Health and Employment Outcomes of the Condition Management Programmes.

Background
The realistic evaluation of the impact and outcomes of the Condition Management Pilots (Ford and Plowright, DH research report, in press) found that participation in CMP was associated with

• Significant improvements in anxiety, depression and confidence
  o Not dependent on age or gender
  o Unrelated to change in the underlying health condition
• Improved depression and (to a lesser extent) anxiety, were associated with increased work readiness
• 20% self-reported return to work by the end of CMP, with two thirds reporting being in work, work ready or moving towards work

The ideal Condition Management programme was flexible in approach, with strong relationships between practitioners and participants and a cognitive/behavioural rather than treatment-based approach to condition management. It consisted of a biopsychosocial model (Waddell and Burton 2005) with three core components of symptom management, coping skills and activity/exercise. Some CMP programmes included a specific component related to return to work, which tended to have a negative effect on health outcomes. No follow up data was available for the DH evaluation.

The IASO team at the University of Central Lancashire are currently undertaking an economic evaluation of four pilot sites representing a variety of configurations of NHS based CMP with and without individual case management and commissioning from statutory, private and voluntary sectors.

Method
A two phase study exploring predictors of mental health and work readiness following CMP, and 12 month benefit costs and employment outcomes. This will be extended to a cost benefit analysis once detailed costings are available.

A representative sample of age, gender and condition from four pilot sites was stratified according to four mental health outcome groups:

1. Subjects whose HAD depression score initially indicated a likely case of depression (>7) but had recovered by the end of CMP (HAD<8)
2. Subjects who were not likely to be cases of depression either initially or outcome (HAD<8)
3. Subjects who were depressed initially and at outcome (HAD>7)
4. Subjects who were not depressed initially but became so after CMP (a small group, mostly with associated adverse life events)

The sample was passed on to Jobcentre plus to retrieve benefit claims and employment data for the 12 months following referral to CMP. The resulting database includes 111 subjects’ data on age, gender, condition (Jobcentre plus diagnostic label: mental health, musculoskeletal, cardio-respiratory or “other”), locality data (IB and JSA claimant rates,
job density i.e. ratio of jobs to working age population), duration and components of individual CMP programmes, initial and outcome HAD data for anxiety and depression, four outcome work readiness scores from the Jobcentre plus outcome report (unvalidated) and 12 month benefits claims and employment outcome.

The relevant questions from the CMP outcome return to Jobcentre plus are in Part 6 of the CMP2 form as below:

1. I feel confident that I can work
2. I feel more confident that I will be able to find work
3. I feel more confident in my ability to manage my condition in a work environment
4. I feel confident that, in general, working would NOT make my condition worse

Participants are asked by their case manager to indicate how they feel on completion of the programme by scoring the options out of 5: 1 = much less confident, 2 = less confident, 3 = no change in confidence, 4 = more confident, 5 = much more confident.

Additional data is available from the national dataset (7 pilots) to explore qualitative responses to questions about changes occurring as a result of CMP, and from electronic case records from one of the pilots to explore presenting problems.

Further work is underway to ascertain the costs of each individual CMP intervention, which will be related to health and employment outcomes and benefits costs.

SPSS was used to explore predictors of health and employment outcomes.

Results

Analysis of national database (7 pilots, 480 subjects)

Depression outcome was not associated with gender, while the “never depressed” group were mostly older people with musculoskeletal problems. Those who recovered from their depression were significantly younger and more likely to be suffering from mental health conditions. Those who worsened during CMP had significantly longer interventions and were more likely to be suffering from “other” conditions ie those for whom CMP was not specifically intended, and to have suffered adverse life events.

Exploration of condition labels and presenting problems in the single pilot sample using logistic regression modelling showed that, adjusting for age & gender, condition as labelled by Jobcentre plus had no significant independent effect on the likelihood of recovery, while participant description of the presenting problem(s) showed that someone with combined physical and psychological problem, and psychological problems alone was more likely to recover compared with other types of presenting problems (physical, psychological and social problems, alone and in combination) (Rsq 20%, p<0.001).

Mean work readiness scores were significantly related to depression outcome groups (p<0.001), with the greatest work readiness in the recovered group, declining to the least
in those who had become depressed during CMP. This relationship was seen in the outcome scores for all four questions.

**CMP return to work component** was negatively associated with work readiness, mean scores for all four questions being significantly higher if the health programme did not include a specific return to work component (p<0.01).

**Analysis of Economic Database (111 subjects)**

Site 1 mental health data includes 17 people with mental health conditions who were referred to an external provider who recorded CORE rather than HAD initial and outcome data. For these subjects, we have classified outcome groups according to normative data for CORE caseness. Site 1 locality data is not yet available, and consequently we cannot yet include job density ratios for these 31 subjects.

Results were weighted according to the sampling method (calculated to adjust scores to represent the proportion of four health outcome groups in the overall pilot sample on the national database).

**12 month Employment Outcomes** (weighted) showed 22% were in work (including 1 person who was doing “permitted work”), 64% were claiming Incapacity Benefits (including 1 person who had returned to work but was back on benefits again), 6% had moved onto Job Seekers Allowance, and the remaining 8% had left benefits but their employment status was not recorded (probably in work, but a small possibility of other outcomes such as ill health retirement). This means that approximately 30% were likely to be in paid employment 12 months after referral to CMP.

**Continuing Incapacity Benefit claim** at 12 months was significantly associated with low scores for all four work readiness questions (p<0.01).

**Paid Employment** at 12 months was significantly associated only with question 2 “confidence to find work” (p<0.01). The remaining three questions were not significantly associated with employment outcome.

**Logistic Regression Modelling** with currently available data suggests that adjusting for age and gender (which are not independent predictors of health or employment outcomes), the effects of site are explained by job density ratio rather than characteristics of the interventions. Health condition and depression outcome are not significant predictors. The only independently significant factor which predicts employment outcome is confidence to find work, which almost doubles the likelihood of employment at 12 months.

**Interim Conclusions**

Age and gender have no significant relationship with health or employment outcomes. Specific work related components of CMP tend to have a negative effect on health and work readiness.
People who present to CMP with a combination of physical and psychological problems are most likely to recover from depression. Recovery from depression is positively associated with improved work readiness.

**Work and Benefit claims.**
30% are off benefits 12 months after CMP with 22% recorded as being in paid work.

Paid employment at 12 months from referral is predicted by confidence to find work at the end of CMP taking account of the variations in local job availability. This is a similar finding to Fishbain (1999), who found that return to work after a pain management intervention was predicted by a combination of intent to do so and job availability.

### Health & Work Outcomes of CMP

- **Return to Work**
- Confidence to find work
- Not depressed on finishing CMP

**People with mental health problems +/- physical illness**

**References**

