

**Boston International Forum X
Primary Care Research on Low Back Pain**

**Addressing Question One:
What are the outcomes of Low Back Pain
and how do they relate?**

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Fundamental Precepts:

- Main determinants of health and illness depend more upon lifestyle, socio-cultural environment and psychological (personal) factors than they do on biological status and conventional healthcare.¹
- Work: most effective means to improve well-being of individuals, their families and their communities.²
- LBP: rigorously tackling an individual's obstacles to a life in work.

1. Marmot M. *Status Syndrome*, Bloomsbury, London: 2004

2. Waddell G, Burton K. *Is work good for your health and well-being?* TSO, London: 2006

Making the distinction: definitions and usage

- *Disease*: objective, medically diagnosed, pathology
- *Impairment*: significant, demonstrable, deviation or loss of structure or function
- *Illness*: subjective feeling of being unwell (internal)
- *Sickness*: social status accorded to the ill person by society (external)

**Cardiff Health Experiences Survey (CHES):
Face-to-Face Interviews [N=1000] GB
population: Main Complaint**

	<u>Open Question:</u>	<u>Inventory:</u>
LBP	8.9%	14.6%
Musculoskeletal	4.6%	7.0%
Mental Health	7.5%	25.6%
Cardio-respiratory	3.6%	5.9%
Headache	2.9%	9.3%
G/I	2.4%	4.0%
Without any complaint	70.1%	33.6%
At least one complaint	20.6%	66.4%
2 or more complaints	8.4%	26.3%

Severity of main complaint greater for open question than inventory

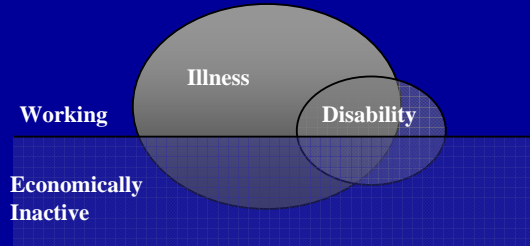
**Ranking of Obstacles to Work by Principal
Category:**

	<u>Rank(%)</u>
• Psychological / Cognitive:	38 %
• Occupational:	32 %
• Social:	11 %
• Economic:	9 %
• Symptom severity (esp: pain, fatigue)	7 %
• Impaired function	3 %
	<hr/>
	100 %

Positive Influences on RTW:

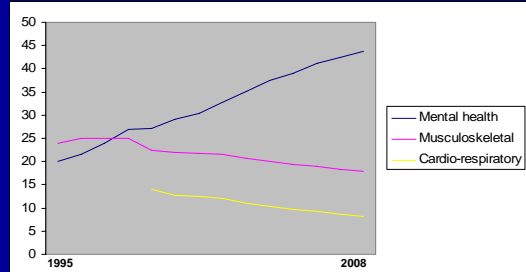
- Moral obligations
- Respect for Employer
- Strong health literacy
- High score on subjective "happiness"
- Well managed chronic condition
- Resilience and coping

The limited Correlation between illness, disability and (in) capacity for work¹



1. Waddell G, Aylward M : 2005

The changing proportion of Incapacity Benefit claimants by diagnosis



National Statistics: www.dssni.gov.uk/incapacity_benefits

UK Incapacity Benefit

- 'Severe Medical Conditions' <25%
- 'Common Health Problems'
 - Mental health problems 44%
 - Musculoskeletal conditions 25%
 - Cardio-respiratory conditions 10%

Common health problems



- Common features
 - High prevalence in working age population
 - Largely subjective - little or no disease or impairment
 - Multifactorial causation – work usually only one contributory factor
 - Most episodes settle rapidly – though often persistent or recurrent
 - Most people remain at work or return to work quite quickly
 - Essentially whole people, with what should be manageable health conditions
 - Long-term incapacity is not inevitable

The Radical Shift in UK Policies (late 1990s):

- Focus: Overcoming obstacles to (return to) work.
- Arresting: Flow of short-term incapacity becoming chronic
- Intervention packages and support to help move IB recipients into the labour market
- Embracing: A bio-psycho-social paradigm

Pathways to Work: Helping people into employment (2002).¹

A significant step to realise a vision.

- Better framework of support and more focused interventions
- Improved, tangible financial incentives
- Condition Management-jointly with local NHS providers

A fundamental philosophical shift in services provided for sick and disabled people. A social rather than a health care intervention

1. DWP (2002) Pathways to work: helping people into employment, Department for Work and Pensions CM5690, HMSO: London.

UK Government “Pathways to Work” Initiative

- Return to Work Payment
£40-120 per week
- Mandatory Work Focused Interviews (Case Managers)
- New Condition-Management Programmes:
(focus: m/s, Mental Health; Cardiorespiratory)
 - helping people to understand and manage their condition
 - using CBT and related interventions

Condition Management: The Pathway to Success

- Modulate expectations, exploit values and build confidence
- Recognise and address the social contexts of health, disadvantage and economic inactivity
- Promote emotional/physical well-being
- Encourage behaviour change
- Living with fatigue/pain

PTW: Evaluation Methodology:¹ Condition Management

- A “spirit of experimentation”
 - process pilots: what delivery works best in what circumstances?
 - impact pilots: assessment/measurement against control groups
 - pragmatic approach

1. Ford P, Ploeght C. *Realistic Evaluation of the Impact and Outcomes of the condition Management Programme*, UCLAN; 2009

Realistic Evaluation Theory¹

- Modelling contextual, quantitative and qualitative data
- What works, for whom, in what context?
- Establish: causal relationship between programme and outcome
- Confirmation: impact of the intervention
- Explanatory components model:
- context (C) mechanism (M) ; outcome (O)

1. Pawson R, Tilley N. *Realistic Evaluation*. Sage, London: 1997

Mixed Methods for Community Interventions¹:

- Multiple forms of data collection and analysis:
 - deductive and inductive thinking
 - qualitative and quantitative methods
- Data Transformation Model:
 - independent analysis of all data
 - pooling and triangulated convergence for data comparison
- Embedded qualitative, independent (“blind”) study
 - subsequent triangulation, limiting error and bias

1. Creswell J, Plano Clark V. *Designing and conducting mixed methods research*. Sage, London:2006

Range Analysis Results:

	<u>M:</u>	<u>F:</u>	<u>Total:</u>
• Participants	1683 (49%)	1748 (51%)	3431
• CMP duration:	Mean:	16 weeks (range:4-32wks)	
	Median:	16 weeks (in 6 of 7 pilots) 13 weeks (in 3 of these)	

Core Components:

Activity/lifestyle modules (fitness and well-being)

Symptom management (eg: pain, fatigue, anxiety, depression etc)

Coping (eg: goals, positive thinking, assertiveness)

Return to work (sequential; throughout)

Condition Management Programmes: Principal Findings

- Undue and mistimed emphasis on RTW had negative effects on engagement and outcomes
- Most common benefits: increased confidence and ability to cope
- Evidence that improvements occurred despite unaltered or deteriorating health condition

Condition Management Programmes: Principal Findings

- Rather than aiming for control of a health condition, successful outcomes dependent on learning process towards self-management and independence
- New roles for health professionals: support and guidance rather than therapy

CMP Findings relevant to LBP:

- Reconciling health and work integral to successful outcomes
- Optimal timing of RTW element among core components critically important
- Statistically significant improvements in HADS anxiety ($p < 0.001$) and depression ($p < 0.001$)
 - not related to underlying health condition
 - not dependent on age or gender
 - associated with successful work outcomes

CMP Findings relevant to LBP:

- Significant improvements in confidence and coping, independent of changes in health status, associated with successful work outcomes
- 20% RTW by end of CMP
66% (in work, work ready or moving towards work)
- 45% in work at 6 months after CMP

Pathways to work: the pilots (Oct, 2003 & April, 2004)

Condition Management Programmes:

- Very favourable reception by participants, personal advisers and CMP practitioners
- Doubling of claimants entering work
- Higher than expected take-up rates
- Exceeds threshold for cost-effectiveness
- Perceived to have lasting effects

PATHWAYS TO WORK: PILOTS (2003-2004)

- 6-800 new job entries each month in existing *Pathways* areas
- Take-up around 5 times that expected from previous RTW interventions
- Welfare Reform :extending provision across country by 2010
 - :reducing by 1 million the number on Incapacity Benefits
 - :employment rate = 80% working age population

Pathways to Work – So Far

- Puts the United Kingdom at the forefront in actively engaging with the client group.
- Very few,¹ if any,² social security interventions in the world have ever achieved such take-up rates, labour market outcomes and enthusiasm.
- Strong potential to reverse the long history of failed international efforts to address successfully long-term incapacity³.

1. Corden A, Thornton P (2002) Employment programmes for disabled people. Lessons for research evaluations. DWP In-House Report 90, Department for Work and Pensions: London.

2. Aylward M, Sawney P (2007) Support and rehabilitation (restoring fitness for work). In: Fitness for Work (Edo: Palmer, Cox and Brown), 4th Edition. Oxford University Press, Oxford.

Work as an Outcome:

Organisational Factors:

- dominant work focus
- strong partnerships with providers
- RTW component throughout programme

Work as an Outcome:

Programme Factors:

- Improvement in anxiety and depression (controlling for initial anxiety and depression scores)
- Improved confidence and coping

Work as an Outcome:

Changes effected by CMP participation:

- 38% increased confidence
- 27% improved management of health condition
- 21% increased activity
- 15% increased motivation/moving on

LBP Outcomes (Symptoms):

	Outcome:	Dominant Factors:	RTW
• Self-estimation of pain (baseline-vs-end programme)	Good (40% reduction)	• health care interventions • improvement in anxiety and depression • Locus of control	Limited

LBP Outcomes (Symptoms):

	Outcome:	Dominant Factors:	RTW
• Global rating of change in LBP	Good (30% reduction)	• symptom management • medication • Improvement in anxiety	Weak

Functional Status Outcomes:

	Outcome:	Dominant Factors:	RTW
• Activities of Daily Living (baseline –vs- end programme)	Good (3 points on 6 ratings)	• improved coping and confidence • functional restoration • back classes	Good*

*Dependent on inclusion of work – focus throughout

Functional Status Outcomes:

	Outcome:	Dominant Factors:	RTW
• Global rating of change	Good (30% reduction)	• symptom management • medication • locus of control	Limited

CONCLUSIONS:

- The outcome of work in LBP is largely independent from other outcomes
- Work outcome is highly dependent on critical elements of the support and management package and the context in which it is delivered:

CONCLUSIONS:

Organisational: dominant and enduring work, focus, strong partnership with (and among) providers

Programme: focus on anxiety and depression, confidence building and coping, symptom management and insight

The Scientific and Conceptual Basis of Incapacity Benefits



Gordon Waddell and Mansel Aylward

The Power of Belief



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