

Advantages of diamorphine		Advantages of injectable methadone	
Easier to inject	21 (20.2%)	It lasts longer	32 (30.8%)
Just like heroin	16 (15.4%)	Fewer daily injections	10 (9.6%)
No unpleasant side effects	11 (10.6%)	Better pharmaceutical product	4 (3.8%)
Better pharmaceutical product	11 (10.6%)	More stability	4 (3.8%)
Less addictive	7 (6.7%)		
Stops illicit trade	5 (4.8%)		
Makes me normal	5 (4.8%)		
I would stay off street heroin	5 (4.8%)		
Better for physical health	4 (3.8%)	No advantages	19 (18.3%)
Easier coping with withdrawal	3 (2.9%)	No difference	3 (2.9%)
No response	35 (33.0%)	No response	38 (37.7%)

Level of satisfaction

	n = 104
Satisfied	52 (50.0%)
Neither satisfied nor unsatisfied	36 (34.6%)
Unsatisfied	12 (11.5%)
No response	4 (3.9%)

Desired change

Now	In 1 year	In 5 years
62 (59.6%)	63 (60.6%)	67 (64.4%)
Diamorphine		
Increase in dose (87.5% n=8)	Increase in dose (62.5% n=8)	Decrease in dose (30.8% n=13) Rehabilitation (30.8% n=13) Increase in dose (23.1% n=8)
Injectable methadone		
Transfer to diamorphine (61.1% n=54) Dose increase (27.7% n=54)	Transfer to diamorphine (47.2% n=55) Dose increase (21.8% n=55)	Transfer to diamorphine (27.7% n = 54) Detoxification (25.9% n = 54)

Conclusion

- Sub-set of patients in OST in North West England in 1990s
- Service developed with Harm Reduction philosophy
- Continued injecting
- Continued, moderated illicit drug use
- “Stability” important to patients and clinicians

…….. Change very slow