

#### **Institution:** Plymouth Marjon University (PMU)

Unit of Assessment: 24			
<b>Title of case study:</b> Marjon Health & Wellbeing: A new approach to enable the self-			
management and prevention of long-term conditions in the community.			
Period when the underpinning research was undertaken: 2010-2020			
Details of staff conducting the underpinning research from the submitting unit:			
Name(s):	Role(s) (e.g. job title):	Period(s) employed by	

		submitting HEI:
Professor Saul Bloxham	Director of School	2003 - present
Associate Prof Kass Gibson	Senior Lecturer	2014 - present
Dr Joe Layden	Senior Lecturer	2008 - present
Mr Ben Jane	Senior Lecturer	2008 - present

# Period when the claimed impact occurred: 2013-2020

## Is this case study continued from a case study submitted in 2014? No

#### **1.** Summary of the impact

Research by Marjon University's Life-Long Health and Wellbeing Research Group has proposed a new approach to address Long Term Conditions (LTCs), which has been used by health providers and in workplaces across Devon and Cornwall. This research has led to the following impact:

1. The introduction of new services in health care and work-based health programmes.

2. Improved health outcomes for persons living with LTCs.

## 2. Underpinning research

The burden of LTCs on both patient quality of life and the NHS accounts for an estimated 70% of the NHS budget. The NHS Five Year Forward View (2014) and The NHS Long Term Plan (2019) highlight the need to improve provision for out of hospital care within the community, to design approaches that enable people to have more control over their health and more personalised care. Our research supports achievement of these aims and the need for new approaches to physical activity health promotion that move beyond 'exercise is medicine' to a person-centred holistic approach. Our findings show the need for sustainable preventative and treatment approaches that promote individual empowerment to support the management of LTCs in the community.

a) The need for new holistic approaches to consider social context: The key findings of our ethnographic studies of researchers, service providers and users, established exercise interventions are less effective when their design does not consider social context and interaction (3.1). Our analysis of the convergence of promotion of physical activity and public health, through a novel theorization, highlighted the importance of contextualising healthy lifestyle behaviour into an individual's own set of circumstances and wider social determinants of health (3.2). To better address social context in interventions, we proposed supporting lifestyle behaviour change through person-centred models and understanding interactions between pathophysiology, individual circumstance, and social factors (3.1, 3.2). For example, our research analysing the use of wearable technology for improving the activity levels of persons with LTCs, determined that holistic, multi-component approaches are effective when supporting person-centred health (3.4, 3.5). Our research identified the need for new approaches of health promotion to move beyond exercise by embedding physical activity health promotion in individual circumstances.

b) Development of our health and wellbeing approach: From this research we developed our Marjon Health and Wellbeing (MHW) approach. This comprises of a small group-based, selfmanagement and person-centred care approach that embeds meaningful physical activity within holistic practice by drawing attention to individual circumstances and context (3.3, 3.5, 3.6). As well as physical activity, topics include (but are not limited to) nutrition, sleep, hygiene and relaxation techniques. Our findings show our approach promotes holistic practice that enhances wellbeing by empowering people not just to realise benefits of increased physical activity, but also to be successful in their own health improvements and taking control of their recovery process (3.3, 3.5, 3.6). We shed the dysfunction narrative and support people through an ongoing process of information exchange and group reflection, supporting people to experiment while maintaining



a greater sense of control (3.3, 3.5, 3.6). Crucially, the MHW approach facilitates bespoke programme design for specific conditions and populations (as detailed in Section 4).

c) The MHW approach enables significant health and wellbeing benefits for patients: Qualitative and quantitative research findings demonstrate the MHW approach is capable of supporting people with LTCs (3.3 - 3.6). Specifically, we show improved health outcomes for persons with unresolving back pain with significant improvements in aerobic fitness (15%), increased physical activity (57%) and a reduction in perceived disability (19%). Fitness improvements, reduction in body fat, and reduction in disability were sustained 6-months post intervention (3.5). People with cancer reported that internal and external support systems enabled programme adherence and increased levels of physical activity, as mediated by the MHW approach (3.6).

# 3. References to the research

**3.1** Williams, O. and Gibson, K. (2018). The Poisoned Elixir: Inactivity, Inequality and Intervention. *Qualitative Research in Sport, Exercise and Health, 10(4): 421-428.* DOI: <u>10.1080/2159676X.2017.1346698</u>

**3.2** Gibson, K. and Malcolm, D. (2019) Towards an Eliasian Sociology of Health and Medicine: The Case of Physical Activity Health Promotion. *Social Theory and Health Online First, 18:* 66-85. DOI: <u>10.1057/s41285-019-00098-w</u>

**3.3** Bloxham, S. Barter, P. Scragg, S. Peers, C. Jane, B. and Layden, J. (2016) Personcentred, physical activity for patients with low back pain: piloting service delivery. *Healthcare*, 4 (2): 28. DOI: <u>10.3390/healthcare4020028</u>

**3.4** Gordon, R. and Bloxham, S. (2017) Influence of the Fitbit Charge HR on physical activity, aerobic fitness and disability in non-specific back pain participants. *The Journal of Sports Medicine and Physical Fitness*, 57(12): 1669-1675. DOI: <u>10.23736/S0022-</u> 4707.17.06688-9

**3.5** Bloxham, S. Layden, J. Jane, B. Peers, C and Scragg, S. (2020) *The longitudinal effects of a physical activity programme on the physical fitness and disability of back pain patients: a service evaluation. Journal of Back and Musculoskeletal Rehabilitation, 33(1): 7-13.* DOI: <u>10.3233/BMR-170856</u>

**3.6** Queen, M., Bloxham, S. and Brown, P. (2017) Support systems for mixed-site recovering cancer patients to sustain physical activity: a qualitative study. *European Journal for Person Centered Healthcare, 5(1): 102-108.* DOI: <u>10.5750/ejpch.v5i1.1227</u>

Two reviewers, independent of and external to Plymouth Marjon University, have verified that the underpinning research is at least 2\* quality in terms of originality, significance and rigour.

## 4. Details of the impact

**Overview:** Our research has had significant impacts in Devon and Cornwall. This case study focuses specifically on how the MHW approach has been operationalised in different contexts and for different conditions to i) introduce new services within health care and work-based health programmes, and ii) improve health outcomes for persons living with LTCs. Our research has supported the service provision of a range of health care providers, including Sentinel Health and Wellbeing (2013 - present); Macmillan Mustard Tree Centre (2014 - present); Livewell South West (2017 - present); Evalesco Consulting and Devon Doctors (2018 - present). Our regional workforce health and wellbeing programmes have impacted on Devon and Cornwall Police Force (2017 - present) and the Environment Agency (2013 - present). Students are integral to programme delivery and future impact is extending to university student education.

The pathways to impact have occurred primarily through dialogue with each organisation to secure placement and real-world learning opportunities for students, and membership of various professional networks. Examples include the Plymouth Physical Activity Network, Plymouth Healthy Lives for Healthy Weight Strategy Group, and Plymouth Business Network. Organisations in the South West are applying the MHW approach (small group, person centred, self-management) to their services as described in the following examples:

Sentinel Healthcare [5.1] corroborate that our research has: improved options for treatment and rehabilitation of back pain; guided improvements in service provision; enabled long-term empowerment of patients; and reduced pressure on frontline services. "One of our long

#### Impact case study (REF3)



established and successful services, which supports patients requiring back pain management and rehabilitation, was developed, delivered and based on the research and expertise provided by Plymouth Marjon University." Sentinel highlight that "we are the only back pain service in the UK offering multi-disciplinary support of this type, supporting both prevention and recovery", which has directly benefitted over 1000 back pain patients. Sentinel describe the reach goes far beyond the individual, "The behaviour techniques used in Marjon's approach have motivated and empowered individuals to maintain adherence to exercise and healthy lifestyles within their own circumstances, beyond the duration of the service. In doing so our service reduces both primary and secondary care referrals reducing cost and strain on front line services. This fills a gap within current NHS rehabilitation provision." Before our collaboration, Sentinel were searching for "different approaches and alternative methods for caring for and supporting our patients holistically." Sentinel emphasise the unique holistic, person-centred focus, "Marjon's research has empowered patients in their own self-management process, providing support for them to make lifestyle changes, across a wide range of areas in the patient's life. This initiates behaviour change which we have observed ripples beyond the patient, to the sphere around them, their peers, fellow patients and their family."

**Feedback from back pain programme participants [5.2] indicates improved holistic understanding of health and wellbeing**. For example, one client reflected, "I feel really well, and I think that's due to this course and making me understand a lot more about pain, about relaxation, about diet as well, and I feel confident about exercising." Another client shared with us how the programme has supported self-management, "Mostly before I have been given painkillers and sent to the physiotherapists who say they can't do much, just keep taking the painkillers. Now [this programme] has opened up a whole new avenue of how to deal with pain, using different gym equipment... boxing... things I would never have dreamed of doing before. It has opened up a whole new aspect of dealing with it and coping with it [back pain]." A client also reported, "I've found the group very, very beneficial. It has changed my whole outlook on how to treat my back pain and it has been really good at lessening my pain."

The Mustard Tree Macmillan Cancer Centre [MTMCC, 5.3] confirms that our research assisted the charity's "achievement of the 2019 NHS Long Term Plan aims to: improve provision of out of hospital care; give people more control over their health; and to devise evidence-based innovative models with local organisations". MTMCC provide access to rehabilitative and prehabilitative programmes that use the MHW approach to improve the care of people diagnosed with cancer. They aim to empower the participants in their own circumstance, irrespective of age, cancer stage or type of treatment. Programmes are delivered by Marjon staff and students helping over 500 people. The MTMCC state that these have "enabled the creation of a service which is unique within Devon and Cornwall NHS provision, for patients diagnosed with cancer." The MTMCC reported the person-centred and contextualised approach improved patient physical health and mental strategies, aiding rehabilitation, "Patients participating in Marjon's programmes are in a better physical and mental condition than those who have not engaged, patients have reported that their ability to cope with treatment, including recovery from surgery, is improved." The scope of impact is described by MTMCC as, "Patient benefits are wide ranging and include improved quality of life, social interaction as well as reduced negative effects of treatment and anxiety levels." MTMCC identified it has specific benefits to cancer patients "Treatment can be very isolating and lonely...patients have reported feeling cared for and supported by this personalised approach." The MTMCC report that as the programmes are accessed by people for free, long-term prospects are improved especially for patients struggling financially, "This removes financial barriers for patients when adopting a healthy lifestyle and therefore decreases the risk of secondary cancer for all." Additionally, the development of an extended network "has been particularly successful with elderly people, encouraging them to open up, providing support."

NHS Livewell South West [LSW, 5.4] report "the impact of Marjon's research has supported us in achieving of our aims of reducing health inequalities across the city, improving people's quality of life and wellbeing, reducing pressure on front line primary care and to support people in their community." LSW, identify the significant impact



our research has had in i) securing funding for LSW to deliver new effective services within the community, ii) advising on the delivery approach of LSW services. LSW report the farreaching benefits of programmes based on the MHW approach for patients with specific LTCs, for example "Informed by Marjon's research we have redesigned our Long-Term Conditions Service (LTC) to support those people recently diagnosed and reduce the pressure on primary care. After a successful pilot programme, the CCG (clinical commissioning group) has funded us to provide integrated care in the community, which is now available as part of the Plymouth Public Health commissioned 'One You Programme' that was offered to Plymouth residents and those on the Diabetic Education Programme. This provides free advice and support to people in Devon and Cornwall for improving their health and wellbeing."

In addition, "Informed by Marjon's Research, we developed a new integrated care community service for the management of leg ulcers (our lower limb service). Marjon helped us move the service into a community, non-medical setting and provide the patients with group lifestyle and wellbeing classes that focused on person-centred care. This environment has been especially liberating for our elderly patients who, despite having healed, did not want to leave the service given the high levels of enjoyment. Our routine assessments on the impact of the service, conducted by nurses, indicated 80% accelerated healing rates in people. For the last three years our wellbeing classes have supported over a thousand people each year and people have reported high levels of satisfaction in measures of quality of life and functional capacity." These programmes received a £635,000 contract from the NHS Devon CCG and have been recognised regionally and nationally in terms of their novel approach, "As a result of working with Marjon, the CCG awarded us the contract to deliver the lower limb service for Plymouth, West Devon and South Ham areas. The success of our new service was also showcased at the National HSJ award ceremony and shortlisted for an innovation award in specialist services redesign." The breadth of impact of MHW research is also indicated in the development of programmes for patients with other LTCs and staff development, "Other examples of our successful collaboration with Marjon include our new community located Fibromyalgia service, only previously available as a Tier Three provision in hospitals. Marjon expertise has contributed to the training of our Health Improvement Practitioners to effectively deliver these for many hundreds of people diagnosed with Fibromyalgia."

Evalesco Consulting (5.5) corroborate that using our MHW approach in programme delivery has led to improvements in GP health and wellbeing; practice efficiency and effectiveness; reduced pressure on primary care services; increased patient satisfaction and professional wellbeing. Our research was identified by Evalesco Consulting and Devon Doctors as "essential...in securing £74,553 worth of competitive funding from The Health Foundation in 2018, to find innovative ways of delivering primary care for patients with chronic pain." Our research significantly altered the traditional model of provision for Devon Doctors, "The current medical model of primary care typically only provides GPs ten minutes to dedicate to their patients. Our Shared Medical Appointments model, based on Marjon's research approach, supported an inclusive 2-hour session that enabled continuity for care for patients beyond their condition." Furthermore, Evalesco elucidate the uniqueness and value of this approach "To my knowledge there are no other Shared Medical Appointment models of care in the NHS or beyond that blend medical and nonmedical expertise in this way. Without Marjon's research expertise for managing groups of patients that enabled peer support and patient empowerment, this project could not have been undertaken." This change in practice had far reaching impacts, "Marjon's expertise enabled us to design relevant and appropriate outcome measures which showed a reduction in one-to-one GP appointments, reduced use of other healthcare services such as out-of-hours GP service, reduction in medication queries, reduced use of pain medication and enhanced satisfaction for those receiving and delivering care." Evalesco Consulting explain the long-term potential of this collaboration, "We are exploring ways to implement this model more widely across primary care with our NHS partners."

Devon and Cornwall Police testify [5.6] how the impact of our research has improved health and wellbeing for Police officers and supported their aim to put officer health and wellbeing



at the forefront of modern policing. We have influenced the design and implementation of a new work-based health programme for police. The Detective Sergeant holding the 'Health and Wellbeing' role for Plymouth states "Four hundred officers have attended since 2018. We have also trained 32 Police Personal trainers to deliver and apply Marjon approach to health and wellbeing for our workforce" and "The infographics were shared online through the Police Intranet system, allowing officers from all over Devon and Cornwall and Dorset to access the expert fitness, dietary, sleep, & wellbeing advice. Posters were made from these infographics and placed in all 32 Police Gyms across the region". They also state "The collaboration with Marjon University has produced some startling results allowing our senior management team to better understand what specific wellness support is required for each team. Some of the key findings included 86% of frontline officers were experiencing MSK pain in work; 52% had never had a health check prior to the visit; 93% said the visit improved how supported they feel by the organization." The impact of our MHW approach "has been seen as leading the way for wellbeing within our Police Force. The Deputy Chief Constable [name retracted] recognized the work as exciting and showed real innovation."

The Environment Agency (EA) testify [5.7] how implementing the MHW approach has improved the health, morale and work attendance of employees. The EA states "The reach and impact of the Marjon health and wellbeing approach has extended to all of our depots in Devon and Cornwall with increased morale, reduced sickness absence and improved productivity of our staff has gained interest from National Directors and has potential to be adopted by the Environment Agency Nationwide." The EA reflects that the MHW approach has improved practice, "We were aware that our previous wellbeing at work provision was limited to one off, single issue assessments. In comparison, the Marjon programme is novel in that it provides a quarterly stop gap to consider how to empower the workforce to self-manage." Furthermore, the EA describe how the MHW approach support person-centred, holistic care, "The Marjon programme is educational but also collaborative and tailors the package to suit the needs of the staff at any given time. The attendance at the programme provides a mini community where the staff now are encouraged to reflect on their behaviours, experiment with some content they are prescribed, and share their progress and experiences with staff and peers alike. It is by nature a person centred, holistic approach that can also flex to each participants needs."

**Future Direction: The impact of our research in health and wellbeing is extending to University student education.** The Physiological Society and Guild HE, in 2019, published a case study of our work entitled "*Patients benefit from student-led activities*" in their publication "*Sport and Exercise Science Education: Impact on the UK Economy*" [5.8, p.34]. In March 2020, we secured a £250,000 grant, awarded by Research England and Office for Students (OFS) [5.9] from their Higher Education Innovation Fund to understand the impact on student learning as they experience programmes that are using the MHW approach. LSW state, "We have also employed Marjon graduates from their Health and Wellbeing degrees and have several regularly on placement with us, strengthening our ability to deploy person-centred health care and promote behaviour change in the community." Plymouth Peninsular Medical School students are offered 2-week Special Study Units to observe how our approach can effectively deliver person-centred care and complement biomedical approaches.

- 5. Sources to corroborate the impact (indicative maximum of 10 references)
  - 5.1 Testimony from Strategic Director of Sentinel Health & Wellbeing
  - 5.2 Transcribed Testimonial feedback from patients located on the MHW website https://www.marjon.ac.uk/mhw/info-for-patients/back-gym/
  - 5.3 Testimony from Director of Mustard Tree Macmillan Centre
  - 5.4 Testimony from NHS Livewell South West
  - 5.5 Testimony from Managing Director of Evalesico Consulting
  - 5.6 Testimony from Devon and Cornwall Police Force
  - 5.7 Testimony from the Environment Agency
  - 5.8 Publication of The Physiological Society and Guild HE
  - 5.9 Research England & OFS award letter for Student Engagement in Knowledge Exchange