

Guide

for treating older people post COVID-19 in hospital, post-acute care and the community

June 2020

Introduction

Due to the relatively short timeframe of COVID-19 there is limited evidence available specific to the virus. To date, the primary focus internationally has been on the acute phase of preservation of life and the specialist respiratory care required for this patient group. We are now entering the rehabilitation phase of this pandemic, for which there is very limited evidence or knowledge around the specific rehabilitation needs or longterm care needs of these survivors. The ISCP Chartered Physiotherapists in Respiratory Care (CPRC) recently published "Rehabilitation quide for physiotherapists treating patients with COVID-19 in hospital" which was endorsed by the Chartered Physiotherapists in Neurology and Gerontology (CPNG). Older people have been disproportionately impacted and are vulnerable to complex and adverse outcomes when hospitalised. Older people present the greatest risk of mortality for COVID-19 with an odds ratio per year increase of 1.10 (Zhou et. al 2020). Therefore, the Chartered Physiotherapists in Neurology and Gerontology (CPNG) identified a need for a more specific document focused on the needs of older people to guide physiotherapists involved in their care.

This document focuses specifically on the management of older people and their recovery pathway post COVID-19. For the purpose of this document an older person will be defined as anyone over 65 years. This document draws on existing evidence that can guide clinicians on likely presentations of this group, potential complications and best practice standards when working with older people. The document is divided into three sections: initial presentation and identification of COVID-19 in older people including acute hospital management; post-acute rehabilitation and community based management.

For the purpose of this document the pathway of care for older people is illustrated from the acute initial presentation, progressing to post-acute care and finally community based management. Regardless of whether the older person is living at home at the time of developing COVID-19 or a resident in nursing home care, the physiotherapy management should follow the same pathway. Often older people may not be admitted from residential care to acute hospitals and may be managed within their own care setting. In these cases it is recommended that

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physiotherapists on initial contact with older people living in residential care consider which "phase" the person is in whether it is the acute, post-acute or community "home based" phase. As residential care is the home of these individuals it is important that they are supported to regain optimal function and manage the potential longer term effects of COVID-19 e.g. fatigue, breathlessness, anxiety. As there has been a high incidence of COVID-19 in Irish residential care, there is a significant role for physiotherapists in the recovery and rehabilitation of this group.

Disclaimer:

This guide has been developed for reference and guidance by the Irish Society of Chartered Physiotherapists' (ISCP) Clinical Interest Group in Neurology and Gerontology (CPNG). It is based on the available evidence on May 10th 2020. It is expected that all physiotherapists using this document will work within their scope of practice in line with local policies, procedures and guidelines.

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Key Concepts for Physiotherapists working with Older People

"A society is measured by how it cares for its 'older' citizens" (WHO, 2019) The public and media response to COVID-19 has unfortunately yielded some ageist and derogatory language around ageing and older people. Fraser et al. (2020) highlighted how some of the commentary around COVID-19 especially on social media concluded that the value of a life is age dependent and that with increased frailty and comorbidity an individual's perceived value diminishes. A fundamental principle for all physiotherapists working with older people is to fight back against ageism and advocate for the rights and inclusion of older people in all aspects of society including their access to physiotherapy.

Physiology of Ageing

Physiotherapists working with older people with or without COVID-19 should be cognisant of the important differences in physiology and presentation that occur with ageing. These factors affect assessment, investigations and management of the older person. Specific features of illness in older people include the following:

Multi pathology/ multi morbidity:

Older people commonly present with more than one problem and a history of multiple comorbidities. There is often overlay between different morbidities and it can be reasoned that a symptom could have multiple causes. Therefore it is important to apply clinical reasoning and differential diagnoses when formulating a clinical assessment and treatment plan.

Atypical presentation:

Older people commonly present with 'general deterioration' or functional decline. Acute disease is often masked but precipitates functional impairment in other areas. Therefore, atypical presentations such as falls, confusion or reduced mobility are not social problems they are often medical problems in disguise. As discussed above, atypical presentation of COVID-19 should be considered.

Reduced homeostatic reserve:

Ageing is associated with decline in organ function with a reduced ability to compensate. The ability to increase heart rate and cardiac output in critical illness is reduced; renal failure due to medications or illness is more likely; salt and water homeostasis is impaired so electrolyte imbalances are common in unwell older people and frequently, thermoregulation is impaired. In addition, quiescent diseases are often exacerbated by acute illness for example heart failure may occur with pneumonia and old neurological signs may become more pronounced with sepsis.

Impaired immunity:

Older people do not necessarily have a raised white cell count or a fever with infection. Hypothermia may arise instead. CRP can be useful when screening for infection in an older person who is not specifically unwell.

Some clinical findings are not necessarily pathological:

For example: A positive urine dipstick in women, a slightly reduced Pa02 and reduced skin turgor may be normal in older people.

Due to the above factors, older people take longer to recover from illness e.g. pneumonia, fracture, fall, hospital admission. Therefore multi-disciplinary rehabilitation is often required to regain and maintain mobility and activities of daily living (ADLs).

Comprehensive Geriatric Assessment

Comprehensive Geriatric Assessment (CGA) is defined as a "multidimensional interdisciplinary diagnostic process focused on determining a frail older person's medical, psychological and functional capability in order to develop a coordinated and integrated plan for treatment and long term follow up" (Rubenstein 1991).

The National Clinical Programme for Older People (NCPOP) recommends that all older people identified as being frail or at risk of frailty should have a timely CGA performed and documented in their permanent health record (HSE 2012). See <u>Clinical</u> <u>Programme for Older Persons</u>

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The CGA should be implemented by the multidisciplinary team. The specific components of the assessment may vary between individuals but it should cover the four key areas of physical, functional, psychological and social assessment (as outlined in the diagram below and adapted from <u>Clinical Programme for Older</u> Persons)

 Physical assessment Presenting complaint Past medical history Medication reconciliation and review Nutritional status Alcohol Immunisation status Advanced directives 	Functional assessmentActivities of daily livingBalanceMobility
 Psychological assessment Cognition and mood 	 Social assessment Living arrangements Social support Carer stress Financial circumstances Living environment

Why perform a Comprehensive Geriatric Assessment (CGA)?

- It is the gold standard in the management of Frailty and allows the MDT to deliver patient-centred care across a spectrum from anticipatory care planning to rehabilitation.
- It can lead to improved outcomes in:
 - Mortality
 - Cognition
 - Length of stay
 - Readmission to hospital
 - Long-term care use

For further reading please review NCPOP supporting documents on CGA <u>Programme</u> <u>Documents & Resources: Older People Clinical Programme</u>

Phase 1: Initial Presentation and Acute Care

Atypical Presentation of COVID-19 in Older People

Older people appear to be more susceptible to the virus; 75% of known infections are in persons aged 50 and over (Ye Yi et al. 2020). Older people are at particular risk of having severe infection and are at higher risk of dying as a result of the disease. Wu et al. (2020) reported that of the 72,314 cases reported by the Chinese Centre for Disease Control and Prevention, case fatality was 8.0% (312 of 3918) in patients 70-79 years old and 14.8% in patients aged ≥80 years (208 of 1408). Early reports suggest that older people with COVID-19 will likely present atypically (Tay and Howard 2020). It is important that physiotherapists working with older people consider atypical presentations of COVID-19. Furthermore, it is crucial to consider the impact of these presenting symptoms on the older person's outcome and management plan. The below box was created to illustrate the difference in primary presenting complaint in older people with COVID-19.

Typical Presenting Symptoms	Atypical Presentation in Older People
(Guan et al. 2020)	(Tay et al. 2020, Malone et al. 2020)
Fever (44% on admission, 87% during admission)	Delirium
Cough (68% of cases)	Postural Instability / Increased Falls
Diarrhoea (3% of cases)	Low Grade/No Fever

Further Reading:

Atypical Covid-19 presentations in older people – the need for continued vigilance

Delirium

Delirium can be an extremely distressing experience for patients, relatives, staff and other patients. It can result in increased length of stay and increased risk of institutionalisation and dependence in older people. Older people who are diagnosed with delirium have up to 50% mortality at one year (Cole et al. 2003). There is an odds ratio of 8 for developing dementia post delirium (Davis et al. 2012). However despite the adverse consequences of delirium it can remain undiagnosed, Collins et al. (2009)

reported failure to recognise delirium of 32-67%. Hypoactive delirium is even more under-recognised than hyperactive delirium.

Given that older people with underlying COVID-19 may present with delirium it is important that physiotherapists can identify the signs of delirium and are familiar with the recommended interventions. This applies regardless of the setting whether it is in acute care, residential care or in the older person's home. The British Geriatric Society (BGS) recommend enhanced implementation of screening for delirium in at risk groups and also regular assessment for delirium using a recommended tool e.g., the 4AT www.the4AT.com.

 Table below adapted from HSE Document "Recognising Delirium in Older

 Hospitalised Patients" <u>Recognising Delirium in Older Hospitalised Patients</u>

Typical Signs of Hyperactive Delirium	Typical Signs of Hypoactive Delirium
Hyperalert	Lethargy, drowsy, difficult to wake
Restlessness, agitation – picking or pulling at clothes, bed linen, IVs, catheters	Decreased alertness
Labile mood: irritability, fear, anxiety, elation	Lack of interest, Staring into space, apathy
Lack of cooperation with reasonable requests, anger, combativeness, aggression	Sparse or slow speech Reduced mobility/movement

If the physiotherapist suspects delirium they should liaise with the medical professional responsible for the patient's care (Consultant/GP). The NICE Guideline on Delirium (2010) recommends risk factor management, interventions to prevent delirium, daily observations to assess for delirium, diagnosis (specialist clinical assessment) and offers suggestions for treating delirium and offers information and support. <u>NICE</u> <u>Delirium Guideline</u>

Physiotherapists should consider the following when working with a person with delirium:

• Ensure effective communication and reorientation

- Explain where the person is, who they are, what your role is, provide reassurance for people diagnosed with delirium
- Consider involving family, friends, carers to help with this.
- Provide a suitable care environment
 - Appropriate lighting and clear signage; a clock (consider providing a 24 hour clock in critical care) and a calendar should be easily visible to the person
 - o Introduce cognitively stimulating activities
- If the person is distressed use verbal and non-verbal techniques to de-escalate the situation

"Delirium, especially its hyperactive motor form, will present significant additional challenges in the context of the COVID-19 crisis. Standard non-pharmacological measures to treat or prevent delirium may well be not possible in isolation environments, and these environments may themselves worsen delirium." *British Geriatric Society (BGS) <u>Coronavirus: Managing delirium in confirmed and suspected cases</u>*

Personal Protective Equipment (PPE) and Delirium

Special considerations must be made for the management of people with delirium while wearing Personal Protective Equipment (PPE).

- Physiotherapists should consider the impact of the PPE on the person's ability to recognise them, communicate with them and feel comfortable to engage in therapy
- Physiotherapists should clearly introduce themselves, their role and use body gestures to compensate for verbal communication compromised by PPE
- Furthermore, seeing the PPE may add to the person's distress and sense of disorientation, physiotherapist should provide reassurance and consider use of images/stickers to indicate the identity of the physiotherapist
- It may also help to re-orientate and educate the person with delirium, when appropriate, as to the reason for the PPE

Isolation and Delirium

Special considerations must be made for the management of people with delirium when in isolation due to COVID-19

- Isolation may exacerbate the person's feeling of disorientation
- When possible maintain frequent communication with the person and create an environment as detailed above to help with orientation
- It may also be helpful when appropriate to explain regularly to the person the reason they are in isolation and provide a realistic timeline to the end of isolation period

Postural Instability / Falls

As older people with COVID-19 may present with postural instability or history of falls, a CGA may be indicated. This assessment should be part of an individualised, multifactorial intervention.

Multifactorial assessment may include the following:

- identification of falls history
- assessment of gait, balance and mobility, and muscle weakness
- assessment of osteoporosis risk
- assessment of the older person's perceived functional ability and fear relating to falling
- assessment of visual impairment
- assessment of cognitive impairment and neurological examination
- assessment of urinary incontinence
- assessment of home environment including a home visit
- cardiovascular examination and medication review

Adapted from NICE Guidelines: Preventing Falls in Older People (2017)

NICE Falls Guidance

Dementia and COVID-19

People living with dementia in the community might have difficulties in remembering safeguard procedures, such as cocooning, wearing masks and social distancing, or in understanding the public health information issued to them. Within nursing homes across Ireland there are a significant number of people who are living with dementia. It is likely that during the COVID-19 pandemic older people living with dementia at home or in residential care are at risk of infection.

Older people living with dementia can find a hospital admission extremely challenging and often can experience a significant loss of function.

Considerations for people living with dementia admitted during COVID-19

Risk of delirium:

With the change in environment and loss of familiar supports, people with underlying dementia are at high risk of delirium. A new environment can lead to increased stress and behavioural problems. Ensure the clinical environment is cognitively supportive, stimulating and promotes orientation (e.g. calendar). Ensure that they are provided with their sensory aids, meaningful belongings and company of family/carer as appropriate.

Delirium caused by hypoxia, a prominent clinical feature of COVID-19, could complicate the presentation of dementia and add to the complications experienced by the older person.

Difficulty Communicating Symptoms:

The physiotherapist should also consider that people with dementia may find it difficult to report pain or other symptoms. The physiotherapist should consider non-verbal communication and clinical signs that the patient may be uncomfortable. Being familiar with the individual and learning more about them can allow the physiotherapist to easier identify when they are "off form". This may be achieved by communicating closely with family and care staff.

Loss of visitors:

During the pandemic older people have been unable to have visitors, this may be especially distressing for people living with dementia. Where possible try to facilitate communication with family or friends.

Collateral/Meaningful Interests:

Physiotherapists should also consider seeking collateral history (with the patient's permission) from a family member or carer to gain an accurate insight into the person's baseline ability, social support and environment at home. Moreover this collateral can be helpful to learn about the person with dementia - their interests, hobbies, activities

they enjoy and how they like to spend their time normally. The physiotherapist can then incorporate these factors into their treatment plan and goal setting process. For further reading please see:

- Dementia: Assessment, management and support for people living with dementia and their carers. NICE Guideline 2018 [NG97] <u>Overview | Dementia:</u> <u>assessment, management and support for people living with dementia and their</u> <u>carers | Guidance</u>
- Alzheimer's Association 2018 Dementia Care Practice Recommendation
 Dementia Care Practice Recommendations
- COVID-19 Resources for people with Dementia and their families and carers <u>Resources Covid</u>
- British Geriatric Society "COVID-19: Dementia and cognitive impairment"
 <u>COVID-19: Dementia and cognitive impairment</u>

Considerations for Older people in Initial Presentation Phase:

Older people affected by COVID-19 may experience symptoms such as respiratory difficulty, fatigue, anxiety, oxygen desaturation and myopathy. This is outlined in detail in the CPRC document "Rehabilitation guide for physiotherapists treating patients with COVID-19 in hospital". Older people may have additional pre-existing factors such as:

- Polypharmacy
- Physical Impairment
- Cognitive Impairment
- Sensory Issues
- Incontinence
- Comorbidities
- Falls History

When older people are hospitalised, they are at risk of:

- Deconditioning
- Delirium
- Falls
- Sarcopenia
- Dehydration
- Constipation
- Infection

Early physiotherapy intervention is essential to prevent, delay or reduce the severity of hospital related disability. Older people should be supported to optimise their functional ability, engage in meaningful physical activity and maintain their independence.

Physiotherapy intervention including respiratory care may also include bed mobility training, transfer practice, sit to stand, mobility training, strengthening exercises, balance training, education on physical activity and falls management. If possible try to increase the older person's activity levels on the ward. This may be achieved by providing self-directed exercise programmes, walking diaries or engaging families and carers to assist.

Outcome Measurements

Consider outcome measurements that align with specific physiotherapy goals identified during the assessment. Also, as these older people may have respiratory symptoms, consider measurements that cross domains of mobility, gait, falls as well as exercise tolerance, breathlessness and oxygen saturation.

- Timed Up and Go
- 30 Seconds Sit-to-Stand Test
- 10 Metre Walk Test
- Hand Grip Dynamometry
- 6 Minute Walk Test (Or 2 Minute Walk Test if unable to tolerate 6 minutes)
- BORG Breathlessness Scale
- Elderly Mobility Scale
- Short Physical Performance Battery (SPPB)

Phase 2: Post-Acute Rehabilitation

The National Clinical Programme for Older People (NCPOP) recommends that older people with complex illnesses and deteriorating health benefit from specialist Older persons' services, provided in a dedicated ward by a multidisciplinary team. In addition to improving patient outcomes and increasing service efficiency, specialist services can contribute to training and advice on the care of older people by other services in the hospital and community settings. The NCPOP also recommends timely access to acute and post-acute specialist rehabilitation in facilities equipped to treat patients with complex rehabilitation needs. <u>NCPOP</u>

The Chartered Society of Physiotherapists (CSP) in the U.K has issued COVID-19 Rehabilitation Standards underpinned by NICE standards. The five quality standards are:

- 1) Assessment and Goal Setting
- 2) Timing and Intensity of Rehabilitation
- 3) Continuity of care and communication
- 4) Ongoing rehabilitation in the community

5) Personal Protective Equipment (PPE) and infection control during rehabilitation Further Reading: <u>Physiotherapy standards for community rehabilitation</u>

Older people post COVID-19 should have access to post-acute rehabilitation services to ensure optimal recovery, maximal functional gain and to facilitate transition home. Older people should undergo a CGA with the multidisciplinary team and collaborative goals should be agreed. As part of the CGA, the physiotherapist may consider screening for:

- Frailty Rockwood Clinical Frailty Scale (CFS)
- Sarcopenia In line with European Working Group on Sarcopenia in Older People (EWGSOP) use grip strength, gait speed, Timed 5 times sit to stand, SARC-F screen
- Delirium 4AT

Goal Orientated Rehabilitation

The National Clinical Programme for Rehabilitation Medicine (NCPRM) recommends effective and realistic goal setting, with patient and family engagement, across the continuum of recovery and service delivery as the cornerstone of the rehabilitation process. <u>NCPRM</u>

Considerations when formulating goals with older people:

- Sensory ensure they are wearing visual and hearing aids if required
- Cognition consider cognitive function and (tailor language according to such to facilitate better compliance with rehabilitation instructions) use appropriate, meaningful language
- Communication use verbal, written, visual communication as needed
- Collaboration if the older person wishes to involve their family or carers in the goal setting and rehabilitation planning facilitate same
- Empower enable the older person to take ownership of their goals and support them to modify and progress the goals as appropriate

Considerations for Post-acute Rehabilitation post COVID-19

Clinical reports to date highlight observations of the following symptoms in the rehabilitation phase:

- Delirium
- Fatigue
- Oxygen Desaturation
- Myopathy
- Anxiety, Grief, Low Mood

Rehab Post COVID-19 Outcome Measurements

Note the table below is a suggested list of potential outcome measurements for this population, it is based on clinical reasoning, and early evidence from the COVID-19 pandemic. It is not an exhaustive list.

COVID-19 Symptom	Outcome Measure Ideas	Treatment Ideas
Fatigue	BORG, FACIT-F, Fatigue Severity Scale	Education, Pacing, Breathlessness Management Programme
Breathlessness	BORG, 2MWT, 6MWT, 40 Step Desaturation Test, Short Physical Performance Battery (SPPB)	Positioning, Breathing techniques, relaxed breathing, pursed lip breathing, "Blow as you go", Pacing, Walking aids, Fans, Oxygen
Deconditioning	10MWT, 5 Times STS, 2MWT, 6MWT, SPPB	Strength training, graded cardiovascular work, pacing, home exercise programme
Muscle Weakness, Myopathy, Neuropathy	Oxford Scale, Fatigue Severity Scale, TUG, 10MWT, Patient-Specific Functional Scale	Strengthening, balance, education, splint, pain relief, respiratory muscle training, acapella, breath-stacking
Airway Clearance	Auscultation, Vitals (Oxygen Saturation), Production of Sputum, BORG	Mobility, ACBT, Manual Techniques, Assisted Cough, Deep breathing/thoracic expansion exercises, Autogenic Drainage
Anxiety / Mood	Hospital Anxiety and Depression Score (HADS), EQ-5D-5L (Quality of Life), 4AT (Delirium Screen)	Onward referral to medical social work, psychology, occupational therapy. Liaise with the medical team if suspect delirium.

Physical Activity

Older people should accumulate at least 150 minutes of moderate physical activity per week.

There is strong evidence that physical activity contributes to increased physical function, reduced impairment, independent living, and improved quality of life in both healthy and frail older people. Physical activity in later life can help treat and offset the symptoms of a range of chronic conditions (e.g. depression, CVD, Parkinson's disease). <u>UK Chief Medical Officers' Physical Activity Guidelines</u>

Throughout the rehabilitation journey a key aspect of the physiotherapy management of older people is the prescription of physical activity. At different stages of the older person's recovery they find it challenging to achieve the recommended physical activity levels. The physiotherapist should facilitate the older person to achieve their physical activity goals through activity modification, education and the provision of physical activity resources such as physical activity monitors or diaries. Engagement with ward staff, families and carers may also empower the older person to increase their activity levels.

Respiratory Skills for Rehabilitation Therapists

As COVID-19 has evolved, the CPNG has received feedback that some physiotherapists working in non-acute settings have reduced confidence in their respiratory care competences. Traditionally the post-acute and rehabilitation patient profile typically presents with older person, neurological or orthopaedic related impairments. Therefore it can be anticipated that the changing profile of older people post COVID-19 potentially presenting primarily with respiratory pathology requires an educational response.

The following educational resources may be useful:

- The Chartered Society of Physiotherapist (CSP) Respiratory on call e-learning module Respiratory on call e-learning modules
- Respiratory Management of COVID 19 Physiopedia online course (Free access for all ISCP members) <u>Respiratory Management of COVID 19</u>
- ONCALLbuddy smartphone application <u>ONCALLbuddy</u>

For more guidance for the respiratory physiotherapy management of COVID-19 please review the ISCP CPRC *'Rehabilitation guide for physiotherapists treating patients with COVID-19 in hospital'.*

Phase 3: Community

Dependent on the "Roadmap for reopening society and business" issued by the Department of the Taoiseach and the Department of Health, the delivery of traditional "face-to-face" community based physiotherapy may be limited.

Early evidence by De Sire et al. (2020) made the following recommendations:

- Telemonitoring and telerehabilitation for the management of COVID-19 patients in the post-acute phase
- Chronically disabled patients should be given access to teleconsultations and any possible support system (e.g., illustrated sheets with links to online videos) for self-rehabilitation and exercise, to cope with the cessation of regular in house or office care by the rehabilitation team

When an older person returns to the community post COVID-19 or if they have been managed at home, a key responsibility of the physiotherapist is to ensure they are appropriately linked with community based services.

If an older person with COVID-19 is being discharged or managed at home, please consider referral to the appropriate members of the primary care team, e.g. occupational therapist, dietician, public health nurse or community RGN, physiotherapists, medical social worker, GP. Information regarding COVID-19 status and date of positive tests should be clearly marked on the referral, as should any risks to staff e.g. difficult social circumstances. COVID-19 survivors who have lost their partner to it, or people struggling with isolation etc., may need increase in Home Care Packages or in home support given day centres are now closed so it is essential to link with social workers.

Community based services available to older people vary across Ireland. To ensure optimal care and longer term management, liaise with local community services to determine the best model of care for the older person.

This may include:

- Primary Care Teams
- Integrated Care Teams

- Frailty Intervention & Emergency Department Older people Teams
- Therapy response teams (specific to COVID-19)
- Day Hospitals
- Voluntary Groups Support, activity, social engagement.
- Reablement Teams
- Private physiotherapists who specialise in neurology and gerontology

Physiotherapy Intervention for Older people in the Community

As per Phase 1 and Phase 2, a CGA should be completed with the older person as appropriate and community based goals should be established.

Depending on the assessment outcome, goals may include:

- Long term management of respiratory issues related to COVID-19 e.g. shortness of breath
- Ongoing education and support for fatigue management
- Training specific to home environment mobility and function (activities of daily living)
- Return to community ambulation
- Return to social participation
- Support to overcome experience of COVID-19

Outcome Measurements in Phase 3:

Outcome measurements should be patient specific and goal related. The measures listed in Phase 2 can be applied in this stage.

e-Health

Remote or e-Health consultations can be used:

- For clinicians who are self-isolating
- For patients with symptoms of or confirmed COVID-19 infection
- For patients who are at high risk of COVID-19 infection
- For patients who are worried about attending appointments or having visitors, or with heightened anxiety (video consultation may be more reassuring than a phone call).
- To maintain social distancing

As e-Health/remote care becomes a more mainstream aspect of physiotherapy intervention in response to COVID-19, the CPNG recommends that physiotherapists consider developing a local standard operating procedure and policy for their workplace. The Chartered Society of Physiotherapists (CSP) has recently published 'COVID-19: Guide for rapid implementation of remote consultations' which has excellent practical tips and advice. It is available here: COVID-19: guide for rapid implementations

More Telehealth Resources:

- Susan Coote "Notes for Physios on the use of Tele-Rehab" <u>Telerehab | ms-</u> research-ireland
- ISCP Policy and guidelines on e-health for physiotherapists in private practice (2020) <u>ISCP Policy on e-health</u>
- European Region of WCPT eHealth

Considerations for Implementation of e-Health with Older people

Cimperman et al. (2013) identified seven predictors that impact an older person's perception of telemedicine services.

- Perceived usefulness
- Effort expectancy
- Social influence
- Perceived security
- Computer anxiety
- Facilitating conditions
- Physicians' opinion

Health care providers on the front lines of COVID-19 have identified that some older people prefer telephone use to digital telecommunication interactions because of a lack of technology understanding and training (Centers for Medicare & Medicaid Services 2020).

Factors to consider when undertaking e-Health with older people:

- Safety is it possible to deliver a patient-centred physiotherapy intervention safely and effectively through telehealth? Does the older person feel safe? Can a caregiver safely provide assistance for assessment of mobility, transfers and balance? Ensure treating physiotherapists has contact details of who to contact if the patient becomes unwell during the session.
- Technology in the home does the older person have access to or feel confident in the use of smartphones, laptop and video conferencing technology?
- Support of caregiver is there another person in the home that may be able to support the telehealth interaction? With social restrictions during COVID-19 in Ireland this may be limited.
- Hearing and vision does the older person have difficulty with hearing or vision and the impact this will have on their ability to provide an accurate history or process information provided?
- Cognitive ability It is feasible and effective to deliver care to people living with dementia using telemedicine (Lindauer et. al 2017), however this evidence is based on a carer being present to facilitate. Consider the older person's cognitive ability and how it may impact on their safety, ability to provide accurate subjective information, ability to complete a self-directed exercise programme and ability to carry-over advice provided.
- Environment ensure the older person's environment is appropriate for the telehealth session e.g. if being guided through an exercise programme that they have appropriate space to do so, access to a rest area, good ventilation, access to water and space to place mobility aid within reach.
- Rapport It can be more challenging to build meaningful rapport and trust in a telehealth situation compared to the traditional "face-to-face" setting. Dedicate time within the intervention to compensate for this and build rapport with the older person.
- Trust For telehealth to be effective the older person needs to trust in its efficacy and feel that they are receiving the same standard of physiotherapy they would have access to in the traditional "face-to-face" form. Provide reassurance and ensure the older person has contact details to seek further assistance if any issues arise e.g., GP

 Time – Allow time for technical issues, time for the older person to process questions and prompts and ensure there is time for questions throughout the session. There is some evidence of cognitive load on an older person using technology if they were unfamiliar with it previously.

Conclusion

Older people have been significantly impacted by COVID-19, accounting for a huge proportion of the reported cases and fatalities. Survivors of the virus may have a complicated recovery and rehabilitation journey whether managed at home or in a clinical setting. Physiotherapists have a crucial role working alongside the multidisciplinary team in ensuring optimal outcomes for older people post COVID-19. The limitations of social distancing, infection control measures and reduced "face-to-face" contact will require physiotherapists to modify their approach and interventions within these restrictions. This document should be read in conjunction with local policies and guidelines in relation to infection control and patient care. An integrated and collaborative approach between physiotherapists and healthcare professionals will provide the older person with the best opportunity to achieve their goals and overcome COVID-19.

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Location of Inventory of Documents	Inventory of Documents (Clinical Section)	
Related Documents	 Rules of Professional Conduct incorporating the Code of Ethics and Guidelines for Professional Behaviour Quality Assurance Standards of Physiotherapy Practice and Delivery ER-WCPT 2018 ISCP Policy on Consent (current) ISCP Scope of Practice (current) 	

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References

Cole, M., Ciampi, A., Belzile, E. and Zhong, L., 2008. Persistent delirium in older hospital patients: a systematic review of frequency and prognosis. *Age and Ageing*, 38(1), pp.19-26. Cimperman, M., Brenčič, M., Trkman, P. and Stanonik, M., 2013. Older people' Perceptions of Home Telehealth Services. *Telemedicine and e-Health*, 19(10), pp.786-790.

D'Adamo, H., Yoshikawa, T. and Ouslander, J., 2020. Coronavirus Disease 2019 in Geriatrics and Long-Term Care: The ABCDs of COVID -19. *Journal of the American Geriatrics Society*, 68(5), pp.912-917.

Davis, D., Muniz Terrera, G., Keage, H., Rahkonen, T., Oinas, M., Matthews, F., Cunningham, C., Polvikoski, T., Sulkava, R., MacLullich, A. and Brayne, C., 2012. Delirium is a strong risk factor for dementia in the oldest-old: a population-based cohort study. *Brain*, 135(9), pp.2809-2816.

De Sire, A., Andrenelli, E., Negrini, F., Negrini, S., Ceravolo, M., 2020. Systematic rapid living review on rehabilitation needs due to Covid-19: update to April 30th 2020. *European Journal of Physical and Rehabilitation Medicine*. DOI: 10.23736/s1973-9087.20.06378-9.

Fraser, S., Lagacé, M., Bongué, B., Ndeye, N., Guyot, J., Bechard, L., Garcia, L., Taler, V., Adam, S., Beaulieu, M., Bergeron, C., Boudjemadi, V., Desmette, D., Donizzetti, A., Éthier, S., Garon, S., Gillis, M., Levasseur, M., Lortie-Lussier, M., Marier, P., Robitaille, A., Sawchuk, K., Lafontaine, C. and Tougas, F., 2020. Ageism and COVID-19: What does our society's response say about us?. *Age and Ageing*,.

Gao, L., Jiang, D., Wen, X., Cheng, X., Sun, M., He, B., You, L., Lei, P., Tan, X., Qin, S., Cai, G. and Zhang, D., 2020. Prognostic value of NT-proBNP in patients with severe COVID-19. *Respiratory Research*, 21(1).

Guan, W., Ni, Z., Hu, Y., Liang, W., Ou, C., He, J., Liu, L., Shan, H., Lei, C., Hui, D., Du, B., Li, L., Zeng, G., Yuen, K., Chen, R., Tang, C., Wang, T., Chen, P., Xiang, J., Li, S., Wang, J., Liang, Z., Peng, Y., Wei, L., Liu, Y., Hu, Y., Peng, P., Wang, J., Liu, J., Chen, Z., Li, G., Zheng, Z., Qiu, S., Luo, J., Ye, C., Zhu, S. and Zhong, N., 2020. Clinical Characteristics of Coronavirus Disease 2019 in China. *New England Journal of Medicine*, 382(18), pp.1708-1720.

Jarrett, P., 1995. Illness presentation in elderly patients. *Archives of Internal Medicine*, 155(10), pp.1060-1064.

Jung, Y., Yoon, J., Kim, H., Lee, A., Kim, M. and Cho, J., 2017. Atypical Clinical Presentation of Geriatric Syndrome in Elderly Patients with Pneumonia or Coronary Artery Disease. *Annals of Geriatric Medicine and Research*, 21(4), pp.158-163.

Lindauer, A., Seelye, A., Lyons, B., Dodge, H., Mattek, N., Mincks, K., Kaye, J. and Erten-Lyons, D., 2017. Dementia Care Comes Home: Patient and Caregiver Assessment via Telemedicine. *The Gerontologist*, 57(5), pp.e85-e93.

Liu, W., Tao, Z., Wang, L., Yuan, M., Liu, K., Zhou, L., Wei, S., Deng, Y., Liu, J., Liu, H., Yang, M. and Hu, Y., 2020. Analysis of factors associated with disease outcomes in hospitalized patients with 2019 novel coronavirus disease. *Chinese Medical Journal*, 133(9), pp.1032-1038.

Malone, M., Hogan, T., Perry, A., Biese, K., Bonner, A., Pagel, P., Unroe, K., 2020. COVID-19 in Older people: Key Points for Emergency Department Providers. *JOURNAL OF GERIATRIC EMERGENCY MEDICINE*, 1(4).

Rubenstein, L., Stuck, A., Siu, A. and Wieland, D., 1991. Impacts of Geriatric Evaluation and Management Programs on Defined Outcomes: Overview of the Evidence. *Journal of the American Geriatrics Society*, 39(S1), pp.8S-16S.

Tay, H. and Harwood, R., 2020. Atypical presentation of COVID-19 in a frail older person. *Age and Ageing*,.

Wachholz, P. and Jacinto, A., 2020. Comment on: Coronavirus Disease 2019 in Geriatrics and Long-term Care: The ABCDs of COVID -19. *Journal of the American Geriatrics Society*.

Wu, Z. and McGoogan, J., 2020. Characteristics of and Important Lessons from the Coronavirus Disease 2019 (COVID-19) Outbreak in China. *JAMA*, 323(13), p.1239.

Yi, Y., Lagniton, P., Ye, S., Li, E. and Xu, R., 2020. COVID-19: what has been learned and to be learned about the novel coronavirus disease. *International Journal of Biological Sciences*, 16(10), pp.1753-1766.

Zhou, F., Yu, T., Du, R., Fan, G., Liu, Y., Liu, Z., Xiang, J., Wang, Y., Song, B., Gu, X., Guan, L., Wei, Y., Li, H., Wu, X., Xu, J., Tu, S., Zhang, Y., Chen, H. and Cao, B., 2020. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *The Lancet*, 395(10229), pp.1054-1062.

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https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/launch-of-a-model-ofcare-for-specialist-geriatric-services.pdf

National Clinical Programme for Rehabilitation Medicine

https://www.hse.ie/eng/about/who/cspd/ncps/rehabilitation-medicine/