CORONAVIRUS DISEASE 2019 (COVID-19) IS THE BIGGEST CHALLENGE THE HEALTH AND CARE SYSTEM HAS FACED IN LIVING MEMORY AND IS HAVING A PROFOUND EFFECT ON THE LIVES OF US ALL.

THE FOCUS OF THIS PAPER IS TO PROVIDE GUIDANCE FOR PRIMARY AND COMMUNITY CARE SERVICES TO UNDERSTAND THE REHABILITATION NEEDS OF THOSE VULNERABLE GROUPS IDENTIFIED AS HAVING A HIGHER RISK OF THE IMPACTS OF COVID-19, BY DESCRIBING THEIR TYPICAL EXPECTED HEALTH CARE NEEDS.

THIS GUIDANCE APPLIES TO ALL CITIZENS IN WALES. IT PROVIDES EXAMPLES OF RECOMMENDED AND GOOD PRACTICE, ENSURING THAT PRIMARY AND COMMUNITY CARE SERVICES ARE AWARE OF THE ASSOCIATED IMPACTS, RECOMMENDED RESPONSES AND REQUIRED INTERVENTIONS. THIS WILL ENABLE THEM TO ASSESS THEIR REHABILITATION SERVICES AND DEVELOP PLANS THAT WILL MITIGATE THE EFFECTS OF THE PANDEMIC.

THIS DOCUMENT IS THE FIRST IN A SERIES FROM THE STRATEGIC PROGRAMME FOR PRIMARY CARE WITH A FOCUS ON A PREVENTATIVE, PRO-ACTIVE WHOLE SYSTEM APPROACH TO THE PROVISION OF REHABILITATION, WHICH PRIORITIZES SERVICES AT OR CLOSE TO HOME AND ENABLES CITIZENS THROUGHOUT WALES TO LIVE AS INDEPENDENTLY AS POSSIBLE FOR AS LONG AS POSSIBLE.


FURTHERMORE IT IS DESIGNED TO BUILD ON THE REHABILITATION FRAMEWORK’S UNDERPINNING REHABILITATION GUIDANCE THAT PROPOSES A STEPPED CARE REHABILITATION MODEL. WHICH CAN BE MAPPED ONTO THE SIX-COMPONENT MODEL OF THE WHOLE SYSTEM APPROACH DESCRIBED IN THE NATIONAL CLINICAL FRAMEWORK (NCF), AND APPLIED ACROSS THE 4 IDENTIFIED POPULATION GROUPS:
Importantly this framework of guidance is all informed by the principles of:

- [A Healthier Wales](#), the plan for Health and Social Care (2018)
- The [Primary Care Model](#) for Wales (Primary Care One, 2019)
- The [Allied Health Professions (AHP) Framework](#): Looking Forward Together (Welsh Government, 2019)

## COVID-19: VULNERABLE & HIGH RISK GROUPS

COVID-19 is often [more severe in people who are](#) older than 60 years or who have pre-existing health conditions like lung or heart disease, diabetes, or conditions that affect their immune system. This includes those groups where immunosuppressants are utilized to support the management of chronic disease.

Emerging evidence of the key symptoms experienced by people who have been directly or indirectly affected by COVID-19 indicates that the [following elements of rehabilitation](#) are likely to be required to enable them to return to their optimal level of independence and wellbeing:

- Fatigue management (pacing, sleep hygiene, mindfulness techniques, graded exercise programmes)
- Nutrition and hydration support to improve strength, function and independence
- Interventions to support anxiety and depression management
- Respiratory rehabilitation (managing breathlessness, increasing exercise tolerance and levels of activity)
- Physical rehabilitation to optimize functionality
- Interventions to improve swallowing and communication
- Support for people to stay well and manage their own conditions better (shared decision making, education, self-management programmes)

Rehabilitation needs will depend on the severity and complexity of symptoms experienced, but there will also be the complexity of secondary complications due to individuals’ co-morbidities and their socio-economic situations.
Significantly, the impacts of COVID-19 have replicated existing health inequalities and, in some cases, have increased them, with a review of deaths from COVID-19 demonstrating a correlation in terms of mortality.

The papers linked above have informed the identification of the following vulnerable and high-risk groups, separated into sections describing their typical expected health and care needs. Examples of recommended and good practice to mitigate the impacts of the pandemic are included below.

**Deprivation**

The wider determinants of health are a diverse range of economic, environmental and social factors that influence people’s mental and physical health.

Health inequalities are essentially about differences in the status of people’s health. The term is widely used to refer to differences in access to and delivery of the care that people receive, and the opportunities that they have to lead healthy lives, both of which can affect their health status.

Health inequalities are underpinned by the circumstances or factors affecting the way in which people are born, grow, live, work and age. These broad social and economic circumstances, which together can influence the quality of the health of the population, are recognized social determinants of health.

Some key social determinants of health are our housing; our education and employment opportunities; our social networks; where we live, and the extent it facilitates exercise, a good diet and social connection.

The Marmot Review is a timely reminder of the continuing social and economic cost of health inequalities over the last decade. Health inequalities have widened and significantly been accompanied by an increase in both child and adult obesity, with rates increasing most among those from lower socio-economic groups.

Notably lower socio-economic groups tend to have a higher prevalence of risky health behaviours, worse access to care and less opportunity to lead healthy lives.

Increased prevalence of obesity and pre-existing disease, in addition to differences in occupational exposure to infection and household density, along with the current economic and financial constraints affecting access to affordable good nutrition, exacerbates the impacts of COVID-19.

**Obesity**

In Wales obesity is a leading public health concern, with almost a quarter of adults self-reporting to be obese, while one in eight reception age children are obese.

Obesity affects quality of life by increasing the risk of developing a wide range of diseases including musculoskeletal conditions, type 2 diabetes, hypertension, some cancers, cardiovascular diseases including heart disease and stroke, liver disease, Chronic Obstructive Pulmonary Disease (COPD) and obstructive sleep apnoea.

Obesity can also be associated with poor psychological and emotional health, with people who are obese suffering weight-related stigma, which may damage their employment
prospects, self-esteem and lead to poor mental health, such as feelings of anxiety and depression.

Risks of the impacts of COVID-19 increase progressively with increasing body mass index (BMI) above the healthy weight range. Furthermore, the World Obesity Federation has highlighted shielding measures combined with the fear of contracting the virus will inevitably lead to weight gain.

Opportunities for people to understand that obesity is a complex and multifactorial condition, requiring access to a range of support mechanisms in order to be empowered to begin to manage their weight and to address the individual factors contributing to their obesity, is of paramount importance.

This support includes knowledge and skills in what constitutes a healthy diet to improve self-efficacy and support the adoption of healthier lifestyles. In addition, resilience and coping strategies, managing negative emotions, and support for long-term behaviour change.

**Nutrition Skills for Life™** is a programme that provides training to build capacity within the health and social care workforce to support diet and lifestyle change. By training those who work closely with, and understand the needs of local people, the service supports communities across Wales to develop the knowledge, confidence and skills to access, prepare and eat a healthy balanced diet.

This also underpins the availability of the *Foodwise for Life* programme, an 8-week weight management programme delivered by volunteers trained and supported through a robust quality assurance programme. Utilizing evidence-based approaches to weight management with individuals looking to make positive lifestyle changes to improve health and well-being, contributing towards activity at Levels 1 and 2 of the Welsh Government *All Wales Obesity Pathway*.

Crucially, access to community weight management services such as Foodwise and Level 2/3 of the All Wales Obesity Pathway should be improved via the implementation of the *Healthy Weight: Healthy Wales delivery plan*. This sets out a 10 year strategy to reduce and prevent obesity, which includes specific action in primary care settings. A refreshed set of priorities and delivery plan are imminent to support pathway development against the 8 identified National priority areas.

Additionally the type 2 diabetes *NHS Diabetes Prevention Programme* has been recommended for inclusion in the National Clinical Plan for Wales. Recognizing people with type 2 diabetes should be offered evidenced based structured education for self-management and be offered weight management interventions as appropriate. Based on a successful project in *Afan Valley*, it is a minimum brief intervention model for targeted groups and delivered on an individual or group basis.

**Age**

The risk of impacts of COVID-19 rise because immune systems tend to deteriorate with age and older people are more likely to have chronic conditions.

The elderly are particularly vulnerable to malnutrition, although it is important to note that malnutrition is *not a preserve of the elderly*, with services reporting an increase in the
requirement for support and focus on occupational performance and the development of skills with people with autism due to the associated impact of the pandemic on normal schedules and activities. Malnutrition is a prevalent and often unrecognised issue in the pandemic that reduces the ability to fight infection, impairs wound healing, and increases the risk of frailty by affecting an individual’s ability to function and their associated quality of life. Services are reportedly observing people who are more isolated, less easily able to access food, and are concerned about requesting support.

The restrictions put in place as a result of COVID-19, including access to transport options, have also meant that many older people, particularly those who have been shielding or self-isolating, have been unable to participate in activities that support their health and well-being, or fully engage with their communities. Research demonstrates that social connection improves physical health and psychological well-being, with a lack of social connection being detrimental to health. It is unsurprising that feelings of experiencing a loss of confidence and being fearful about going back out again are being reported.

People with dementia are also more likely to be affected by the impact of separation, with lockdown isolation causing alarming levels of decline for people with dementia who are rapidly losing memory, speech, and the ability to dress and feed themselves, compounding their pre-existing social anxiety, anxiety, stress/distress, sense of belonging and inclusion.

Even mild cognitive difficulties can go unidentified without appropriate cognitive assessment. Affecting an individual’s ability to complete occupations important to them, such as managing finances, driving a car and returning to work, further influencing their societal participation.

It is therefore of paramount importance to work in collaboration with individuals, their family and carers to ensure timely access to the right support is available for people with early stage difficulties to support functional independence with respect to prevention, screening, evaluation and intervention. A proactive anticipatory care approach should be employed wherever possible.

Helpfully, there are further examples of services who provide an asset based self-management focused approach via a direct access model and have responded to emerging primary care demand. They have complemented existing teams by supporting the management of individuals’ exacerbation of chronic conditions due to the pandemic’s impact on lifestyle and performance of occupations.

Notably, services have been deployed into primary care in North Wales to mitigate the impacts of COVID-19, replicating an already successful interdisciplinary team model, also demonstrating efficacy in supporting people to manage any pre-existing health conditions, as well as additional anxiety or other mental health concerns that may have arisen from the stress of the pandemic.

Comorbidities

Pre-existing conditions such as dementia and Alzheimer’s disease, cardiovascular disease, high blood pressure, respiratory disease, diabetes or kidney disease can weaken immune systems and reduce the ability to fight infection.

Timely management of risk and optimizing an individual’s functional ability through education, advice and interventions to prevent or slow onset of further impairments underpins supported
self-management. This is the fundamental basis of rehabilitation programmes such as cardiac and pulmonary rehabilitation, and is crucial to mitigate the impacts of COVID-19 for people with pre-existing health conditions.

This also aligns with the Macmillan principles and guidance for prehabilitation for people with a cancer diagnosis, maximizing their resilience to treatment throughout the cancer journey in the aim of improving outcomes. Certainly, timely access to the continuum of prehabilitation support from the Prehab4Cancer and Recovery programme model through to preparing for treatment has never been more critical due to the clinical impact of COVID-19 on cancer care regarding population 2 (people awaiting paused urgent and routine planned care who have further deterioration in their function).

Significantly, there is also a growing body of evidence of the effectiveness in addressing chronic conditions by integrating wider members of the multi professional team into primary care settings, because of their expertise in health behaviour change, development of healthy habit and routines, and adaptation to changes in life circumstances. There are examples of Community Health and Well-being Teams delivering multi-agency, multi professional anticipatory care at a Cluster level via targeted interdisciplinary team assessment, and the implementation of individual care and support plans.

Digital approaches and resources to deliver support are also developing and will continue to form an integral part of all care pathways for people to support self-management. However, it must also be acknowledged that issues with connectivity in rural Wales and digital poverty and inequity of access, fuelling health inequality, have a significant impact on a person’s ability to access appropriate support and interventions.

Additionally, digital approaches to service delivery are not recommended with disorders in cerebral function, or from indirect effects of extra cerebral disease where cognition and behaviour are affected.

Crucially, user experience along with review of emerging evidence will be key in evaluating the quality and safety of digital transformations in service provision. A blended approach that provides a choice to citizens throughout Wales and mitigates any potential for either creating or exacerbating health inequalities is required.

Occupation

Public-facing occupations increase the risks of an individual’s exposure to infection and the impacts of COVID-19. With increasing demands on services and this additional demand expected to continue for some time, it is important to recognise that if services do not protect the psychological wellbeing of staff, it will not be possible to provide the support our population needs.

The British Psychological Society (BPS) guidance offers practical recommendations for how to respond at individual, management and organizational levels in a coordinated way that is consistent with organizational policies and compassionate care. Notably, as part of its recommendations, it emphasizes the importance of visible leadership and clear communication strategies.

Helpfully, Health Education and Improvement Wales (HEIW) has a leading role in the delivery of the leadership agenda for Wales, embedding a collective and compassionate approach
in the development of the National leadership strategy and underpinning principles. Its Leadership Portal Gwella provides access to a wide range of compassionate leadership and management resources.

Furthermore, the Healthy Working Wales programme helps employers, individuals and a range of health professionals to support people in Wales to stay fit and healthy so they can remain in employment, or return to work following a period of ill health. The Influence and Participation Toolkit developed by Mind Cymru is also a helpful resource to inform and support engagement with people with mental health problems in a meaningful way.

Principally, therapeutically informed employment support for those experiencing the impacts of COVID-19 is required, encompassing physical and mental health, cognitive, communication and functional assessments as appropriate, and should be available to support return to work according to occupational setting.

The value of AHP Health and Work Reports in primary care and the Wellbeing through Work In-Work Support (IWS) service is therefore recognized. These provide personalized self-management and specific advice about workplace modifications for people who have commonplace mental health disorders such as stress, anxiety or depression, or musculoskeletal conditions. These services enable individuals to manage their health conditions more effectively so that they can continue to work, with interventions based on a cognitive behavioural approach. The latter service has also provided a programme of webinars in response to the pandemic.

**Ethnicity**

People from some Black, Asian and minority ethnic groups have a significantly higher risk of the impacts of COVID-19. This is associated with an increased prevalence of living in urban areas, experiencing socio-economic deprivation, and occupational exposure, and is further exacerbated by a higher prevalence of some comorbidities such as hypertension, diabetes and obesity.

An ongoing current study of older adolescents has also suggested those of black or mixed ethnicities are reporting significantly more symptoms of depression.

**Mental Health**

The impacts of COVID-19 on mental health and mental health services will continue long after the physical health crisis subsides, with demand for mental health support increasing and expected to remain high for some time.

Self-isolation, increases in domestic violence and substance abuse, financial insecurity and bereavement will affect people with pre-existing mental health conditions, the wider public and the health and care workforce, with certain demographic groups disproportionately affected.

The effects of lock down and social distancing have exacerbated existing inequalities in mental health for young adults and women, with the largest effects amongst those who already reported lower levels of mental health and those with diagnosed mental health problems. People with a severe mental illness are more likely to be overweight and are therefore more likely to suffer from related physical health conditions, such as diabetes.
Supporting communication during the pandemic is also critical, as an inability to express wishes and to reach out to family and loved ones at this most difficult time can result in withdrawal and depression.

In this next phase of COVID-19, early modelling suggests that a large proportion of the additional demand for mental health services will be for anxiety and depression. Unfortunately, a summary of research into the psychological impact of COVID-19 on children and young people indicates the demand for mental health support following a pandemic and/or social isolation or quarantine significantly increases. An increase in depression and anxiety during and after enforced isolation ends is predicted. Increased feelings of anxiety was also the highest reported symptom in reviewing the impact of COVID-19 on cancer patients in the UK.

Services should offer preventative support and early intervention where possible, and different levels of support that reflect individuals’ different needs will be required. It is important to note mental health services will not be able to meet the demand for mental health support alone.

As a result, the role of everyone across all services and settings is likely to be crucial in restoration and recovery. Everyone will have a role in identifying individuals who may be experiencing emerging mental health difficulties, signposting or referring to appropriate support and advice, and in providing some aspects of early intervention and support. This demand is likely to impact most severely on primary care, which is often the first port of call for people experiencing these feelings and where the majority of depressive and anxiety disorders are managed.

Integrating wider members of the multi professional team into primary care settings can assist with the early identification and support of individuals who are struggling with their mental well-being, preventing the development of more serious mental health issues and reducing demand on secondary services.

Specifically, the use of occupational therapists / mental health practitioners, speech and language therapists, along with social prescribers (as part of the continuum of social prescribing support), will all strengthen the mental health offer in primary care and presents an opportunity to mitigate the impacts and additional demand created by COVID-19 by:

- Upskilling existing staff and creating stronger links with the third sector and secondary care, supporting holistic person-centred assessment and recovery and Talking Therapies.
- Addressing swallow disorders with those people who are at risk due to high doses of anti-psychotic medication, motor speech difficulty, hyper-salivation, poor dentition and increased risk of dysphagia post COVID-19.
- Focussing on self-care and resilience building, addressing cognitive–behavioural challenges and individuals’ occupational limitations, preventing more serious and long-term mental health needs.

Notably, Healthy Prestatyn / Rhuddlan Iach provides support via its First Contact Practitioner model for people with common through to complex mental health presentations directly from the practice triage system. This model promotes good mental health, assists recovery, and helps people achieve personalized goals. The Primary Care Liaison Service (PCLS) is an example of a mental health service delivered in primary care that supports people with a common mental health disorder. Designed to assist in the management of complex cases by primary care, it improves communication between the tiered elements of mental health and well-being services by providing specialist mental health direction and quickly identifying the most effective recovery pathway, or community-based resource.
Certainly providing more coherent, integrated mental health care for both the wider population and those with an existing mental illness presents opportunities to implement more place-based services. This should be in partnership with third sector organizations, education and housing providers, social care, and employment support services, enabling a more holistic offer that mitigates the impacts of COVID-19 and supports people to recover and stay well.

**SUMMARY**

This paper is designed to support understanding of and planning for the predicted rehabilitation needs of those vulnerable groups identified as having a higher risk of the impacts of COVID-19 by describing their typical expected health care needs.

The key elements of rehabilitation likely to be required by the 4 main identified populations groups, who have been directly or indirectly affected by COVID-19, have been outlined. This paper has focussed on the support required by those individuals identified as vulnerable or at high risk due to individuals’ comorbidities, socio-economic situations, weight, age, ethnicity, occupational exposure, weight and mental health.

This paper recognizes that there is a wide range of rehabilitation skills and services in place across primary and community care in Wales. Examples provided in the body of this paper to mitigate the impacts of the pandemic are designed for use in conjunction with local clinical expertise.

With no current dataset capturing existing demand for or the impact of rehabilitation services across Wales, the demand for these groups is difficult to foretell. Therefore, utilizing the Welsh Government’s published Rehabilitation Evaluation Framework and its developing Modelling Resource is recommended in order to meet the anticipated additional demand for rehabilitation services caused by the impacts of COVID-19.