

**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**

<b>MSD case management</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>	<b>Notes</b>
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
<b>Total (£)</b>	<b>8,735.29</b>	<b>17,470.58</b>	<b>34,941.16</b>	
Service provision costs (staff salaries)				
<b>Total (£)</b>	<b>145,500.00</b>	<b>145,500.00</b>	<b>145,500.00</b>	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
<b>Total (£)</b>	<b>11,775.15</b>	<b>23,550.30</b>	<b>35,325.45</b>	
<b>Costs of providing the service (£)</b>	<b>166,010.44</b>	<b>186,520.88</b>	<b>215,766.61</b>	

### 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
<b>Total (£)</b>	<b>18,089.76</b>	<b>180,897.60</b>	<b>370,840.08</b>	

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

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

#### Speedier return to work

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
<b>Total (£)</b>	<b>79,656.61</b>	<b>119,484.92</b>	<b>159,313.23</b>	

#### Improved productivity / work without restrictions

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	
<b>Total (£)</b>	<b>14,184.02</b>	<b>28,368.03</b>	<b>42,552.05</b>	

#### Prevention of repeated absence

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
<b>Total (£)</b>	<b>23,845.59</b>	<b>238,455.93</b>	<b>488,834.65</b>	

#### Total benefit of providing the service (£)

<b>139,811.18</b>	<b>575,276.88</b>	<b>1,081,716.01</b>
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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

<sup>2</sup> 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**

<b>MSD case management</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>	<b>Notes</b>
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
<b>Total (£)</b>	<b>8,723.16</b>	<b>17,446.32</b>	<b>34,892.64</b>	
Service provision costs (staff salaries)				
<b>Total (£)</b>	<b>150,000.00</b>	<b>150,000.00</b>	<b>150,000</b>	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
<b>Total (£)</b>	<b>21.19</b>	<b>42.38</b>	<b>63.58</b>	
<b>Costs of providing the service (£)</b>	<b>158,744.35</b>	<b>167,488.70</b>	<b>184,956.22</b>	

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 <sup>†</sup>
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
<b>Total (£)</b>	<b>12,185.40</b>	<b>121,854.00</b>	<b>249,800.70</b>	

#### 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 <sup>†</sup>
Number of hours	1.0	2.0	5.0	
Cost per hour	23.64	23.64	23.64	Assume Manager's salary = £30,000
<b>Total (£)</b>	<b>2,718.60</b>	<b>5,437.20</b>	<b>13,593.00</b>	

#### 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
<b>Total (£)</b>	<b>211,125.30</b>	<b>316,687.95</b>	<b>422,250.60</b>	

#### Improved productivity / work without restrictions

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

#### Prevention of repeated absence

No of staff prevented from repeat absence	87	87	87	17% of 738 expected, but reduced to 6% <sup>†</sup>
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
<b>Total (£)</b>	<b>9,218.52</b>	<b>92,185.20</b>	<b>182,987.62</b>	

#### Total benefit of providing the service (£)

<b>249,829.98</b>	<b>565,328.67</b>	<b>918,370.44</b>
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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**

<b>MSD case management</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>	<b>Notes</b>
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
<b>Total (£)</b>	<b>1,879.38</b>	<b>3,758.76</b>	<b>7,517.52</b>	
Service provision costs (staff salary)				
<b>Total (£)</b>	<b>16,994.00</b>	<b>16,994.00</b>	<b>16,994.00</b>	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
<b>Total (£)</b>	<b>10,815.30</b>	<b>10,815.30</b>	<b>10,815.30</b>	
<b>Costs of providing the service (£)</b>	<b>29,688.68</b>	<b>31,568.06</b>	<b>35,326.82</b>	

**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](http://www.nhscareers.nhs.uk))

### Benefits of providing the service 2004

	Low	Medium	High	
<b>Preventing absence</b>				
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
<b>Total (£)</b>	<b>45,912.93</b>	<b>45,912.93</b>	<b>45,912.93</b>	
<b>Management time saved due to avoiding absence (project cost to manage staff replacement / investigate incident for those absent)</b>				
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
<b>Total (£)</b>	<b>449.16</b>	<b>898.32</b>	<b>2,245.80</b>	
<b>Speedier return to work</b>				
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				
<b>Total (£)</b>				
<b>Improved productivity / work without restrictions</b>				
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				
<b>Total (£)</b>				
<b>Prevention of repeated absence</b>				
No of staff prevented from repeat absence	n/a	n/a	n/a	Not known
No of days saved per person				
Costs per day				
<b>Total (£)</b>				
<b>Total benefit of providing the service (£)</b>	<b>46,362.09</b>	<b>46,811.25</b>	<b>48,158.73</b>	

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**

<b>MSD case management</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>	<b>Notes</b>
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
<b>Total (£)</b>	<b>2,039.88</b>	<b>4,079.76</b>	<b>10,199.40</b>	
Service provision costs				
<b>Total (£)</b>	<b>81,631.00</b>	<b>81,631.00</b>	<b>81,631.00</b>	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
<b>Total (£)</b>	<b>30,360.00</b>	<b>60,720</b>	<b>91,080</b>	
<b>Costs of providing the service (£)</b>	<b>114,030.88</b>	<b>146,430.76</b>	<b>182,910.40</b>	

**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	
<b>Total (£)</b>	<b>128,225.00</b>	<b>128,225.00</b>	<b>128,225.00</b>	

**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
<b>Total (£)</b>	<b>481.32</b>	<b>962.64</b>	<b>2,406.60</b>	

**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				
<b>Total (£)</b>				

**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	
<b>Total (£)</b>	<b>113,850.00</b>	<b>227,700.00</b>	<b>341,550.00</b>	

**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				
<b>Total (£)</b>				

**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