

**Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation**

## **Case Studies**

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 1

## About the person:

**Age:** 41 year old

**Diagnosis:** Epilepsy, left-hemiplegia, visually impaired.

**GMFCS Level:** Male GMFCS 3

**Physical Profile:** At last physio discharge in Feb 2019 client mobilised indoors with, left foot AFO, manual handling belt and A of 1. He used an attendant propelled wheelchair for outdoor mobility.

**Home situation:** Lives in supported living

**Day/community activities:** Attended x3 weekly day centre activity sessions including a tai-chi group at LD day centre.

## Management before the Pandemic:

Client had an exercise programme at home which was carried out by support staff.

Due to the extent of his physical decline staff were no longer able to carry out his exercise programme with him.

## Impact of Pandemic on Physical Presentation:

Gradual decline in mobility: Leaning on staff and requiring increased support. Requiring the use of a wheelchair/commode indoors between rooms. In the past female staff found it harder to support client due to his height and stature however now all staff find it difficult. He leans on staff and his legs give way. Unable to move left leg independently when transferring.

## Impact of Pandemic on management plan:

Client is known to respond positively from contact with his mum. Lack of contact due to lockdown impacted on his emotional and behavioural well-being. Client had previously been referred for a block of rebound therapy to support his mobility needs however this was unable to be carried out during lockdown. Due to pandemic client's usual activity groups were not running so physio was unable to complement these to combine opportunities for strengthening. Pandemic meant that all sessions had to be delivered at client's home face to face by physiotherapist.

## Impression:

Reduced opportunity for walking and physical activity accelerated his rate of physical decline so that staff were unable to walk client. Psychological - staff reported increased episodes of low mood secondary to not being able to see his mum or leave the house. Ceasing of activities at day centre. Delay in supporting living care team referring to LD physiotherapy during the lockdown period

## Rehabilitation:

To walk safely indoors with assistance of 2 support staff

## Treatment Plan:

3 month block of weekly physiotherapy sessions to practice mobility in home environment. Initially with x2 physios - progressed to x1 physio to carry out staff training to practice handling and handover ongoing mobility practice.

## Outcome:

Client walking safely approx 30m in the home environment with Aof2 and manual handling belt. Client independently stepping with left leg and legs not giving way.

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 2

## About the person:

**Age:** 25

**Diagnosis:** Cerebral Palsy

**GMFCS Level:** GMFCS Level 5,

**Neurological presentation:** Quadriplegic, Spastic CP, Hip dysplasia/

**Home situation:** Lives with Family

**Day/community activities:** Previously going to college, now no community access

## Management before the Pandemic:

Managed with Physiotherapy program at college, Rebound Therapy, Social Interaction at college

## Impact of Pandemic on Physical Presentation:

Worsening of pain, stiffness which led to an increase in anxiety, attended A&E with hip pain. Onward referral to elective orthopaedics proposed to consider surgical management of long standing hip displacement,

## Impact of Pandemic on management plan:

Not accessing school therefore physiotherapy program not being completed

## Impression:

Associated stiffness in lower back with potentially radiculopathy

## Rehabilitation:

Manage pain  
Improve Flexibility

## Treatment Plan:

Initially 2 x weekly physiotherapy, stretching program Liaise with GP to review medications

## Outcome:

Better pain management. Family completing PT program. Difficulty with bowel management and change in medication. Ongoing support with family to manage anxieties. Onward referral for orthopaedics review no longer required.

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 3

## About the person:

**Age:** 70

**Diagnosis:** moderate learning disability

**Neurological presentation:** no neurological deficits

**Physical Profile:** Independently mobile and accesses the community

**Home situation:** Lives in supported living. Support from carers to complete daily activities.

## Management before the Pandemic:

No input required

## Impact of Pandemic on Physical Presentation:

Admitted to hospital with COVID-19. Refusing input in the hospital. Deterioration in mobility to max assistance of two to transfer and unable to mobilise.

## Impact of Pandemic on management plan:

No rehab facilities available to discharge from hospital as reserved as COVID overspill.

## Impression:

Acute deterioration due to illness.

## Rehabilitation:

Return to baseline functional presentation and return home to previous placement.

## Treatment Plan:

Hospital in-reach to assess rehabilitation potential. Unable to return home due to physical decline. Therefore, rehabilitation provided by specialist LD team in continuing care facility initially. Once able to walk with a frame, moved to ground floor supported living environment to continue rehabilitation with specialist LD team. When able to manage stairs, moved back to home (first floor supported living) and community mobility rehabilitation continued.

## Outcome:

Client returned to previous functional level of mobility. Required extensive input from our team to reach this goal which the team is not set up to provide on a regular basis

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 4

## About the person:

**Age:** 20 year old male

**Diagnosis:** Global Developmental Delay

**Home situation:** Lives at home with mother.

**Day/community activities:** Attends specialist college 3 days a week.

## Management before the Pandemic:

Using a Kaye Walker to mobilise and a standing frame to maintain muscle length and strength, at college.  
Habitually knee walks/ crawls at home. Uses wheelchair for outdoor mobility.

## Impact of Pandemic on Physical Presentation:

College closed in March 2020 and client shielding at home. When college reopened in September 202 client unable to go back to using Kaye Walker, and managing significantly shorter spells of time in standing frame.

## Impact of Pandemic on management plan:

Virtual visits by PT, college staff able to recommence standing programme. Pandemic has caused deterioration in standing ability and loss of functional mobility.

## Impression:

Only likely cause for deterioration is lack of standing and walking opportunities due to pandemic. It is as yet unknown whether client will regain walking at level prior to pandemic.

## Rehabilitation:

To regain functional mobility with Kaye walker.

## Treatment Plan:

Programme commenced to rebuild tolerance of standing with view to returning to use of Kaye Walker  
Standing frame practise, building up from a few minutes initially back to 40 minutes 2 x daily when at college (as prior to pandemic)

## Outcome:

Ongoing

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 5

## About the person:

**Age:** 71 year old lady

**Level of LD:** mild/ moderate LD

**Physical Profile:** Previous fracture femur and revision several years later - leg length discrepancy had orthotic footwear to correct this

**Home situation:** Lives alone- no family nearby

**Day/community activities:** Day centre attendance and social groups in the evening.

## Impact of Pandemic on Physical Presentation:

Sat in recliner chair apart from support in morning to rise and help to bed. Snoozed during the day and disturbed sleep at night. Didn't leave the house, occasional visits from older sister. Not motivated to move during the day apart from toilet visits. Low mood as TV only stimulation. Not wearing orthotic footwear to compensate for leg length discrepancy. Non fractured hip developed restriction in ROM unable to flex to 90 as habitually reclined. Scoliosis developed in back from leg length discrepancy. Barely able to stand up unaided and in extreme pain requiring stronger painkillers. High tone in trunk/ neck.

## Rehabilitation:

Correct leg length discrepancy by wearing of orthotic footwear. Encourage regular movement / exercise.

## Treatment Plan:

Ensure support team are aware of the importance of having orthotic footwear fitted - Photos taken of back posture with and without orthotic footwear fitted with markings and narrative on the difference. Reinstated exercise program and importance of regular movement and made all aware of the risk of sustained immobility. Contact with social work re impact of current support level on physical abilities and mood

## Management before the Pandemic:

No physio input for some time since rehab after hip operations

## Impact of Pandemic on management plan:

All activities which encouraged movement stopped. No stimulation/ lack of motivation low mood/ less inclined to be active

## Impression:

As above

## Outcome:

Plan put in place with support team and I'll monitor by phone with service user and support workers

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 6

## About the person:

**Age:** 57

**Diagnosis:** breast cancer and painful knee (early OA)

**Home situation:** lived with very elderly parents with health concerns in a small house supported by a sister living locally

**Day/community activities:** They were all very protective of her. She had not accessed day services for several years.

## Management before the Pandemic:

Pre pandemic with physiotherapy input person returned to day services and exercise programme was set up. Confidence returned and a walking aid was purchased for outdoors. Became active and involved in day services and enjoyed accessing the day service, community activities and meeting up with friends.

## Impact of Pandemic on Physical Presentation:

During the pandemic the person returned to sitting at home and being inactive. Would not engage with the home exercise programme. Balance and mobility deteriorated. Build up of wax in her ears which had not been resolved by usual method (oil).

## Impact of Pandemic on management plan:

Day services not accessed where a regular exercise sessions had been set up. Returned to being inactive. Not engaging in a home exercise programme. Had fallen out doors in garden with family member. Low mood. Difficultly in accessing Heath appointment-removal of wax in ears

## Impression:

Unable to access day services. Cramped environment at home. Loss of confidence. Lack of motivation to engage with her exercises supported by her sister who was also caring for her elderly parents. Resulted in deconditioning and fear of falling. Unable to access virtual sessions. Build up of wax affecting balance and confidence.

## Rehabilitation:

To engage in exercise, To Improve confidence, To improve balance and muscle strength

## Treatment Plan:

Home visit following risk assessment for physiotherapy assessment, advice and exercises. Signpost back to social services for support to access limited day services for those at risk/high needs. Support to access services to remove wax which was 15 miles away which had been identified.

## Outcome:

Returned to day services and regular exercise programme was recommenced. Improved balance and mobility Improved confidence Improved mood

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 7

## About the person:

**Age:** 55 year old lady

**Diagnosis:** Downs Syndrome

**Physical Profile:** Independently mobile

**Home situation:** Living with elderly family.

## Impact of Pandemic on Physical Presentation:

Full loss of mobility from walking to using a full body hoist.

Complaining of lower limb pain.

Spent a lot of time in bed resulting in total loss of mobility and severe constipation.

Was admitted and discharged without support but then fell and taken to a community bed.

Intermediate care services struggled to engage and she continued to remain in bed.

## Rehabilitation:

Current goal is to complete pivot transfer daily with care staff in care home where she was admitted.

Eventually to progress to standing and stepping.

Sadly she would benefit from hydrotherapy but unfortunately the pool isn't accessible at present.

## Impact of Pandemic on management plan:

No previous management plan but attended day services daily which was stopped resulting in tendency to remain in bed.

## Treatment Plan:

Intensive input, functional rehabilitation and currently engaging well with using a ball and music. Intervention at least twice a week.

## Management before the Pandemic:

Self management independently mobile

Never accessed services except day services.

## Impression:

Deconditioning resulting in lower limb pain and fear of falling. Not engaging with mainstream physiotherapy/rehabilitation services.

## Outcome:

Over past three weeks she is now sitting out in her chair daily and is completing pivot transfer and stands. Rehab continues.



# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 8

## About the person:

**Age:** 46

**Diagnosis:** Down's Syndrome,

**Physical Profile:** Obesity, Poor skin integrity.

**Home situation:** Lives in 24hr supported living with 6 other people.

**Day/community activities:** Community activities provided by the supported living.

## Impact of Pandemic on Physical Presentation:

Service user caught Covid-19 in April 2020. 27 days intubated in ITU in a coma - staff advising to expect the worst. Moved to a ward. Liaison between LD physiotherapy and ward staff as poor engagement in therapy. Difficult to assess what was low motivation (long standing) and what was lost viral fatigue. Provided ward physiotherapy ideas including certificates/medals to reward when he does well. Ward physiotherapist purchased a trophy which he got when he mobilised 5m with Zimmer frame. He was delighted and this really motivated him (he continued to desaturate on mobility) in the end he was given an NHS lanyard which he was delighted to receive.

*I was really impressed with the ward physiotherapist engagement with recommendations.*

## Rehabilitation:

To get him home as soon as safe to do so. The downstairs bedroom has become free due to the passing of his housemate. This had to be explained to him by the support team prior to leaving hospital. It was agreed with ward team, social worker, community team and support team to wait until his discharge date to let him know as there were concerns he would stop engaging in rehab if he knew. He was really upset - but he has managed this well and fortunately the relief to be home had outweighed his sadness of having to move into his housemates bedroom.

## Treatment Plan:

Community Learning Disability Team took responsibility of the rehabilitation on discharge. Twice weekly physio sessions to rebuild muscle (++ atrophy), work on balance, increase mobility. Mainstream Community led on O2 weaning as they had a protocol in place already - they only needed to complete 2 sessions as his rehab with us went so well he really improved very quickly and was motivated to rehab as he 'didn't want to go back into hospital'. District nurses - wound dressing - sores around his mouth from intubation and an 'ungradable' sacral sore - which has now improved to a grade 2 - again due to his engagement in rehab and not spending lots of time sitting or lying.

## Management before the Pandemic:

Wasn't open prior to lockdown but was known historically.

Lots of work on exercise prescription for weight loss and circulation (due to skin integrity issues)

## Impact of Pandemic on management plan:

Unable to access the ward to provide direct support - it was hard not being able to go into the ward to help. It was all done via telephone. If we had gone it would have been easier to assess what was motivation and what was post viral fatigue?

## Impression:

Covid-19

## Outcome:

Now off oxygen!!! Is now able to manage the stairs and has returned to upstairs bedroom. Great example of team working across different services and different NHS Trusts. He has now become a bit of a 'rock star' in our Trust as he has presented his story to some of our management meetings.

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 9

## About the person:

**Age:** mid 50's.

**Diagnosis:** Mild LD and Autism

**Physical Profile:** Presents with a stooped gait pattern

**Home situation:** Lives independently in a unit with 24hr support on site, although does not have direct 1:1 support himself, but can ask for help if he needs it. Has a care link.

**Day/community activities:** Accesses the community independently and often visited the office for a coffee and to meet his peers.

## Management before the Pandemic:

Attended the gym twice a week independently, supported by the leisure centre staff on pre arranged terms. Attended swimming group once per week, adapted sports session with rebound therapy and cycling once per week, and complete gym programme in the falls prevention session once per week. All on a Disability membership with the leisure centre. We would see him in these groups at least twice a week where if he had any other issues/problems (not physio related) we could give him appropriate advice/support in an 'every contact counts' context.

He also attended an evening Adult autism session once a month - 'chatterbox' with the intensive support team where he enjoyed socialising with his peers.

## Impact of Pandemic on Physical Presentation:

Since the pandemic his mental health has deteriorated as he is unable to have the social interaction with the services as he once did. As he lives independently he does not have the internet or access to the appropriate technology to continue sessions in a virtual manner. He phoned members of the team at least 2 or 3 times a day which includes the weekends for a 5-10min 'chat' each time. He has suffered increased falls with sustained injuries and reduced balance and has displayed elements of reduced self care.

## Impact of Pandemic on management plan:

His usual level of weekly activities has perished. Once the leisure centre reopened we were in a position to risk assess him attending with therapy support once per week. Hoping that we can educate him on the processes and importance of social distancing and the leisure centre 'rules' staff at the leisure centre are extremely supportive and plan to 'adopt' him into their sessions. The booking system however is very discriminative - telephone call to book each session and have to pay over the phone prior to the booked session - cannot be late and time is limited. Although he can tell the time he struggles with the concept of time and needs prompting and reminding of when his session is almost finished. With the second lockdown in place this hard work has been interrupted and has therefore had a further negative impact on his mental health around the socialising aspect. We are working with the leisure centre to try and work around the 'pay over the phone' issue as many of our service users use cash and require receipts for the transaction to monitor finances.

## Impression:

Lack of physical activity and social interaction as a result of the pandemic has had a significant negative impact on this chap's health and daily function.

## Rehabilitation:

Improve balance, mobility and reduce incidences of falls. Increase social interaction - access the leisure centre as it is safe and appropriate to do so.

## Treatment Plan:

Before the second lockdown we were supporting access to the gym and swim session - each once per week. The plan was to increase his confidence and then he could access more often more independently once learnt the processes and rules. The leisure centre staff were keen to continue to support him long term and communicate with us if they required any input or had any concerns

## Outcome:

The gym access had improved over the past 2 months, and less incidences of falls. Reduced number of phone calls per day. Since lockdown 2 in place access has stopped and phone call have increased.

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 10

## About the person:

**Age:** 45

**Diagnosis:** Learning Disability with visual impairment and compromised mobility.

**Physical Profile:** Able to walk to toilet from bedroom and living room to have his breakfast, lunch and tea. Showered daily in the morning and bedtime after 8pm.

**Home situation:** lives in supported house with three other gentlemen

**Day/community activities:** Family visited weekly, out at least one day, and day service one day per week. Yearly holiday away for up to a week,

## Management before the Pandemic:

Accessed swimming weekly. Boxing weekly. In rehab once weekly at physiotherapy at hospital before lock down to work on standing due to 2 falls and re-fracture of right leg. Fibula initially but then tibia and the re-fracture just as pandemic hit.

## Impact of Pandemic on Physical Presentation:

Client's vision has deteriorated, increased seizure activity, noticeable tremor some days worse than others. Response to conversation much more of a struggle on some days.

## Impact of Pandemic on management plan:

Daily routine relaxed and in this instance staying in bed longer. Has breakfast and lunch in bedroom. Does go through to living room in wheelchair for tea time meal. Not getting out or seeing family. No day service x 1 weekly. Not able to access weekly swim session. Not able to continue to mobilise independently. Not able to continue to access physiotherapy rehab at hospital to work on specifics and external to home.

## Impression:

Social distancing and Isolation. Physical wellbeing can be compromised by mental health. Key factors are social opportunities and improved access to health and mental health services.

## Treatment Plan:

Referrals made to GP, cardiology and neurology. Twice weekly rehabilitation - via risk assessment. Standing practice, exercise programme from hospital, provision of suitable equipment (stand aid hoist and hoist). Still able to stand on good days with stand aid hoist. Transfers into armchair daily for a few hours as in wheelchair caused lower back spasm, thus time out offers pain relief and resting of muscles affected.

## Outcome:

Mood is much brighter. Stamina levels have increased and he appears more responsive, so feel mental health has improved. Initially used to transfer into bed for few hours after lunch but this has since stopped and pain relief only used if required which has since reduced. He is now back boxing and day out in the community and family were back visiting. However new lock down may affect this progress and still awaiting neurological appointment.

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 11

## About the person:

**Age:** Mid 50s gentleman

**Diagnosis:** Parkinson's and LD

**Physical Profile:** Pre-covid level of mobility sit to stand only.

**Home situation:** Lived in residential, non LD home.

## Postural Management before the Pandemic:

Not known to team, sit to stand only in residential care

## Impact of Pandemic on Physical Presentation:

Admitted to hospital in April with COVID. Discharged fully hoisted, unable to lie to sit or maintain midline, unsupported position

## Impact of Pandemic on management plan:

No input as inpatient and discharged without rehab to baseline.

## Impression:

Deconditioned, no input as inpatient, poor presentation prior to admission compounded by living in an environment not knowledgeable in Learning or Physical Disability

## Rehabilitation:

Aim towards pre COVID-19 level of sit to stand

## Treatment Plan:

- Postural management in bed and appropriate specialist seating.
- Active, active assisted and passive exercise in lying.
- Supported sitting - progressed to independent work side of bed
- Sit to stand practice
- Stepping with frame.

Exercises included sit to stand practice (with equipment) and postural management delegated to home staff in absence of therapy team

## Outcome:

Independent lie to sit transfer edge of bed, maintaining independent sitting edge of bed, independent sit to stand, 4-5 step transfer with 1 staff member and use of Zimmer frame between bed/chairs.

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 12

## About the person:

**Age:** 39yrs,  
**Diagnosis:** Cerebral Palsy  
**GMFCS Level:** 3  
**Physical Profile:** Previously independently mobile with crouched gait, hamstring contractures, wheelchair for longer distances only. Bilateral adapted footwear and AFOs with maximum heel raise.  
**Home situation:** Lives in supported living.  
**Day/community activities:** Previously attended day service 4 days per week, went swimming, go carting and horse riding regularly.

## Management before the Pandemic:

Annual review of mobility and posture. Maintained in community with very limited physiotherapy involvement. Swimming and hippotherapy

## Impact of Pandemic on Physical Presentation:

Significant deterioration in mobility. Increased shortness of breath on exertion (SOBOE), fear of falling, unable to walk without physical assistance of carers (who were finding this increasingly difficult). Increased use of self-propel wheelchair (daily around the house)

## Impact of Pandemic on management plan:

Referral to physiotherapy due to concern all mobility would be lost and would become full time wheelchair user.

## Impression:

Lost access to all activities outside the home. Inconsistent approach from carers re: support around mobility

## Rehabilitation:

To mobilise independently between bedroom and lounge without requiring staff assistance (approximately 10m)

## Treatment Plan:

Review of orthotics. Consistent approach to supporting mobility from care staff. Regular walking throughout the day to restore some exercise tolerance. Recommended use of self propel wheelchair for independence around the home (rather than sitting in armchair and requiring carer assistance for transfers) and also to increase exercise tolerance. Trial of walking aids. Collaboration with care coordinator to write support plan around use of walking aid.

## Outcome:

Now independently mobile around home using posterior walker which individual took to surprisingly well and really likes. Reduced SOBOE. Carers pleased that resident is independent again. Family members are extremely grateful that face to face physiotherapy was available despite the pandemic and their loved one is independent and mobile again.

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 13

## About the person:

**Age:** early twenties

**Diagnosis:** cerebral palsy, PMLD

**GMFCS Level:** 5

**Physical Profile:** Complex respiratory (nonspecific diagnosis but he had regular oral suction and a wet BIPAP system overnight). Had been into hospital at least three times in the past 2 years due to pneumonia. He was hoisted for all transfers.

**Home situation:** He lived in a small residential home (4 clients) and his Mum and Dad usually visited him 3-4 times a month.

**Day/community activities:** His carers would usually take him out to an activity every day (rebound therapy, hydro, cartridge riding, accessible sailing).

## Impact of Pandemic on management plan:

In March he was admitted with pneumonia and the hospital hesitated to provide ventilator treatment. They didn't say no, they had an empty ward full of triple the usual ventilator capacity, but they hesitated too long (because of national prioritisation guidance) and this young gentleman in his early twenties passed away.

Prior to the pandemic the gentleman would have had acute intensive respiratory treatment (ventilator and IV antibiotics). Each time he had been admitted prior to COVID he was placed on a ventilator while given IV antibiotics for a couple of days, and then he had fought to bounce back. No stepwise deterioration was noted.

## Postural Management before the Pandemic:

**Positioning:** Alternative Seating, wheelchair, sleep system

**Therapeutic Activities:** Hydrotherapy, rebound, passive stretching, orthotics and use of the hot tub at home.

**Respiratory Management:** His community respiratory care was maximised.

## Impression:

Hospitals following national prioritisation guidelines despite having empty wards. Hospital staff being unsure of current guidelines and hesitating in delivering usual critical care.

## Outcome:

Death

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY

## About the person:

**Diagnosis:** PMLD, spastic quadriplegia, contracture

**GMFCS Level:** 5

**Physical Profile:** He had no history of fractures or dislocations.

**Home situation:** He lived in his own home with 24 hour support and another service user (campus provision).

## Impact of Pandemic on management plan:

In April our physios were contacted as he was displaying a lot of pain. Our physio concluded he had likely dislocated his hip and a safeguarding was raised.

The GP prescribed pain meds but wouldn't refer to X-ray as no orthopaedic surgeries were happening.

Within a week this gentleman was refusing oral intake (food and meds) due to the pain.

His circle of support met to review the best interest decision and it was decided it was now in clients best interest to have the PEG operation. But the hospital weren't doing them anymore so instead he was placed on palliative care and starved to death a week later.

## Postural Management before the Pandemic:

Care team had held a best interest decision last January to decide whether or not he should have a PEG.

It was decided that with supplements they could currently get enough calories and his epilepsy medication into him, so it didn't justify the risks of surgery.

They also stated that this decision would be reviewed in the future as this balance was likely to change.

## Impression:

Operation (hip and PEG) was counted as elective, and not provided during pandemic. Therefore, refused treatment and placed on end of life care

## Outcome:

Death. Gentleman would have had the hip X-ray and surgery if indicated, he also would have had PEG surgery.

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 15

## About the person:

**Age:** 37

**Diagnosis:** Spastic Quadriplegic Cerebral Palsy, Epilepsy

**GMFCS Level:** 5

**Neurological presentation:** Reflexive patterns – flexion to pain, Spasticity upper limbs,

**Physical Profile:** Spinal fusion, windsweep to the left, reduced tone in lower limbs – previous tenotomy, increased tone upper limbs, flexion patterning on noxious stimulant.

**Main area of concern:** respiratory health, saliva management, right upper limb

**Home situation:** Lives with mum and personal assistants (long term carers)

**Day/community activities:** day centre 2 x week, day centre 2 x week

## Postural Management before the Pandemic:

**Positioning:** Custom Contoured wheelchair, Night time positioning (only tolerates sleeping on left)

**Medical Management:** Spinal fusion, tenotomy

**Therapeutic Activities:** Stretching programmes at day services completed on the floor

## Reason for Referral:

Increased care need because he was adopting a flexed position when completing personal care.

## Impact of Pandemic on Physical Presentation:

Reduced range of movement in left hip adduction (10°), right shoulder abduction (10°) and external rotation (10°).  
Right shoulder pain on abduction and external rotation causing flexion pattern of lower limbs

## Impact of Pandemic on management plan:

Day services ceased – reduction in twice a week floor stretching programme  
Increase time spent in bed lying on left side

## Impression:

Right shoulder pain during personal care causing flexion patterning of legs thus requiring increase support during personal care. Right shoulder pain caused by increase muscles stiffness from reduced stretching and spending prolonged periods in left side lying with arm adducted and internal rotated across chest.

## Rehabilitation:

**GOALS:** Reduce shoulder stiffness and pain.  
Reduce flexion patterns and need for AO2 during personal care

## Treatment Plan:

Stretches to right shoulder focusing on pectoralis – Abduction, External rotation  
Soft tissue release to pectoralis  
Delegation shoulder and leg stretching programme via PhysiTrack  
30 mins right side lying counter positioning daily.  
**Frequency:** daily stretching completed by care team. One weekly physiotherapy

## Outcome:

Reduced pain on personal care, reduce flexion patterning during personal care. Reduced care burden – able to complete task with AO1



# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 16

## About the person:

**Age:** 23

**Diagnosis:** Dystonic Cerebral Palsy, Reflux

**GMFCS Level:** 5

**Neurological presentation:** Four limb and truncal dystonia, marked fluctuations in tone. Usual dystonic pattern: head extension and rotation to right, Upper limbs: right flexion, left extension, Lower Limb: right hip flexion, adduction and internal rotation.

**Physical Profile:** Spinal fusion, surgery to relocate hips, contractures in all four limbs.

**Main area of concern:** Head and neck position, fluctuations in dystonia

**Home situation:** lives with mum and sister, external care

**Day/community activities:** day centre 4 x week

## Management before the Pandemic:

**Positioning:** Wheelchair with modifications to control movement disorder

**Orthotic:** Arm and hand splints

**Medical Management:** DBS, medication (baclofen, nitrazepam, Trihexyphenidyl), Botox – Neck, upper limbs.

**Therapeutic Activities:** Movement and alt. positioning plan at day centre

## Reason for Referral:

Referral by mother reporting not sitting in wheelchair effectively. Rotating to the left and not contact through backrest. Difficult to roll to right during person care

## Impact of Pandemic on Physical Presentation:

Significantly increased dystonia (triceps, posterior deltoid, pectoralis, latissimus dorsi, and posterior rotator scapular muscles), change in presenting dystonic pattern to head and neck rotation to the left, right shoulder extension and anterior superior displacement of glenohumeral joint (revert back to pre-DBS pattern of movement when shoulder surgery was considered). Marked reduction in shoulder flexion and abduction – bony end feel, pain on movement.

## Impact of Pandemic on management plan:

**Botox Injections:** last injection 09.10.2019, due appointment 24.04.2020 – delayed by 2.5 months (appointment 9.7.2020). 9 months between injections.

**Day services:** ceased therefore reduce access to movement and counter positioning.

**Cease Non-essential physiotherapy services:** limited monitoring and hands on intervention by physiotherapy team

## Impression:

Displacement of right shoulder joint due to increased dystonia and change in presenting pattern resulting in poor wheelchair position as pushing through right arm. Caused by lack of Botox injections, access to movement and day services, and lack of access to physiotherapy monitoring.

## Rehabilitation:

**GOALS:** Reduce pain and dystonia, reduce care required during postural care, improve position in wheelchair

## Treatment Plan:

1. Soft tissue release, passive ROM and stretching to triceps, posterior deltoid, pectoralis, latissimus dorsi, and posterior rotator scapular muscles
2. Kinesiology taping
3. Prioritisation of Botox injections and support appointment – 9.7.2020 injected right triceps, posterior fibres of deltoid, and pectoralis.
4. Shoulder x-ray – anterior, superior displacement of glenohumeral joint.
5. Review wheelchair set up – removed right armrest

**Frequency:** Bi-weekly physiotherapy from 3.7.2020 to 12.08.2020

## Outcome:

Reduced pain caused by relocation of right shoulder in line with reduced dystonia (managed by botox and physiotherapy intervention).

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation – CASE STUDY 17

## About the person:

**Age:** 43

**Diagnosis:** Undiagnosed chromosomal abnormality, Epilepsy, Eczema, PMLD.

**GMFCS Level:** 5

**Neurological presentation:** Fluctuating generalised muscle tone which changes between flaccid to markedly overactive depending on her level of arousal and comfort. Tendency for flexion patterning. Marked increased tone in her adductors and hamstrings which impacts on personal care and positioning.

**Physical Profile:** Flexion contracture in all four limbs and trunk. Right hip ROM limited in flexion and abduction. Marked kyphosis.

**Main area of concern:** Increased tone in all four limb and trunk, increased stiffness throughout making personal care and position challenging.

**Home situation:** Lives at home with family. Management at home limited by environment and family work patterns.

**Day/community activities:** Day centre 5 days a week.

## Reason for Referral:

Mum reporting to day centre staff increased 'stiffness' and it is difficult to perform personal care.

## Assessment of impact of Pandemic on Physical Presentation:

Increased stiffness with some reduced ROM following Lockdown and reduce access to mvt at day centre. Improved with PT intervention in the form of stretching and movement. It is hoped that she will recover back to baseline following intervention.

## Impact of Pandemic on management plan:

Day services ceased therefore unable to access therapeutic activities and movement programme. Increased time in static positions at home due to limited opportunities as a results of environmental constraints

## Impression:

Increased stiffness due to reduced access to movement and counter positioning at day service. Nil loss of ROM therefore movement recoverable. Claire on downward trajectory pre-pandemic because unable to tolerate systemic medication to manage tone.

## Rehabilitation:

**GOALS:** Reduce muscle stiffness to ease care demands during personal care

## Treatment Plan:

- 2 x physiotherapy sessions at day service when family able to facilitate sessions.
- Completed stretches and movement programme to all four limbs and trunk
- Small t-roll provided improve position in supine.

## Outcome:

Short term improvement reported in providing personal care post stretching and movement session. Unable to continue with sessions at day service due to family commitments with work. Family reluctant for sessions to occur at home due to anxieties re: COVID-19. Family not ready for service user to return to day service at current time. Therefore, unable to continue with physiotherapy sessions. Likely to see further development of contractures rather than reversible stiffness.

## Postural Management before the Pandemic:

**Positioning:** Custom contoured wheelchair, Sleep system failed due to environmental constraints, counter positioning on acheeva bed (day centre).

**Medical Management:** Nil – Botox is not effective (immediate positive effects but not sustained), systemic medication caused drowsiness or increase in seizure activity.

**Therapeutic Activities:** Movement programme at day centre,

**NB:** Trialled Rebound Therapy but not effective as increased tone.

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 18

## About the person:

**Age:** 48

**Diagnosis:** Dystonic Cerebral Palsy

**GMFCS Level:** 5

**Neurological presentation:** Spasticity, dystonia, reflexive patterns, leg spasms.

**Physical Profile:** Posture stable. Critical ROM in her arms and legs. Slight correctable scoliosis

**Main area of concern:** Pain in left leg, specifically behind left knee, night time spasms, poor sleep.

**Home situation:** lives with sister, twice daily carers

**Day/community activities:** Day centre 4 x week

## Postural Management before the Pandemic:

**Positioning:** CAPS II wheelchair, Night time positioning,

**Orthotics:** 30mins leg gaiters per day

**Medical Management:** Botox injections (Left Lower Limb – Gastrocnemius, Medial Hamstring, Adductors and Rectus Femoris – last injections 28.2.20), Madopar, Co-codamol (PRN), Ibuprofen gel

**Therapeutic Activities:** Stretching Programme at home and day centre

## Reason for Referral:

Increased pain in knee and waking up at night, reported by sister during welfare calls

## Impact of Pandemic on Physical Presentation:

Increased pain in back of left knee, increased flexion pattern of left leg pulling on foot plates and knee blocks, increased spasticity in muscles usually targeted by Botox. Waking up regularly at night, requiring co-codamol morning and night to manage pain, crying and distress on stretching.

## Impact of Pandemic on management plan:

**Botox Injections:** 4 month delay in Botox injections (due June 2020). Botox known to significantly improve pain (no analgesia required) and reduced night time spasms.

**Day services stopped** – 2 stretching sessions per week stopped. Performed by competent support worker.

## Impression:

Delay in Botox Injection by 4 months leading to an increase in spasticity and dystonia causing re-occurrence of pain in insertion of lateral Gastrocnemius.

## Rehabilitation:

**GOALS:** reduce pain, improved sleep and reduce use of morning co-codamol

## Treatment Plan:

**Stretches:** Left adductors, Gastrocnemius, and medial hamstrings.

**Soft tissue release and trigger point:** Left quadriceps, hip flexors, medial hamstring and lateral head gastrocnemius, peroneal and tibialis anterior

**Botox injections.** Target lateral gastrocnemius, rectus femoris, and adductors.

**Frequency:** 7 x weekly treatments sessions until Botox Injections on the 17.09.2020 -

## Outcome:

Pain free and reduced co-codamol use.  
Reduced distress during stretching treatment  
Pain free 3 days post treatment

NB: pain likely to return due to length of time between injections at present.

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 19

## About the person:

**Age:** 23

**Diagnosis:** Cerebral Palsy, Epilepsy, Constipation

**GMFCS Level:** 4

**Neurological presentation:** Spastic quadriplegia (lower limb more effected than upper limbs), Spasticity in left > right lower limb.

**Physical Profile:** Spinal fusion (T3 – L3), dislocated left hip, mild contracture in lower limbs (left > right).

**Main area of concern:** Pain in lower back, left hip and leg. Constipation.

**Home situation:** Lives with family (mum, dad and two siblings)

**Day/community activities:** College TC 5 days a week – due to transition 2020 but given 1 year extension due to pandemic

## Postural Management before the Pandemic:

**Positioning:** Wheelchair (self propels thus limited postural control) wears lumbar support in wheelchair to improve trunk stability and reduce lean to left which causes iliocostal impingement.

**Medical Management:** Nil – effects to control spasticity and pain have caused constipation

**Therapeutic Activities:** Floor programme at college (2 x week), rebound therapy at college (once a week). Stretching programme (home)

## Reason for Referral:

Referral by mum reported significant back and hip pain. Presented to A&E with pain. Discharged on analgesia and recommended referral to elective hip surgery to review long standing hip dislocation. Discomfort especially in lying and worse at night.

## Assessment: Impact of Pandemic on Physical Presentation:

- Increased generalized stiffness
- Increased spasticity in left lower limb
- Nil change in PROM
- Spasms and flinching in pain and discomfort on extension of lower limbs (left > right)

## Impact of Pandemic on management plan:

**Closure of college:** resulting in reduced access to weekly floor programme and rebound therapy with a physiotherapy.

## Impression:

Pain is neurological in origin rather than joint pain. Likely to be due muscle spasms causing nerve impingement or inflammation. Worsen on lying and moving from flexion to extension.

## Rehabilitation:

**GOALS:** Reduce pain and improve sleep. Reduce access to secondary care.

## Treatment Plan:

- Pregabalin and paracetamol
- Movement to trunk and Lower limbs – trunk rotation, lower limb flexion and extension
- Prone – once pain settled

## Outcome:

- Painfree
- Sleeping though night
- No further A&E admissions

# Impact of the social measures used to control COVID-19 on the physiotherapy needs of adults with a learning disability and their rehabilitation– CASE STUDY 20

## About the person:

**Age:** 35

**Diagnosis:** Learning Disability, Sturge-Webber Syndrome, Epilepsy, Stroke at 11 months

**GMFCS Level:** 4

**Neurological presentation:** Left hemiplegia, spasticity left lower limb, tactile defensive in upper limbs.

**Physical Profile:** Transfers with min AO1 via standing, tendency to plantarflex left foot, rocks in sitting, left knee contracture (10°)

**Main area of concern:** Left ankle ROM, reduced standing tolerance, deterioration in transfers (dropping to knees on standing), increased spasticity left leg (gastrocnemius and medial hamstring).

**Home situation:** Lives with father and mother, external care.

**Day/community activities:** Day centre 5 days a week

## Postural Management before the Pandemic:

**Positioning:** Wheelchair, Prone standing frame with AFOs (3 x week – 40mins), Alternative seating

**Therapeutic Activities:** Standing at hand rails (5 x week approx. 5 mins), Standing sling (weekly 30 mins), gait trainer (5 x week 30mins), Hydrotherapy (weekly), Dynamic movement programme (3 x week)

## Reason for Referral:

Referral by father due to a deterioration in standing transfers, dropping to knees mid transfer. Parents then have to support from floor which is difficult to perform.

## Impact of Pandemic on Physical Presentation:

Left ankle dorsiflexion and knee flexion range of movement deteriorated by 10°. Reduce trunk control/core strength resulting in instability during transfers thus drops mid way through standing transfer

## Impact of Pandemic on management plan:

Day services ceased thus reduced access to therapeutic activities and prone standing frame

## Impression:

Deterioration caused by significantly reduced access to therapeutic activities and prone stander, critical to maintaining ankle range of movement, trunk control and standing tolerance

## Rehabilitation:

**GOALS:** Restore transfer ability to AO1

## Treatment Plan:

- 1) Prone stander with AFOs (starting 5 mins wk 1, increase to 20 mins wk 4)
- 2) Standing at wall bars (as tolerated)
- 3) Gait trainer (30-60mins)

**Frequency:** 3 times a week at day centre delivered by support staff, monitored by physiotherapy team

## Outcome:

Standing in prone standers (15mins)  
Standing at wall bars between 3-6 mins  
Gait trainer up to 60 mins  
Parents report improved transfers but early days

**Thank you to everyone who contributed to the survey and case studies**

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