

## Contents

<b>Summary</b>	<b>2</b>
<b>Impact and the national health agenda</b>	<b>3</b>
<b>Impact and the local health agenda</b>	<b>4</b>
<b>Commissioning Impact</b>	
• <b>Impact's unique selling points</b>	<b>4</b>
• <b>Costs</b>	<b>5</b>
• <b>Tariffs</b>	<b>5</b>
• <b>Capacity</b>	<b>6</b>
• <b>Waiting times</b>	<b>7</b>
• <b>Appropriate referrals</b>	<b>7</b>
• <b>Guidelines for referral</b>	<b>7</b>
• <b>Clinical Governance</b>	<b>8</b>
<b>Improvements in patients' health and wellbeing</b>	<b>8</b>
• <b>Back pain</b>	<b>9</b>
• <b>Musculoskeletal disorders</b>	<b>11</b>
• <b>Chronic Pain</b>	<b>14</b>
• <b>Mental Health conditions</b>	<b>15</b>
• <b>Gynaecological conditions</b>	<b>18</b>
• <b>Other chronic conditions</b>	<b>19</b>
<b>Patient diversity and health inequalities</b>	<b>20</b>
<b>The impact of our work on primary care</b>	<b>22</b>
<b>The Impact team</b>	<b>23</b>
<b>Acknowledgments</b>	<b>24</b>
<b>Appendices</b>	<b>25</b>

## Summary

Since February 2004, Impact Integrated Medicine Project has provided acupuncture, chiropractic and homeopathy to over 300 patients within a primary care setting. A comprehensive evaluation of our service has demonstrated the effectiveness of these interventions in treating a range of long-term conditions, particularly back pain, musculoskeletal disorders, chronic pain, mental health conditions and gynaecological disorders.

Accessed by all sections of the local population, including a range of 'hard to reach' groups, Impact's service makes a significant and innovative contribution to tackling local health inequalities. 48% of our patients are from Black and Minority Ethnic groups, in an area where the BME population overall is 28%. Very high levels of demand for the service demonstrate that integrated medicine is a very popular choice, especially for patients who have not been successfully treated by conventional methods.

Our work over the last two and a half years has demonstrated that patients who complete treatment at Impact subsequently visit their GP less often, report taking less medication and have less need for referral to secondary care, thus saving NHS resources. Dr Shona Kelly,<sup>1</sup> who last year evaluated reductions in attendance via records at GP practices, comments, "many of the patients referred to Impact were frequent attenders to GP practices; some because they had many chronic physical conditions and others because of mental health issues...many frequent attenders decreased their burden on GP services." Provision of acupuncture, chiropractic and homeopathy is a cost-effective way of managing patients with a range of long-term conditions, including mental health issues.

Nationally, the Impact team are now recognised as skilled and experienced providers of integrated and complementary medicine within primary care; we work closely with Nottingham City Primary Care Trust and other stakeholders to ensure the highest standards of clinical governance.

The new NHS commissioning process, including Practice-based Commissioning, now gives commissioners the opportunity to make bold commissioning decisions that introduce innovative ways of working, extend choice and access to patients, and forge a new partnership between traditional NHS providers and other organisations involved in health and social care. It is clear that commissioning services like Impact can also lead to a better use of resources, as patients reduce their reliance on traditional primary care. As a local social enterprise, Impact is uniquely placed to deliver flexible, whole person care, especially to patients in deprived communities.

***"People need choices and a variety of approaches to generating well being, alternative health is becoming more popular, but the main thing is that it empowers individuals to respect and be responsible for maintaining and improving their health. This scheme empowers the community. This has positive written all over it, keep funding this scheme, it is amazing!"<sup>2</sup>***

***"Almost all of the patients I have referred to Impact have made a point of reporting to me the improvement in pain levels and mobility they have experienced, and clearly therefore improvement in their quality of life... The ability to refer into such a service has also added to my ability to offer holistic care to a wider group of clients. I do hope that the area which you cover can be widened so that more patients can experience the benefit and equity of care can therefore be achieved"<sup>3</sup>***

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<sup>1</sup> Division of Epidemiology and Public Health, Queens Medical Centre, Nottingham

<sup>2</sup> All quotes from the Impact comments book, unless otherwise stated

<sup>3</sup> Practice nurse, Mary Potter Health Centre

## Impact and the national health agenda

In a series of recent white papers, Government policy has stressed patient choice in health care. The 2003 paper, *Building on the Best – Choice, Responsiveness and Equity in the NHS*, includes a commitment to develop a framework for access to complementary medicine throughout the NHS. It also states the Government's aim "to increase choice of access to a wider range of services in primary care, encouraging innovative new providers, particularly in deprived areas where primary care has traditionally been weak, and extending more flexible ways for people to access care."

In *Standards for Better Health*, the Government calls for patients and service users to be put first, through more personalised care, and outlines the need to shift the focus of care from illness to health and wellbeing. Impact provides whole person care tailored to the individual needs of patients, with demonstrable improvements in health and wellbeing.

The Department of Health is committed to ensuring the development of innovative new models of provision by engaging with the Third Sector (which includes social enterprise). The recent Third Sector Commissioning Task Force report, entitled *No Excuses. Embrace Partnership Now. Step towards change!* calls for the Third Sector to become an equal partner in delivering services, on the basis that organisations like ours have a valuable role to play in delivering dynamic, responsive, locally-based services.

The recently published *Health Reform in England: update and commissioning framework* document calls for "the health and care system to focus far more effectively on promoting good health, independence and well-being."<sup>4</sup> Impact's health and wellbeing outcomes demonstrate that we are achieving these aims in our work with patients. Impact also contributes positively to the achievement of the following aims outlined in the commissioning framework:

- A more personalised service for patients
- Better, more sensitive provision for vulnerable and excluded members of society
- The development of more collaborative work, across clinical divides, to construct care pathways around the individual needs of patients
- The provision of choices which reflect the individual's beliefs, values and preferences as well as clinical need
- The availability of choices around the type of treatment as much as about the place of care
- Strong engagement with patients and the public.

***"It was clear from your...annual report that numerous Nottingham residents have responded very well to your services and feel a great deal of gratitude for them. I congratulate you and your team for the work you have done since the Project's inception"***<sup>5</sup>

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<sup>4</sup> Department of Health: Health Reform in England: update and commissioning framework p4 1.9

<sup>5</sup> Lord Warner, Minister of State (NHS Reform) in letter 25.04.06

## Impact and the local health agenda

In *Strategic Vision: Making a difference for Nottingham*, Nottingham City Primary Care Trust makes clear its aims to improve health for the city's population. Impact can contribute to the success of this vision in the following ways:

- By providing an innovative, evidence-based approach to the treatment of mental health conditions in adults, children and adolescents, which is accessible to all sections of the community
- By developing our work with asylum seekers and refugees, who already access our service and have experienced improvements in their health and wellbeing
- By providing an innovative, whole person approach to the management of long term conditions – our model offers a holistic, person-centred integrative approach which has resulted in patients reporting improvements and being able to function much better in their daily lives
- By creating further capacity for the treatment of a range of chronic conditions, we have demonstrated that our service results in fewer GP attendances, which impacts on patients' access to primary care
- By continuing to work with our patients' forum, which is now one of the most active in Nottingham, we ensure that our service is responsive to patients' needs and views
- By providing a service which has proved to be extremely popular with patients, particularly those from BME communities and male patients, thus tackling health inequalities.

## Commissioning Impact

With funding from New Deal for Communities and support from Nottingham City PCT we have been able to pilot the provision of acupuncture, chiropractic and homeopathy to patients who live in Radford and Hyson Green. We now have comprehensive evaluation outcomes on the effectiveness of our interventions; this has enabled us to make decisions on how our resources can be most appropriately used, for maximum benefit to patients and GP practices. Our close working relationship with Nottingham City PCT and proven track record in delivering whole person care in an innovative, integrated manner means that we are ideally placed to work with GP clusters across the city, and beyond.

## Impact's unique selling points

- By offering integrated care packages within Impact, we are able to address a range of conditions/complaints in-house, reducing the need for the patient to go elsewhere
- Patient demand/choice for access to Impact's service is very high, and satisfaction levels are very high – 85% of patients who completed our satisfaction survey reported being very satisfied – the need for the service has been clearly demonstrated
- There is clear, practice-based evidence of effectiveness (from our work to date) for the treatment of back pain, MSDs, chronic pain, mental health conditions and gynaecological disorders
- Patients who are treated at Impact subsequently attend GP practices less often, giving GPs and practice staff greater capacity to concentrate on other priorities

- Patients who are treated at Impact report reducing/discontinuing prescribed medication
- Patients of all ages can be considered for treatment, including children and adolescents
- Patients who are treated at Impact are less likely to require further referral to secondary care, reducing costs
- Patients for whom there is no clear conventional diagnosis may be successfully treated at Impact
- Audits from complementary medicine services in other parts of the country have been shown to be cost-effective; for example, a PCT audit of a chiropractic service in Wilmslow has found that for every 22 patients referred, £10,000 was saved – 8 out of 10 patients waiting for orthopaedic appointments no longer required them. A revaluation of the integrated health services supplied by Glasgow Homeopathic Hospital (which involved scrutiny by the Health Board and parliamentary committees) found that long-term demands on the NHS were reduced with significant reductions in GP visits, new investigations and drug use<sup>6</sup>
- Referral to Impact offers community-based care which is accessible to patients from all sections of the community, including hard-to-reach groups. A study by Impact partner Julie McKay in 2004 found that Impact patients were nearly ten times more likely than those from NG2 to have hard evidence of psychosocial issues. Three times the number of consultations have been required for treatment to be effective. Our service effectively tackles health inequalities
- Referral to Impact is cost effective, when compared to Payment by Results tariffs for outpatient care. We anticipate that cost savings per patient will accrue over time, given the preventative and long-term nature of our interventions
- Impact is a locally-owned social enterprise; any profits are re-invested in the service, enhancing the quality of care.

## Costs

90% of the cost of providing the service is staff salaries and administration/overheads.<sup>7</sup> Salary levels have been determined in association with the relevant professional organisations. Additional costs include evaluation, which is an essential component of an innovative service, and interpreting, which is essential to ensure access to all sections of the population. The cost of equipment/remedies is small, just 1% of the total budget; the materials used during an acupuncture consultation cost on average 97p, whilst a standard homeopathic prescription costs just 16p.

## Tariffs

The tariffs below have been calculated according to our expenditure during the last financial year. As a not-for-profit limited company and social enterprise, we are committed to providing best value. The higher cost of the first consultation reflects the longer consultation time and the additional administration that is involved with each new patient. The number of required consultations is based on our clinical experience to date.

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<sup>6</sup> Letter from Dr David Reilly, Consultant Physician and Honorary Senior Lecturer in Medicine, 1/6/06

<sup>7</sup> Our 2005/06 Income and Expenditure Account is available for inspection at Impact

	<b>No of Consultations required</b>	<b>First Attendance Tariff</b>	<b>Follow up Attendances Tariff</b>
<b>Acupuncture</b>	10 - 12	£78	£43
<b>Chiropractic</b>	6 - 10	£78	£43
<b>Homeopathy</b>	6 - 12	£78	£43

In 2005, New Deal for Communities, in conjunction with Nottingham City Council, conducted a value for money exercise at Impact, and concluded that an average tariff of £54 per consultation represented good value for money, taking into account a comparison with private sector provision, along with the poorer levels of health and additional support needs of patients in deprived areas. We are confident, therefore, that the current average tariff per consultation of £47.37 represents good value for money.

To set up possible peripheral services (for example, at LIFT sites), a budget for capital items of approximately £2,000 will be required. Responsibility for this cost is negotiable.

The costs of a referral to Impact can be compared to outpatient mandatory tariffs (2006/07) for adult secondary care referrals in relevant specialties:

<b>Outpatient Specialty</b>	<b>First Attendance Tariff</b>	<b>Follow up Attendance Tariff</b>
Orthopaedics and trauma	£144	£71
Pain management	£187	£86
General medicine	£215	£92
Gynaecology	£135	£74

NB No tariffs are available yet for the treatment of mental health conditions.

## **Capacity**

Impact is located in the Waverley Health Centre, Radford, which is easily accessible from the city centre. Our current capacity at the Waverley Health Centre is outlined below; if required, capacity can be extended by providing services from other locations, which may be desirable to ensure access for patients around the city, particularly in outlying areas. Until December 2006, Impact will also be delivering services to New Deal for Communities; capacity will increase from January 2007 onwards.

Minimum and maximum capacity figures are based on number of consultations required, as above.

	<b>Sept – Dec 2006: new patient capacity</b>	<b>2007: new patient capacity</b>
<b>Acupuncture</b>	27 - 31	217 - 253
<b>Chiropractic</b>	34 - 54	276 - 434
<b>Homeopathy</b>	25 - 42	203 - 338

## Waiting times

A high level of demand for the current service, which allows for both self-referral and health professional/GP referral for all residents of Radford and Hyson Green, has led to long waiting times and the closure of the waiting list. Our work with current patients will be completed by December 2006. However, commissioning will allow us to expand capacity to meet demand from GP practices; the streamlining of our referral criteria will also ensure that demand is manageable. Therefore, we anticipate that waiting times should not exceed 12 weeks, and will aim to see patients within 6 – 8 weeks, wherever possible.

## Appropriate referrals

During Impact's pilot project phase, all referrals and self-referrals of Radford/Hyson Green residents have been accepted, regardless of their condition or circumstances. By evaluating the outcomes, and looking at patterns of referral, we are now able to determine which patients will be the most likely to complete treatment, and the optimum number of consultations for each discipline.

312<sup>8</sup> patients have received treatment here to date. 118 patients have received integrated care, with a flexible package of treatment based on individual need. 39 patients have received acupuncture alone, 39 patients have received chiropractic alone, and a further 116 patients have received homeopathy alone. 114 have successfully completed treatment, with a further 136 currently in ongoing treatment. 53 patients have discontinued; of these, 11 moved away from the area, 4 moved on to receive further conventional care, and 5 chose not to continue. A further 11 referrals proved to be unviable – for example, of 10 patients referred for homeopathic treatment by social care organisations working with vulnerable adults, only 1 was able to complete treatment; for the other patients, alcohol use and/or chaotic lifestyles in temporary accommodation meant that ongoing attendance at the clinic was not possible.

## Guidelines for referral

The following criteria should be applied when considering referral to Impact:

- Patients with back pain, musculoskeletal disorders, chronic pain, mental health conditions, gynaecological conditions and other complex, chronic conditions are suitable for referral to Impact
- The patient needs to understand the reasons for referral to Impact, and be committed to attending for treatment
- Patients with very chaotic lifestyles, who are in temporary/hostel accommodation, are generally unsuitable for referral
- Patients who intend to move away from Nottingham within six months should not be referred.

The Impact team are available to give more detailed advice on referral, and can assess patients prior to treatment, where appropriate.

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<sup>8</sup> All figures are from 9.6.06.

## Clinical Governance

Since the inception of Impact, the staff team have worked closely with Nottingham City PCT to ensure the highest standards of clinical governance. All Impact practitioners are registered with the relevant professional organisations,<sup>9</sup> and the Nottingham City PCT locality office holds details of our qualifications, registration, insurance and criminal records checks. Each practitioner is engaged in a programme of continuing professional development.

In 2005, the University of Westminster's School of Integrated Health, in association with the NHS Alliance and the King's Fund, produced a definitive guide to developing clinical governance for CAM in primary care.<sup>10</sup> We have been able to incorporate these recommendations into our practice, and are able to demonstrate our compliance with them. Risk management and patient safety are integral to our approach; acupuncture, homeopathy and chiropractic are low-risk interventions. All relevant health and safety requirements are strictly adhered to.

## Improvements in patients' health and wellbeing

During the development phase of the project, a comprehensive evaluation framework was agreed between the Impact team, Nottingham City PCT and NDC. Areas of evaluation include improvements in patients' health and reductions in GP attendance rates, medication and referrals to secondary care. Pre- and post-treatment measures, SF-36 and MYMOP, are used with each patient.<sup>11</sup>

The SF-36 Health Survey was designed for use in clinical practice and research, health policy evaluations, and general population surveys. It has become very widely used in clinical medicine. It includes one multi-item scale that assesses eight health concepts, including limitations in physical, social and usual role activities, bodily pain, general mental health, vitality and general health perceptions. Each patient completes SF-36 before treatment starts, and again once all their treatment at Impact is completed. An overall percentage score can be calculated for each patient, with 100% representing perfect health.

MYMOP aims to measure the outcomes that the patient considers the most important. Several published studies have shown that MYMOP is practical, reliable and sensitive to change. Using a 7 point score (0 – 6), patients score their two most troublesome symptoms, an activity that is important to them (which may be limited by their symptoms) and their overall feeling of well-being. It is considered that the smallest difference that patients consider important is approximately 0.5. A moderate difference corresponds to a change of approximately 1.0, and changes of greater than 1.5 can be considered large.<sup>12</sup> Patients fill in a MYMOP form at the first consultation (for each intervention, if they are referred within the team) and again once that intervention is completed.

Drs Shona Kelly and Emmanuel Atsu Dodor<sup>13</sup> have reviewed records from 226 patients. The patients' most pressing symptoms were abstracted from the MYMOP forms, GP/health practitioner referrals and the Impact practitioners' diagnoses. Dr Kelly then rationalised the symptoms into logical chronic conditions categories. Then, within each group of conditions, before and after scores on MYMOP and SF-36 were compared. The outcomes for each condition are outlined below.

<sup>9</sup> General Chiropractic Council; British Acupuncture Council; Society of Homeopaths

<sup>10</sup> Guidelines and Tools for Developing Clinical Governance for CAM in Primary Care: [www.ihn.org.uk](http://www.ihn.org.uk)

<sup>11</sup> [www.sf-36.org](http://www.sf-36.org);

[www.hsrb.ac.uk/mymop/main.htm](http://www.hsrb.ac.uk/mymop/main.htm)

<sup>12</sup> Guyatt et al 1998

<sup>13</sup> Division of Epidemiology and Public Health, School of Community Health Sciences, University Hospital, Queens Medical Centre, Nottingham

## Back Pain

Low back pain now costs the nation more than £1bn each year. The latest evidence for the treatment of back pain, including the UK Back Pain Exercise and Manipulation (UK BEAM)<sup>14</sup> trial and European Guidelines<sup>15</sup> for the management of acute non-specific low back pain recommend a multi-disciplinary bio-psycho-social model of care including spinal manipulation for patients who are failing to return to normal activities. Chiropractic treatment is also recommended for chronic low back pain – there is evidence that spinal manipulation in addition to GP care is more effective and more cost effective than GP care alone. Research has demonstrated that acupuncture is also effective in treating back pain.<sup>16</sup> A recent bulletin from the National Back Pain Collaborative states that “95% of patients presenting in secondary care do not need to be there.”

### Suggested Care Pathway

Our approach at Impact is to provide a full package of care for patients with back pain, providing a care pathway that addresses all aspects of the patient's condition. This includes chiropractic manipulation, exercise advice and rehabilitation and ergonomics. Patients may also be referred to acupuncture and homeopathy, especially where psychosocial factors are present. See appendix one for our suggested primary care back pain pathway.

### Back Pain: outcomes

SF-36 outcomes demonstrate that patients with back pain show statistically significant improvements in their physical role limitations (their ability to perform everyday tasks and functions such as walking), emotional role (their ability to interact socially and emotionally), mental health, pain and overall change in health (which includes the patient's own perception of their health).

### Back pain (n=57, 24.3% of all patients)

SF-36 - Higher Scores = Better Health	pre-*	post-*	Significance Test
physical functioning	61.6 (23.57)	65.8 (33.7)	-0.815 (24) p = 0.423
role limitations – physical	34.0 (38.8)	68.0 (31.1)	-4.309 (24) p < 0.001
role emotional	49.3 (47.3)	68.0 (40.3)	-2.114 (24) p = 0.045
social functioning	56.0 (29.1)	76.6 (26.8)	-3.518 (24) p = 0.002
mental health	64.8 (25.2)	74.4 (23.4)	-2.420 (24) p = 0.023
energy and vitality	50.2 (21.3)	58.2 (23.6)	-1.680 (24) p = 0.106
pain	38.6 (25.4)	68.2 (25.6)	-5.706 (24) p < 0.001
general health	60.6 (19.3)	64.0 (22.3)	-0.756 (24) p = 0.457
change in health	48.0 (24.9)	72.0 (19.5)	-3.868 (24) p = 0.001

\* Mean (SD) of standardised scores on first line; range of raw scores on second line of each box

# t(df) on first line; significance (p) on second line

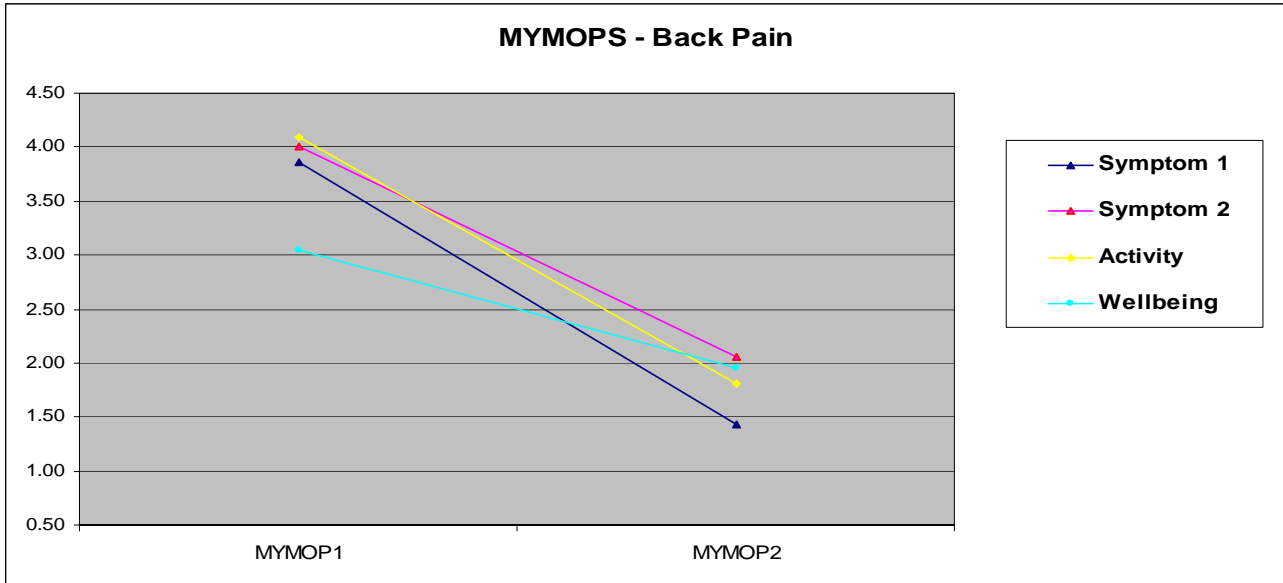
% Mean (SD) of change in standardised scores on first line; range of change score on second line of each box

<sup>14</sup> [www.york.ac.uk/healthsciences/centres/trials/ukbeam](http://www.york.ac.uk/healthsciences/centres/trials/ukbeam)

<sup>15</sup> [www.backpaineurope.org](http://www.backpaineurope.org)

<sup>16</sup> [www.ftcm.org.uk/low\\_back\\_pain.htm](http://www.ftcm.org.uk/low_back_pain.htm)

MYMOP outcomes show that patients with back pain report significant improvements (2.43) in the symptom they felt was most important, as well as their second-choice symptom (1.94). They also report fewer activity limitations (2.29) and an increase in general well-being (1.10).



#### **Case 1: Chronic low back pain: chiropractic**

65 year old George<sup>17</sup> self referred with low back pain. He had a 15 year history of “burning and aches in the back” and experienced numbness in his thighs. His range of motion was very restricted. X-rays showed some degeneration but were otherwise unremarkable. He had been prescribed painkillers and was attending a hospital outpatient clinic every 6 months for spinal injections.

George found that all his symptoms were temporarily removed following his first chiropractic treatment. This symptom free period extended as his treatment progressed; after 12 consultations his treatment is now completed. He no longer takes daily painkillers, and reports going to see his GP less often. He has much less pain and is now able to move around much more easily. He no longer needs physiotherapy with the back pain team and decided to cancel his latest spinal injection as it was no longer required. His MYMOP score reduced from 3.33 to 2.0, and his SF-36 score increased from 47.22% to 65%.

**“I have seen Julie who really helped my back pain and Fiona who gave me a homeopathic remedy for myself and my two children, I feel that we have all been helped and are finding our lives easier”**

<sup>17</sup> Names have been changed in each case study.

**Case 2: Chronic neck and back pain, with underlying stress and anxiety: chiropractic and homeopathy**

*Denis, a 45 year old man, referred himself to Impact with a 3+ year history of low back pain. He linked this to a 20 year history of neck pain, following a chip fracture of the cervical vertebrae. The low back pain followed an acute episode of neck pain. He had visited his GP who had prescribed painkillers and exercises. He described his symptoms as being 'sharp pain on certain motions' and his whole spine as 'very stiff in the mornings'.*

*He received chiropractic manipulation over 6 visits, during which time he became consistently symptom-free. His MYMOP score (for his physical symptoms) reduced from 5.0 to 1.75. It was noted during consultations that he had a history of anxiety, stress and panic attacks. 3 months later, he came back following a relapse of his back pain which he felt had been triggered by stress. The physical symptoms were easily managed in 2 treatment sessions, and a referral was made to homeopathy to address his psychological state.*

*During the first homeopathic consultation, it emerged that Denis had suffered from performance-related anxiety for more than 20 years. He also experienced anxiety about his own and others' health. A remedy was prescribed – he reported a few days later that his back pains had temporarily worsened, and that he felt much better in himself – a typical remedy response. He was seen in the clinic a month later, and reported feeling a lot less anxious, and experiencing less pain. He also mentioned a history of cysts in the upper eyelid, and hay fever symptoms. Over the next six months, the remedy was repeated four times; the eye symptoms completely resolved and he reported feeling much more confident and much less anxious. We are continuing to address his hay fever symptoms. His MYMOP score (for his psychological symptoms) reduced from 2.66 to 1.66. His blood pressure also reduced significantly. No SF-36 data is available for this patient.*

## **Musculoskeletal Disorders**

The majority of both health professional referrals and self-referrals to Impact so far have been for musculoskeletal disorders (MSDs). According to government figures, 30% of primary care consultations are related to MSDs. 60% of long-term sickness is related to MSDs and 25% of incapacity benefit recipients have MSDs. The Department of Health has recently published *The Musculoskeletal Services Framework – A joint responsibility: doing it differently*, which recommends the following:

- Support and treatment should be offered as close to home as possible and be holistic in approach, addressing psychological and social needs as well as the physiological
- Care should be provided within an integrated, multidisciplinary approach
- Capacity within primary care should be developed by offering a wide range of non-surgical alternatives, including chiropractic – it is recommended that people with joint pain should be able to seek assessment by physiotherapists, chiropractors or osteopaths directly without the need for GP referral, thus saving GP time
- Stimulation analgesia, including acupuncture, is recommended for pain management in patients with MSDs
- It is recommended that all PCTs explore the opportunities for creating a Clinical Assessment and Treatment Service (CATS), including chiropractors.

Chiropractic care has been funded by Salford PCT for a number of years, and the chiropractic service is now provided as a point of referral from Salford's musculoskeletal assessment service. The PCT was keen to continue to commission the service because of the choice of manipulative treatments it offers to patients and the evidence base which underpins this.

Impact's approach to the treatment of patients with MSDs includes chiropractic and/or acupuncture, with occasional referral to homeopathy, especially in complex cases involving multiple psychosocial factors. Our assessment and treatment of patients with MSDs fits closely with the model now recommended by the Department of Health.

See Appendix 2 for our suggested care pathway for patients with MSDs.

### **MSDs: outcomes**

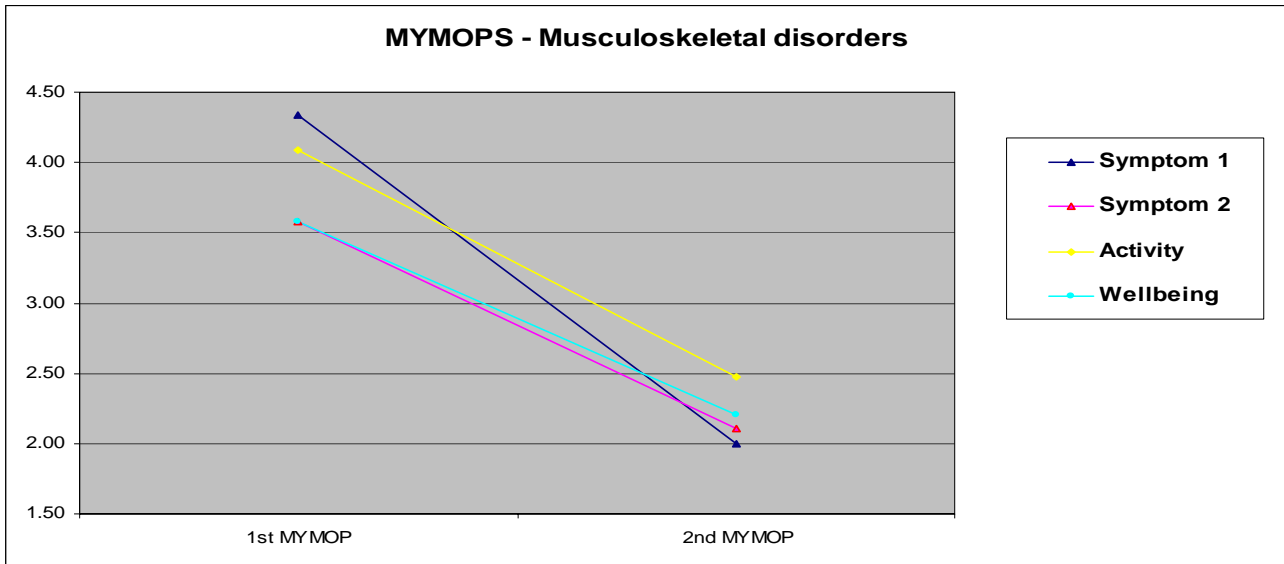
SF-36 outcomes for this group of patients show statistically significant improvements in their physical role, social functioning, energy and vitality, pain and overall change in health. The improvements in social functioning and energy and vitality are not as large as changes in the other domains and may or may not be seen in another analysis with great numbers. However, the other changes are robust.

### **Musculoskeletal Disorders/Rheumatic Disease (n=60, 25.5% of all Patients)**

<b>SF-36 - Higher Scores = Better Health</b>	<b>pre-*</b>	<b>post-*</b>	<b>Significance Test</b>
physical functioning	59.8 (22.8)	66.6 (27.0)	-1.802 (24) p = 0.084
role limitations – physical	31.0 (32.5)	59.0 (39.5)	-3.361 (24) p = 0.003
role emotional	76.1 (73.0)	72.0 (39.3)	0.253 (24) p = 0.803
social functioning	59.2 (27.3)	74.3 (31.3)	-2.139 (24) p = 0.043
mental health	61.1 (24.8)	70.4 (22.4)	-1.623 (24) p = 0.1180
energy and vitality	42.4 (21.8)	52.8 (21.8)	-2.288 (24) p = 0.031
pain	34.9 (17.8)	56.7 (24.1)	-3.642 (24) p = 0.001
general health	47.0 (22.1)	54.8 (27.5)	-1.568 (24) p = 0.130
change in health	46.0 (18.7)	69.0 (23.1)	-3.874 (24) p = 0.001

***“When I was first introduced to Impact, I was in a dreadful state with my back. I was literally being helped to dress, bathe, walk etc, but now with the skills, time and patience of Julie and Heather, my health has improved dramatically”***

MYMOP outcomes for patients with musculoskeletal/rheumatic disorders who received acupuncture and/or chiropractic manipulation report improvements in the first (2.33) and second (1.48) symptoms, as well as fewer activity limitations (1.60) and an increase in overall well-being (1.38).



### **Case 3: Sciatica: acupuncture**

60 year old Arthur came to Impact with sciatica, with constant sharp pain in the right buttock, thigh and knee. He had been prescribed painkillers by his GP, which he was taking twice daily. However, he was concerned about continuing medication as he was developing stomach symptoms. He began acupuncture treatment, which focussed on local points at the affected sites and points along the appropriate channels.

After the first treatment, he reported only a slight improvement, with the sharp pain reduced to a dull ache. However, by the sixth and final treatment, he reported being completely pain free and no longer needed to take painkillers. His MYMOP score reduced from 3.0 to 1.3. His SF-36 score changed from 51.22% to 90.00%. Three months later, Arthur reported still being symptom-free.

### **Case 4: Shoulder pain: chiropractic**

Linda, in her forties, was referred by her GP for left shoulder pain, particularly on raising or moving her arm. The pain had come on gradually, starting about 6 months previously. Tasks such as washing and dressing were difficult and uncomfortable.

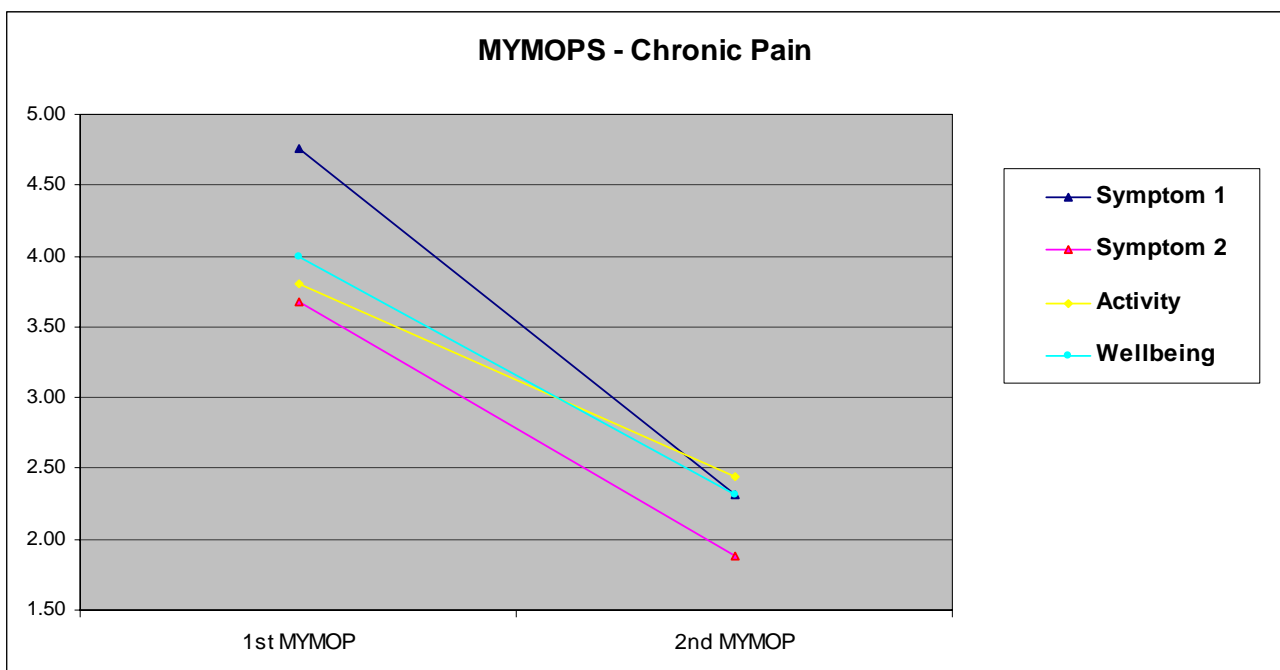
She experienced immediate improvement after the first week of chiropractic treatment. She received a total of 5 chiropractic appointments and was discharged completely symptom free. Interestingly, her SF-36 shows a very slight deterioration, from 78.55% to 76.88% - however, her change in health score increased from 25% to 75%, indicating that she perceives her health to have improved. She remains symptom free 9 months after being discharged from care and no longer requires referral to a physiotherapist which was the GP's next stated recourse.

## Chronic Pain

Many studies have shown that acupuncture is an effective treatment for chronic pain. For example, a recent trial has shown acupuncture to be effective in treating migraine.<sup>18</sup> Another study on migraine showed that the costs of providing acupuncture were less than that of NHS recommended medication.<sup>19</sup> The Primary Care Chronic Pain Pathway Proposal recently produced by Anita Dixon and Lucy Davidson (Broxtowe and Hucknall PCT) aims to offer GPs an alternative pathway that can be utilised under Practice-based Commissioning; a review of 50 GP referrals to chronic pain services based at QMC and Nottingham City Hospital found that “up to 75% of these referrals could be managed in primary care using interventions such as acupuncture, manipulation, algorithms, further GP education and promoting self-care.” The Nottingham Chronic Pain Pathway gives a coherent structure for referral into Impact. Patients with chronic pain who are referred to Impact are triaged by the acupuncturist, and then either begin treatment, or are referred to chiropractic or homeopathy, as appropriate to the individual. For a small number of patients, acupuncture is required approximately once a month on an ongoing basis, to maintain improved pain levels.

### Chronic Pain: outcomes

Nearly 45% of our patients have presented with conditions involving pain, which is often chronic and severe. Analysis of SF-36 scores shows that 80% of all the Impact patients who have completed treatment report improvements in their pain levels. Some patients have remained pain-free following the completion of treatment with no further intervention; for others, acupuncture provides a way of effectively managing their pain. MYMOP results show similar improvements, as outlined below.



<sup>18</sup> *Efficacy of Acupuncture for the prophylaxis of migraine* Lancet Neurology vol. 5 issue 4

<sup>19</sup> *Cost effectiveness analysis of a randomised trial of Acupuncture for chronic headache in primary care* David Wonderling, March 2004, BMJ

### **Case 5: Chronic post-operative pain: acupuncture**

36 year old Samira self referred for treatment with post-operative low back pain, with pain down the right leg and spasmodic pain, tingling and numbness down the right arm. She had had surgery for a slipped disc following a Caesarean section eight months previously. A mother of four young children, with refugee status, the pain regularly interrupted her sleep; she walked with great difficulty and was often tearful. She reported that pain levels had remained the same since the surgery. She was being treated with painkillers and physiotherapy; repeat surgery was likely if there was no improvement.

An interpreter was booked, and acupuncture treatment began. The first few sessions were focussed on settling her into the process, and initially progress was slow. After 5 treatments, she reported two pain-free days. As her energy picture has improved, symptoms have gradually reduced. She experiences occasional flare-ups, usually related to other factors, such as 'flu or domestic problems. Her overall MYMOP score has decreased from 6.0 (the highest score possible) to 4.0. No SF-36 data is available for this patient.

Samira has now received a total of 26 treatments, and attends the clinic approximately once a month in order to manage her pain levels effectively. Her mobility has improved, as has her quality of life – she is now able to lift and cuddle her children and has recently enrolled on an English course. She no longer requires surgery.

***“Before coming here, I was in constant pain and there were a lot of things I couldn’t do. Since coming here, I’ve not been in constant pain and I’ve done more than I did before”***

## **Mental Health Conditions**

At any one time, 1 in 6 of the population has a mental health problem, usually anxiety or depression. One in 250 has a psychotic illness, such as bipolar affective disorder or schizophrenia. Increasingly, children and young people are also suffering – up to 15% of both pre-school children and teenagers are estimated to have a mental health problem. 44% of incapacity benefit recipients have mental health problems. The World Health Organisation estimates that by 2020, depression will be the second biggest health problem in the world after heart disease. Currently, mental health is the top spend area for Nottingham City PCT, outstripping spending on chronic heart disease and cancer by some margin.<sup>20</sup>

A recent 6-year longitudinal study<sup>21</sup> on more than 6,000 patients with chronic disease (including depression) seen at Bristol Homeopathic Hospital concluded that 70% patients had experienced improvements, in conditions which had not previously responded to conventional treatment. Practice-based evidence from other projects, including the Newcastle West PCT complementary therapies project, has found that patients with anxiety and depression benefited particularly from homeopathic intervention. At Waltham Forest PCT, outcomes from a pilot project have led to homeopathy being included in the care pathway for all mental health service users.

<sup>20</sup> *Strategic Vision: Making a difference for Nottingham* Finance section

<sup>21</sup> Drs David Spence, Elizabeth Thompson and SJ Barron: *Homeopathic Treatment for Chronic Disease: A 6 year university hospital outpatient observational study*, *The Journal of Complementary and Alternative Medicine*, Vol 11 No 5

Mental health conditions are the second most frequent reason for referral and self-referral to Impact. Patients with a range of chronic mental health problems, including anxiety, depression, stress-related disorders, sleep difficulties, racing thoughts, bi-polar affective disorder, post-traumatic stress, fears and phobias, grief/bereavement and irritability/anger/rage have experienced improvement following treatment here.

The majority of these patients have received homeopathic treatment, which provides a unique framework in which to explore and understand the patient's subjective experience of their symptoms, sensations and feelings. It should be noted that as well as adults, children and young people can be treated successfully – limited conventional care is available for those under 18 with mental health problems, and drug therapy is often inadvisable.

### Suggested Care Pathway

The Impact team are currently working with Nottinghamshire Mental Healthcare Trust to look at how access to homeopathy and/or acupuncture can be developed for mental health service users. For patients in primary care, referral to homeopathy is suggested where the symptoms/condition are long-term, and where referral to short-term counselling or cognitive behavioural therapy is unlikely to benefit the patient. Patients with chronic anxiety and/or depression have particularly benefited from homeopathic treatment at Impact.

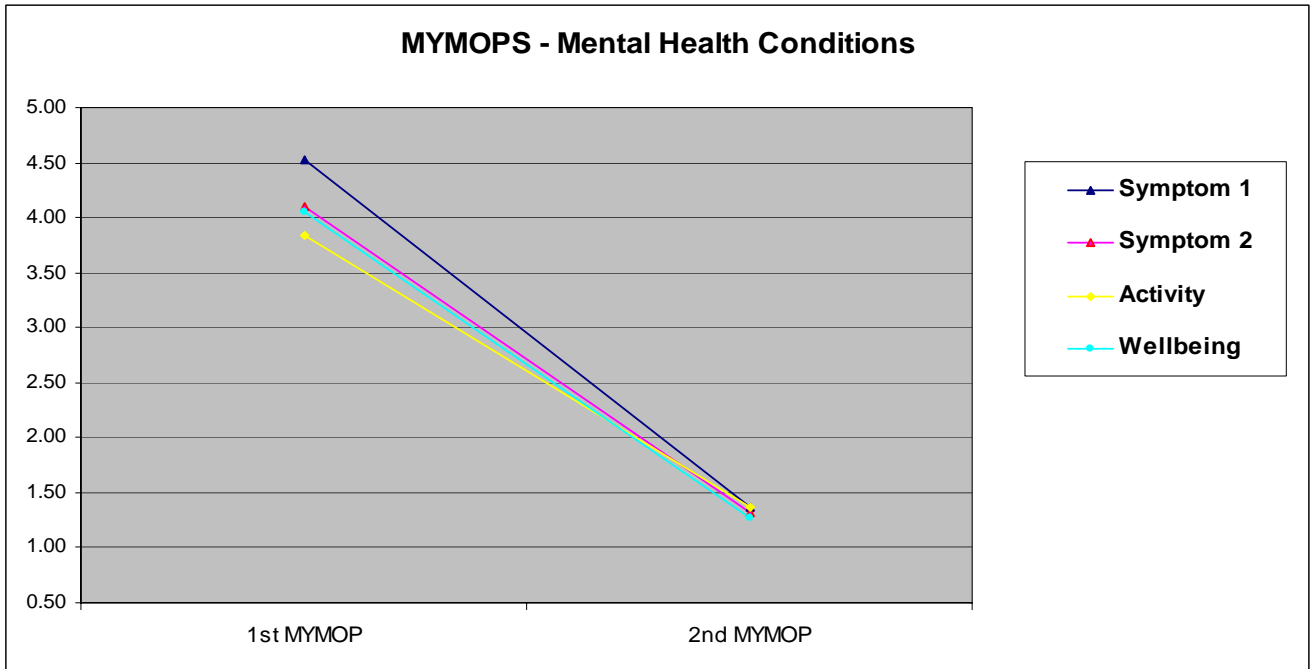
### Mental Health Conditions: outcomes

Analysis of SF-36 scores demonstrates that patients with mental health disorders showed improvements in the physical role limitations, social functioning, mental health, energy and vitality, pain, and overall change in health. These SF-36 scores include all the patients who are considered to have a mental health component to their major complaint, including those who have been treated for other conditions.

### Mental Health (n=87, 37% of all patients)

SF-36 - Higher Scores = Better Health	pre-*	post-*	Significance Test
physical functioning	74.4 (28.2)	75.9 (34.9)	-0.379 (34) p = 0.707
role limitations – physical	42.9 (40.0)	65.0 (38.9)	-3.159 (34) p = 0.003
role emotional	39.0 (67.5)	57.1 (44.7)	-1.446 (34) p = 0.157
social functioning	45.3 (25.8)	64.8 (33.1)	-2.818 (34) p = 0.008
mental health	48.8 (20.9)	62.1 (27.9)	-2.383 (34) p = 0.023
energy and vitality	37.0 (21.3)	51.7 (24.6)	-2.971 (24) p = 0.005
pain	54.3 (27.6)	68.4 (28.8)	-3.293 (34) p = 0.002
general health	52.4 (29.6)	57.2 (30.0)	-1.175 (34) p = 0.248
change in health	55.0 (29.0)	75.7 (23.1)	-3.346 (34) p = 0.002

MYMOP scores also show a significant improvement in patients with mental health conditions – in fact, patients with these conditions show the largest changes in health overall. The MYMOP results below are for patients who have received homeopathic treatment:



### **Case 6: Anxiety: homeopathy**

*Carol, in her fifties, presented for treatment at the suggestion of her GP. On arrival, she was very agitated, anxious and tearful; the recent discovery that her blood pressure was raised had triggered acute anxiety. During the consultation, it emerged that the anxiety manifested in a number of ways; she was frightened of having a heart attack; she was experiencing panic attacks, especially at night; she was obsessive about neatness/tidiness, and unable to throw any item away. She was also having regular nightmares.*

*After homeopathic analysis of her symptoms, a remedy was prescribed. Two weeks later, she wrote a note saying she felt much better, "I am pleased to tell you I am so much better, I cannot believe what a difference it has made to me and my circumstances". During the first follow-up consultation, it became clear that the prescription was accurate – her anxiety was much reduced, her obsessive behaviour had stopped and she was no longer having panic attacks or nightmares. Three and a half months after the first remedy, she experienced a relapse following a stressful family situation, and the remedy was successfully repeated. It was then repeated a third time after a further four months. Her MYMOP score reduced from 5.75 to 0.75. Her SF-36 changed from 16.22% to 60.44%. She recently reported feeling well, with no return of the anxiety.*

***"I have found this service very helpful. Since I've been seeing Fiona I have managed to come off antidepressants and I've gained lots more confidence which is great"***

### Case 7: Depression: homeopathy

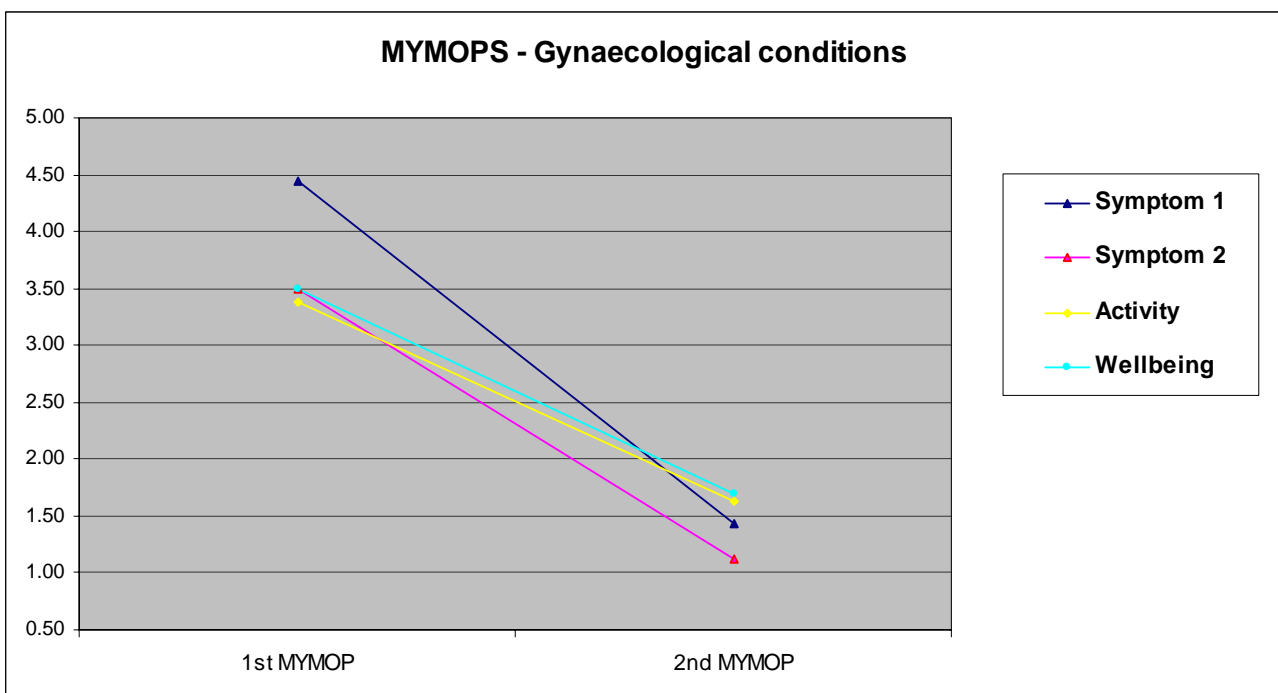
51 year old Brenda was referred to Impact by her GP, for treatment for neck/back pain. During her assessment session, it emerged that she had a long history of depression, and was recovering from drug and alcohol addiction. She was on anti-depressants and painkillers. She described the depression as a “black cloud”, during which time she had no energy or motivation. She also frequently felt worthless and lacking in any self-esteem.

The initial homeopathic prescription was given for the physical pain; she was also referred for chiropractic treatment. Her pain was much reduced by the second consultation, and she was feeling more positive. However, it became clear over the next few months that there was no substantial change in her psychological state, despite the prescription of another remedy, and she did not attend the clinic for six months. On her subsequent return, her case was re-analysed and a different remedy prescribed. A month later, she reported a significant change, feeling much more positive, with considerably improved self-esteem. In all, she attended the clinic 11 times over 2 years. She has been able to discontinue antidepressants. Her MYMOP score has reduced from 4.25 to 2.25 and her SF-36 score changed from 33.22% to 81.66%. She now goes to see her GP less often.

### Gynaecological Conditions

Whilst the number of patients self referring or being referred with gynaecological conditions is relatively small, the outcomes are significant, and we feel that offering women referral to homeopathy and/or acupuncture provides an effective and cost-effective alternative to secondary care referral. Patients with heavy bleeding (some as a result of uterine fibroids), premenstrual syndrome, amenorrhoea (due to polycystic ovary syndrome), dysmenorrhoea, irregular periods and menopausal symptoms have all experienced improvements following treatment, particularly in the symptom that they deemed most important (3.0).

The MYMOP scores are below:



**Case 8: Polycystic Ovary Syndrome: homeopathy**

*Susie, aged 31, referred herself to Impact for homeopathic treatment. She had ceased menstruating when she was 17, and had been diagnosed with polycystic ovary syndrome, and advised that she was unlikely to ever menstruate naturally. She was also experiencing some stress and anxiety, mostly related to her work situation. After the first remedy, she reported an increase in energy, and a considerable reduction in anxiety/stress levels. She decided to stop taking the pill, which she had been taking for over 10 years. A couple of months later, following a change in the homeopathic prescription, she had a period, and has continued to menstruate naturally since, with her periods usually regular and manageable. She completed treatment after 13 months, having been prescribed 2 remedies, the second of which was repeated 6 times. Her MYMOP score reduced from 4.0 to 0.75. Her SF-36 score changed from 68.11% to 86.22%. A year on, she still feels generally very good; calm, relaxed and balanced, and with no need of further treatment.*

**Other Chronic Conditions**

***“I have been suffering long term illness since the late eighties and have found comfort at last with the treatments and encouragements from the staff”***

We have worked with a number of patients with chronic, complex conditions which we are not able to categorise in a straightforward manner. Some of these patients have a mental or psychosomatic component to their condition; others have multiple diagnoses of physical conditions, and all have lived with chronic health for a number of years. Acupuncture, chiropractic and homeopathy can sometimes offer the possibility of improvement or effective management for these patients. For example, several patients with fibromyalgia are using acupuncture and/or homeopathy as a means to manage their condition. It is for these patients that our integrated work has often been most effective.

**Case 9: Depression, tennis elbow, back pain/sciatica and asthma: integrated work**

*52 year old Andrew self referred to Impact in early 2004, suffering from depression following the break-up of a relationship. He also complained of tennis elbow and back pain/sciatica. He began homeopathic treatment – during the first consultation, he ‘felt like throwing the towel in’, was feeling low all the time and had lost concentration. Following the first prescription, he reported feeling a little better, saying he now accepted what had gone wrong. His improvement continued over the next four months or so, till the depression was substantially better. He was then referred to acupuncture, to address the sciatica and tennis elbow.*

*The tennis elbow resulted from his occupation; he was now incapable of working, and finding sleep difficult. He received 6 acupuncture treatments over three months and reported a gradual reduction in pain, with a corresponding improvement in strength at the joint.*

*Several months later, he attended the acupuncture clinic again for treatment for asthma, which he had suffered for many years. He had a further course of 10 treatments; in the early phase of treatment, he reported coughing up thick brown mucus, which gradually became clearer and more liquid. He also reported less tightness in his chest, and was able to walk/exercise much more easily.*

*He was subsequently referred for chiropractic for back pain/sciatica, which he had suffered for over 5 years. He received 5 chiropractic appointments and was given reconditioning exercises, for which he was very compliant. By his last appointment, his condition was much improved. Andrew’s SF-36 score changed from 24.33% to 63.55%.*

## Patient Diversity and Health Inequalities

A survey<sup>22</sup> of complementary health provision in England found that 43% of PCTs provide access to complementary medicine either wholly or largely free at the point of delivery. Acupuncture, chiropractic, homeopathy, osteopathy, therapeutic massage and nutritional therapy are the services most commonly provided by PCTs. The Patients' Association has recently called for greater access to complementary medicine on the NHS.<sup>23</sup> 70% of GPs think that some access to complementary medicine should be available on the NHS.<sup>24</sup> Currently, however, spending on complementary medicine represents just 0.5% of the total NHS budget.

Following an uptake study by Impact partner Julie McKay on chiropractic patients in 2004, it was found that patients from NG7 (Impact's intake area) were nearly ten times more likely to have hard evidence of psychosocial issues than those from NG2 (West Bridgford). Their condition was also likely to be twice as chronic, and almost three times the number of consultations were required for treatment to be completed (3.5 compared to 9.6). The effects of deprivation on health are well-documented – here is further evidence that patients living in deprived areas are much more likely to have chronic, complex health issues than those living in more affluent areas.

“Tackling inequality is a central part of the government health policy. Choice and personalised care for everyone are the stepping stones towards a fully-engaged scenario which will provide the most cost-effective solution for the health service in the long run.”<sup>25</sup> The current mixture of predominantly private provision and limited NHS provision creates a two-tier health market in which choice is limited to those who can pay. This creates inequality between socially disadvantaged groups and higher income groups, at odds with the Government's commitment to combat health inequalities. The Government has pledged to attack this kind of two-tier healthcare in the country by providing access and choice for everyone. In some poorer countries, such as Cuba, the strategic use of complementary healthcare in health policy has delivered ‘first world’ results.

Since Impact opened, our work has been recognised by Nottingham City Primary Care Trust as effective in tackling health inequalities in the Radford/Hyson Green area. Impact is committed to equality of access, and a breakdown of the diversity of our patients demonstrates that we have been able to provide access to patients from all sections of the community - 48% of our patients are from BME (Black and Minority Ethnic) communities. The NDC resident BME population is 28.4%, so our service is accessed by proportionally more people from BME communities. Interpreters are provided for all patients who do not speak English, so we have been able to work with asylum seekers and refugees, all of whom are dealing with physical and psychological trauma.

***“Impact is an essential part of this (health) clinic and this community. It is one of the things that keeps me living in this area... There is a need for this service in the whole of Nottingham and nationwide”***

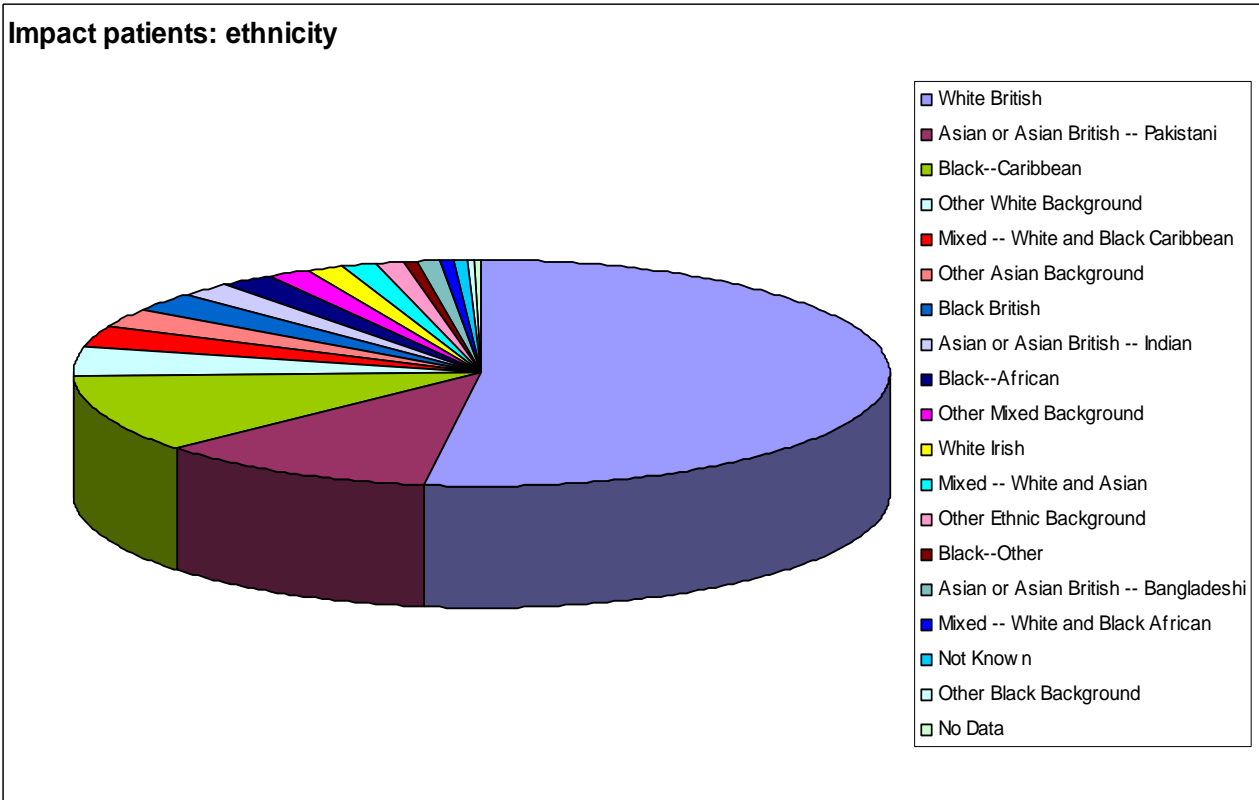
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<sup>22</sup> *Clinical Governance for Complementary and Alternative Medicine in Primary Care*, Final Report to the Department of Health and the King's Fund, University of Westminster' 2004

<sup>23</sup> BBC News Online 16.08.05

<sup>24</sup> GP magazine, November 2004

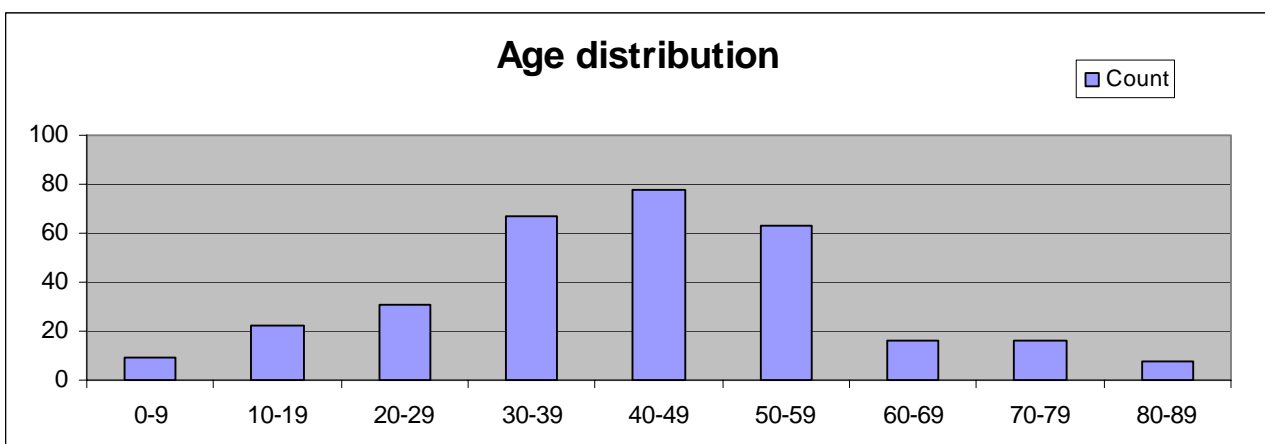
<sup>25</sup> Fellows' Associates, *Public Health, Private Wealth: Complementary healthcare and the NHS*



38% of our patients are men. As Roger Williams, Nottingham City PCT comments, “You know it’s working when 38% of your patients are men. Men don’t normally get too bothered about their health, but with this they turn out. The feedback has been very good indeed and there are people using Impact who would not usually access the normal service. It’s extremely impressive.”<sup>26</sup>

Whilst 8% of our patients are registered disabled, 30% consider themselves to have a disability, including mobility problems.

The age distribution of our patients is very wide, as illustrated below:



<sup>26</sup> Communities Today magazine, February 2005

***“I have been receiving treatment from Impact in the form of homeopathy and chiropractic. For me this is an essential part of me having a positive attitude and action towards my health and well being both mentally and physically. The combination of these treatments work well for me, there is no way I would be able to afford the combination of treatments.”***

### **The impact of our work on primary care**

During 2005 the Impact team, together with Dr Shona Kelly, carefully evaluated the impact of our work on primary and secondary care, specifically reductions in prescribed medication, reduced GP attendance and reduced referrals to secondary care.<sup>27</sup> The findings from this work were as follows:

- Of the 69% of patients who were taking prescribed medication when they began treatment at Impact, 87% reported either discontinuing or reducing their medication on completion of treatment
- The medication reduced or discontinued includes analgesics, antidepressants, sleeping tablets, blood pressure medication, antihistamines, asthma inhalers, epilepsy control drugs, antacids and beta blockers
- 76% of patients who have completed treatment report going to see their GP less than before they came to Impact; only 6 patients reported that they continue to see their GP regularly. “Many of Impact’s patients were frequent attenders to GP practices; some because they had many chronic physical conditions and others because of mental health issues...many frequent attenders decreased their burden on GP services”
- 89% of those who no longer see their GP so frequently attribute the change to the treatment they have received at Impact
- Out of 10 patients who had been referred for secondary care, 6 no longer need further intervention, with patients no longer requiring physiotherapy, orthopaedic surgery or hysterectomy.

Dr Kelly commented on her findings overall, “In general patients in this project reported decreased use of Government healthcare services and improved well-being. Examination of their medical records confirmed that most used less conventional healthcare although we could not demonstrate that they had reduced their medications...Virtually all patients felt that they used fewer GP services since starting with Impact and, although the healthcare utilisation data does not show as big an effect, it does concur with the trend towards less use of GP practice services. The patients may also have been incorporating use of other NHS services into their reply and as we could not collect this information we have likely underestimated the reduction in the use of NHS services.” Impact’s services are an effective example of ‘upstream working’, which result in reduced demand on other primary and secondary care resources, and enhance self-responsibility and independence in patients.

Data on changes in medication use, GP attendance rates and take-up of secondary care is collected from each patient who completes treatment, and is available for further review.

***“This service is helpful, the staff are friendly and I feel more confident in getting better than I was before. It’s good to be able to get some treatment without side effects”***

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<sup>27</sup> See Impact’s 2005 Annual Report for full details: [www.impact-imp.co.uk](http://www.impact-imp.co.uk)

## The Impact team

Impact Integrated Medicine Partnership is a social enterprise, and was set up in response to requests from residents in Radford and Hyson Green for access to complementary and alternative medicine (CAM), which in Nottingham is not generally available in primary care.<sup>28</sup> Currently funded by New Deal for Communities<sup>29</sup> till December 2006, the project opened in February 2004.

Impact's three partners combine considerable clinical skills and experience with a commitment to providing an accessible service with high standards of clinical governance.

**Heather Fitton MBAcC DipAc** is a member of the British Acupuncture Council, and has been in practice for 13 years.

**Fiona Robertson DSSH RSHom** is a member of the Society of Homeopaths, and qualified as a homeopath 9 years ago.

**Julie McKay BSc DC** is registered with the General Chiropractic Council and has been in practice since 1999.

**Audrian Smith**, our administrator, combines a background in midwifery with her organisational skills and ability to make patients feel at ease.

The Impact partners have been recognised locally and nationally for our skills and expertise in the provision of complementary medicine in primary care, both within our respective professions and in the NHS. Impact is an NHS Live project, and we have presented our work at a variety of conferences, including the National Primary Care Development Team's mental health collaborative, Nottingham's Health Inequalities Conference, Trent Improvement Network's Inspiring Success 2006, and the Alternative and Complementary Health Research Network 2006 conference. Working with Nottingham University Medical School, we provide input for second year medical students on CAM, and are conducting training on a GP refresher course in September 2006. We regularly contribute to the development of integrated care via national organisations, such as iCAM.<sup>30</sup>

Impact Integrated Medicine Partnership is a company limited by guarantee; Fiona Robertson, Heather Fitton and Julie McKay are the co-directors. Impact has a steering group which meets regularly to discuss relevant issues and advise the staff team; membership includes Nottingham City Primary Care Trust, New Deal for Communities, patient representation and the complementary medicine sector.

***“Of course, conventional health care provides the spine of the NHS. But complementary treatment is increasingly adding valuable benefits and choices for people...The integrated approach is patient-centred, may be more effective and could save precious health service resources...It is a question of being open-minded about each others' abilities and perspectives. Ultimately this will be driven by the patients. We all want the best of all worlds, combining the benefits of both complementary and conventional NHS approaches to health”<sup>31</sup>***

<sup>28</sup> A University of Westminster survey has estimated that over 40% of PCTs have dedicated primary care accessed CAM (complementary and alternative medicine) services, and almost 60% of those are available to the whole PCT population

<sup>29</sup> A government regeneration programme managed by the Office of the Deputy Prime Minister

<sup>30</sup> Based at the School of Integrated Health, Westminster University

<sup>31</sup> Peter Hain, whilst Secretary of State for Wales, 2004 –

[www.alliance-natural-health.org/index.cfm?action=news&ID=103](http://www.alliance-natural-health.org/index.cfm?action=news&ID=103)

## **Acknowledgments**

I would like to thank the following people for their invaluable assistance in the preparation of this document:

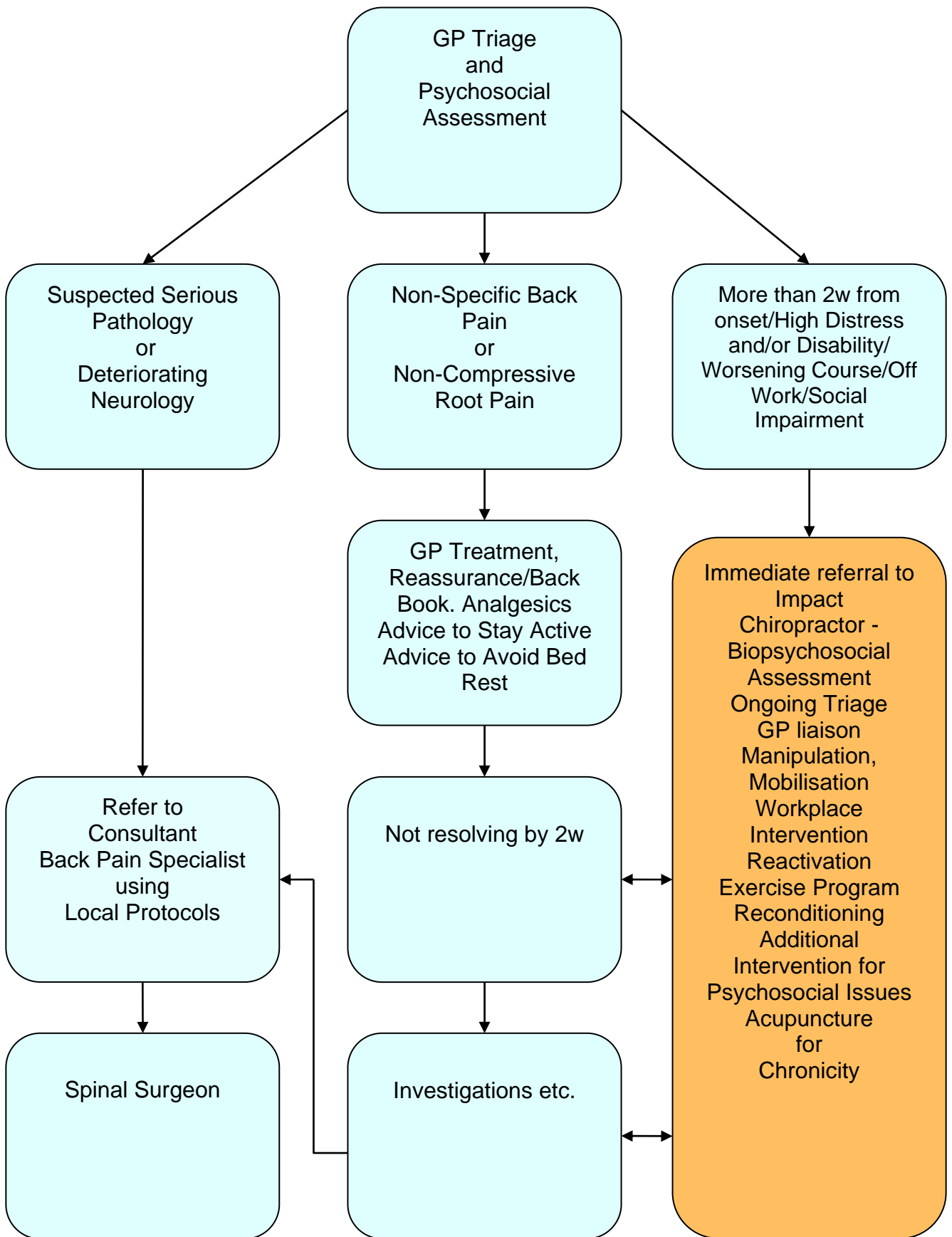
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Dr Rashbal Ghattaora

Many thanks also go to all the Impact patients who have participated so willingly in our evaluation and research.

Fiona Robertson  
Co-director

2006

**Appendix 1: Suggested Primary Care Back Pain Pathway**



**Appendix 2: Suggested Primary Care Musculoskeletal Disorders Pathway**

