

Table 2a: Data from Lothian University's Hospital Division of NHS Lothian of 13,500 staff - 2003

Data relates to the period 01/01/03 - 31/12/03. Service staffed by 4 FTE physios.

The service was started in 1997.

Costs of providing the service 2003

MSD case management	Low	Medium	High	Notes
Line management costs				
Number of staff seen	762	762	762	189 of these were absent; 573 not absent
Number of hours per case	0.5	1	2	
Cost per hour	22.93	22.93	22.93	Assume Manager's salary = £29,100
Total (£)	8,735.29	17,470.58	34,941.16	
Service provision costs (staff salaries)				
Total (£)	145,500.00	145,500.00	145,500.00	Service maintenance; not set up costs
Attendance of MSD sufferers during work time				
Number not absent	573	573	573	
Number of sessions	2	4	6	Varied from 2 - 6 depending on individual need.
Time per session (hours)	0.75	0.75	0.75	30 minutes contact + travel time
Cost per hour	13.70	13.70	13.70	Average D grade Nurse's salary = £17,394
Total (£)	11,775.15	23,550.30	35,325.45	
Costs of providing the service (£)	166,010.44	186,520.88	215,766.61	

Benefits of providing the service 2003

Preventing absence

	Low	Medium	High	
Number of staff able to continue in their work	176	176	176	573 (not absent)*31% said it prevented absence†
Estimated no days absence prevented/ person	1.00	10.00	20.5	20.5 = HSE figure for average MSD related absence
Costs per day	102.78	102.78	102.78	Average D grade Nurse's salary = £17,394
Total (£)	18,089.76	180,897.60	370,840.08	

Management time saved due to avoiding absence (project cost to manage staff replacement / investigate incident for those absent)

	Low	Medium	High	
Number of replacement staff	176	176	176	573 (no. not absent)*31% said it prevented absence ²
Number of hours	1.0	2.0	5.0	
Cost per hour	22.93	22.93	22.93	Assume Manager's salary = £29,100
Total (£)	4,035.20	8,070.40	20,176.00	

Speedier return to work

	Low	Medium	High	
No of staff returned to work 'earlier'	n/a	n/a	n/a	
No of days returned earlier	1,550.00	1,550.00	1,550.00	310 weeks phased RTW (average 1.6 per absence)
Productivity rate	0.50	0.75	1.00	
Costs per day	102.78	102.78	102.78	Average D grade Nurse's salary = £17,394
Total (£)	79,656.61	119,484.92	159,313.23	

Improved productivity / work without restrictions

	Low	Medium	High	
No staff whose treated MSD doesn't limit work	345	345	345	60.2% of those not absent (573)†
No of hours saved due to full productivity	3	6	9	
Costs per hour	13.70	13.70	13.70	
Total (£)	14,184.02	28,368.03	42,552.05	

Prevention of repeated absence

	Low	Medium	High	
No of staff prevented from repeat absence	232	232	232	39% of group (762) previously had; reduced to 9%†
No of days saved per person	1.00	10.00	20.5	
Costs per day	102.78	102.78	102.78	Average D grade Nurse's salary = £17,394
Total (£)	23,845.59	238,455.93	488,834.65	

Total benefit of providing the service (£)

Low	Medium	High
139,811.18	575,276.88	1,081,716.01

Low cost estimate : low benefit estimate =	0.84	3.08	5.01	= High cost estimate : high benefit estimate
High cost estimate: low benefit estimate =	0.65	(med : :med)	6.52	= Low cost estimate: high benefit estimate

² Based on self-report via questionnaire 9 months following physiotherapy

Table 2b: Data from Lothian University's Hospital Division of NHS Lothian of 13,500 staff - 2004
Data relates to the period 01/01/04 - 31/12/04. Service staffed by 4 FTE physiotherapists.

The service was started in 1997.

Costs of providing the service 2004

MSD case management	Low	Medium	High	Notes
Line management costs				
Number of staff seen	738	738	738	260 of these were absent; 478 not absent
Number of hours per case	0.5	1	2	
Cost per hour	23.64	23.64	23.64	Assume Manager's salary = £30,000
Total (£)	8,723.16	17,446.32	34,892.64	
Service provision costs (staff salaries)				
Total (£)	150,000.00	150,000.00	150,000	Service maintenance; not set up costs
Attendance of MSD sufferers during work time				
Number not absent	478	478	478	
Number of sessions	2	4	6	Varied depending on individual need.
Time per session (hours)	0.75	0.75	0.75	30 minutes contact + travel time
Cost per hour	14.13	14.13	14.13	Average D grade Nurse's salary = £17,932
Total (£)	21.19	42.38	63.58	
Costs of providing the service (£)	158,744.35	167,488.70	184,956.22	

See notes in section 6.2.9 for further explanation.

Benefits of providing the service 2004

Preventing absence

	Low	Medium	High	
Number of staff able to continue in their work	115	115	115	478 (not absent)*24% said it prevented absence [†]
Estimated no days absence prevented/ person	1.00	10.00	20.5	
Costs per day	105.96	105.96	105.96	Average D grade Nurse's salary = £17,932
Total (£)	12,185.40	121,854.00	249,800.70	

Management time saved due to avoiding absence (project cost to manage staff replacement / investigate incident for those absent)

Number of replacement staff	115	115	115	478 (not absent)*24% said it prevented absence [†]
Number of hours	1.0	2.0	5.0	
Cost per hour	23.64	23.64	23.64	Assume Manager's salary = £30,000
Total (£)	2,718.60	5,437.20	13,593.00	

Speedier return to work

No of staff returned to work 'earlier'	n/a	n/a	n/a	
No of days returned earlier	3,985	3,985	3,985	797 weeks phased RTW (average 15 days per absence)
Productivity rate	0.50	0.75	1.00	
Costs per day	105.96	105.96	105.96	Average D grade Nurse's salary = £17,932
Total (£)	211,125.30	316,687.95	422,250.60	

Improved productivity / work without restrictions

No staff whose treated MSD doesn't limit work	344	344	344	72% of those not absent (478) [†]
No of hours saved due to full productivity	3	6	9	
Costs per hour	14.13	14.13	14.13	
Total (£)	14,582.16	29,164.32	43,746.48	

Prevention of repeated absence

No of staff prevented from repeat absence	87	87	87	17% of 738 expected, but reduced to 6% [†]
No of days saved per person	1.00	10.00	20.5	
Costs per day	105.96	105.96	105.96	Average D grade Nurse's salary = £17,932
Total (£)	9,218.52	92,185.20	182,987.62	

Total benefit of providing the service (£)

249,829.98	565,328.67	918,370.44
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Low cost estimate : low benefit estimate =	1.57	3.38	4.97	= High cost estimate : high benefit estimate
High cost estimate: low benefit estimate =	1.35	(med:med)	5.79	= Low cost estimate: high benefit estimate

Table 3: Data from a Primary Care Trust (NHS) with 1,100 staff
Data relates to 2002 - 04. Service staffed by 0.5 FTE physiotherapist

Costs of providing the service 2004

MSD case management	Low	Medium	High	Notes
Line management costs				
Number of staff seen	159	159	159	37 of these were absent; 122 not absent
Number of hours per case	0.5	1	2	
Cost per hour	23.64	23.64	23.64	Assume manager's salary = £30,000
Total (£)	1,879.38	3,758.76	7,517.52	
Service provision costs (staff salary)				
Total (£)	16,994.00	16,994.00	16,994.00	Service maintenance; not set up costs
Attendance of MSD sufferers during work time				
Number not absent	122	122	122	
Length of initial session (hours)	1.25	1.25	1.25	45 mins + travel (of 30 mins) * 1 initial session
Length of subsequent sessions (hours)	3	3	3	30 mins + travel (of 30 mins) * 3 sessions
Cost per hour	23.64	23.64	23.64	Assume average salary = £30,000
Total (£)	10,815.30	10,815.30	10,815.30	
Costs of providing the service (£)	29,688.68	31,568.06	35,326.82	

Notes:

- The average salary for the PCT staff is taken as £30,000; this includes GPs, nurses and allied health professionals, and administrative staff.
- Management costs are taken as £30,000 (range of £23,000 – 31,000 are quoted as a practice management salary, www.nhscareers.nhs.uk)

Benefits of providing the service 2004

	Low	Medium	High	
Preventing absence				
Estimated no days absence prevented	259.00	259.00	259.00	786 days before programme, 527 after
Costs per day	177.27	177.27	177.27	Assume average salary = £30,000
Total (£)	45,912.93	45,912.93	45,912.93	
Management time saved due to avoiding absence (project cost to manage staff replacement / investigate incident for those absent)				
Number of replacement staff	19	19	19	56 people absent before the programme; 37 after
Number of hours	1.0	2.0	5.0	
Cost per hour	23.64	23.64	23.64	Assume manager's salary = £30,000
Total (£)	449.16	898.32	2,245.80	
Speedier return to work				
No of staff returned to work 'earlier'	n/a	n/a	n/a	Not known
No of days returned earlier				
Productivity rate				
Costs per day				
Total (£)				
Improved productivity / work without restrictions				
No staff whose treated MSD doesn't limit work	n/a	n/a	n/a	Not known
No of hours saved due to full productivity				
Costs per hour				
Total (£)				
Prevention of repeated absence				
No of staff prevented from repeat absence	n/a	n/a	n/a	Not known
No of days saved per person				
Costs per day				
Total (£)				
Total benefit of providing the service (£)	46,362.09	46,811.25	48,158.73	

Low cost estimate : low benefit estimate =	1.56	1.48	1.36	= High cost estimate : high benefit estimate
High cost estimate: low benefit estimate =	1.31	(med:med)	1.62	= Low cost estimate: high benefit estimate

Table 4: Data from a Utility company
Data relates to 2002 - 04

Costs of providing the service

MSD case management	Low	Medium	High	Notes
Line management costs				
Number of staff seen	89	89	89	89 people; 66 not absent
Number of hours per case	1	2	5	
Cost per hour	22.92	22.92	22.92	Assume manager's salary = £30,000
Total (£)	2,039.88	4,079.76	10,199.40	
Service provision costs				
Total (£)	81,631.00	81,631.00	81,631.00	Includes set up and service maintenance costs
Attendance of MSD sufferers during work time				
Number not absent	66	66	66	
Number of sessions	4	8	12	Reported between 4 and 12 sessions per person
Time per session (days)	1	1	1	Each session was 1 day
Cost per day	115.00	115.00	115.00	HSE data
Total (£)	30,360.00	60,720	91,080	
Costs of providing the service (£)	114,030.88	146,430.76	182,910.40	

Benefits of providing the service

Preventing absence

	Low	Medium	High	
Estimated number of days absence prevented	1,115	1,115	1,115	1631 days before; 516 days after
Costs per day	115.00	115.00	115.00	
Total (£)	128,225.00	128,225.00	128,225.00	

Management time saved due to avoiding absence (project cost to manage staff replacement / investigate incident for those absent)

	Low	Medium	High	
Number of replacement staff	21	21	21	Number of absences prevented (23 absent before programme; 2 left, the remaining returned to work)
Number of hours	1.0	2.0	5.0	
Cost per hour	22.92	22.92	22.92	Assume Manager's salary = £30,000
Total (£)	481.32	962.64	2,406.60	

Speedier return to work

Number of staff returned to work 'earlier'				Those absent returned at start of programme; this is accounted for in the avoidance of absence above.
Number of days returned earlier				
Costs per day				
Total (£)				

Improved productivity / work without restrictions

	Low	Medium	High	
No staff whose treated MSD doesn't limit work	18	18	18	27 working with restrictions before prog.; 9 after
Productivity level improvement	0.25	0.50	0.75	These 18 returned to full duties from restricted
Annual salary cost	25,300	25,300	25,300	
Total (£)	113,850.00	227,700.00	341,550.00	

Prevention of repeated absence

No of staff prevented from repeat absence				Not relevant, because the data relates to a group who were experiencing MSDs rather than the whole workforce. The amount of absence prevented for this group is shown above.
No of days saved per person				
Costs per day				
Total (£)				

Total benefit of providing the service (£) **242,556.32** **356,887.64** **472,181.60**

Low cost estimate : low benefit estimate =	2.13	2.44	2.58	= High cost estimate : high benefit estimate
High cost estimate: low benefit estimate =	1.33	(med:med)	4.14	= Low cost estimate: high benefit estimate