Specific Question: In patients with musculoskeletal (MSK) disease, is a physiotherapy virtual consultation (VC) as clinically effective and as acceptable to clinicians and patients when compared to a face to face physiotherapy consultation?

Clinical Bottom Line

Overall, there is moderate to good quality evidence to suggest that virtual consultations (VC) undertaken in primary care and orthopaedic settings have a similar effect on health outcomes compared to face to face consultations and patients are highly satisfied with this approach.

Patients with chronic MSK disease attending physiotherapy virtual consultation are satisfied with the approach and most assessments can be undertaken reliably. However, the evidence is only of poor to moderate quality.

VC may not be suitable for all physiotherapy assessment in all contexts but it can be used as a first contact.

Face to face (i.e. Clinician and patient physically in the same room) is still regarded as the gold standard but patients report virtual consultation reduces travel and wait times.

Why is this important?

In the current COVID 19 pandemic many Physiotherapy services are looking to offer patient non face to face appointment to reduce the risk of infection and reduce the foot fall through the NHS.

Physiotherapists are now embedded in all sections of the MSK pathway which varies across the UK. Roles vary and include first contact assessment and advice, and 'one-stop shop' interface services requesting further diagnostics and onward referral to secondary care.

Video consultations are currently being considered or offered in First Contact Physiotherapy, Physiotherapy and Interface contexts. Both the consultation, differential diagnosis and elements of treatment (self-help, advice on exercise and activity) can also be offered.

Physiotherapy is a traditionally face to face, hands on discipline, however trials have been undertaken on the use of telephone consultations for assessment and management. The Physio Direct trial (Salisbury et al 2013) found this to be a safe and effective method of management for patients with MSK disease. Patients found it to be acceptable.

CAT Lead: Kay Stevenson and Tina Hadley-Barrows

Email: kay.stevenson@mpft.nhs.uk
Tina.Hadley-Barrows1@nhs.net

Date completed:

It is important that we understand the literature underpinning this method of consultation. Anecdotally Physiotherapists recognise the benefits and challenges, and suggest it is not suitable for all patients and the context is important (i.e. if patient seen as First Contact or in an Interface setting). Patients not only recognise the benefits, such as reducing the burden of hospital attendance, but acknowledge its limitations, such as not all patients having the technology or the perceived technological 'know how' to support its use.

Whilst this may be acceptable to patient during COVID 19, will this form of consultation be of value when the pandemic recedes?

Please see:

https://www.keele.ac.uk/pcsc/research/impactacceleratorunit/evidenceintopracticegroups/alliedhealthprofessionals/ for CAT on telerehabilitation

Search timeframe: 2015-2020

Inclusion Criteria:

	Description	Search terms
Population and Setting	Adult patients Musculoskeletal pain	Adult patients Pain Osteoarthritis Back pain Spinal pain Shoulder pain Knee pain Joint pain Muscle pain Muscle strain Tendonitis
Intervention or Exposure	Video consultation	Bursitis Video consultation One consult Accurx Virtual
Comparison, if any	Usual Face to face consultation	Online Video conferencing internet Physiotherapy
		Physical therapy Usual care Face to face

CAT Lead: Kay Stevenson and Tina Hadley-Barrows

Email: kay.stevenson@mpft.nhs.uk
Tina.Hadley-Barrows1@nhs.net

Date completed:

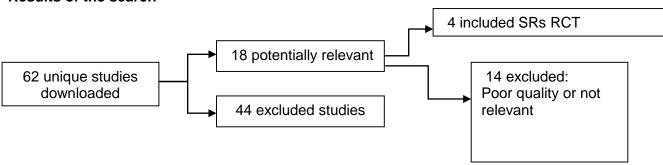
		'Hands on' assessment	
Outcomes of interest	Pain reduction	VAS	
	Satisfaction	Satisfaction	
	Acceptability	Safety	
	Safety	Adverse events	
Types of studies	Systematic Reviews (SRs) & Randomised Controlled Trials (RCTs)	SRs and RCTs	

Routine Databases Searched

Cochrane Systematic Reviews, Clinical Evidence, DARE/HTA/NHSEED, Medline, CINAHL, AMED, PsychInfo, Cochrane (CENTRAL), Web of Science, IBSS (BIDS)

Date of search - May- June 2020

Results of the search



CAT Lead: Kay Stevenson and Tina Hadley-Barrows

Email: kay.stevenson@mpft.nhs.uk
Tina.Hadley-Barrows1@nhs.net

Date completed:

Table 1- Detail of included studies

First Author, year and type of study	Population and setting	Intervention or exposure tested	Study results	Assessment of quality and comments
Buvik et al 2018	Norway Orthopaedic setting 389 randomised controlled trial	2 Groups Video assessment (n= 199)- included a nurse Versus Standard face to face (n=190) Outcomes: Patient satisfaction Patient reported Health EQVAS Outpatient	Overall no differences Both received high levels of patient satisfaction, with 86% of patient receiving video wanting this method at their next consultation No differences in patient reported health outcomes at 12 months Patient more satisfied than clinicians	Good quality Some information not included ie. randomisation method but published previously Only used particular sections of a validated questionnaire Reliable outcome measures Nurse being present at video consult will not reflect UK
Grona et al 2018 Systematic review with a narrative review (2003-2018)	Chronic MSK Physiotherapy	experience Validity and reliability and System and health outcomes (assessment and treatment)	High risk of bias in studies exploring validity and reliability Suggesting an improvement in satisfaction and health outcome – but studies of small numbers	practice No meta-analysis High risk of bias Only 4 databases searched 2 reviewers not 3

CAT Lead: Kay Stevenson and Tina Hadley-Barrows Email: kay.stevenson@mpft.nhs.uk
Tina.Hadley-Barrows1@nhs.net

Date completed:
Date CAT to be reviewed: 2021

First Author, year and type of study	Population and setting	Intervention or exposure tested	Study results	Assessment of quality and comments
Thiyagarajan et al 2020 Systematic scoping review with a narrative review	Primary Care All data bases searched 2010-2018	Experience of patients and clinics using video consultation (VC)	7 studies identified Patients satisfied with (VC) report decrease travel costs and reduced wait times (USA) Face to face still seen as gold standard. VC not suitable for all situations	All databases searched English language only No grey literature or unpublished work included 2 reviewers
Mani 2017 Systematic review	Search of all databases 2000-2015 Physiotherapy MSK	Validity and reality tele consultation and rehab QUAREL and QUADS for quality	Moderate to good quality Assessment of Pain, ROM, Swelling, balance, gait and functional assessment showed good validity. Low to moderate reliability for lumbar posture, neurodynamic tests, orthopaedics special tests and scar assessment	2 reviewers, plus third for review Good search Used reference lists Didn't include Gray literature QAREL tool for quality QUADAS tool for validity studies article

Summary

The research presented has been undertaken in various countries and contexts. The Norwegian study, was high quality, but did not represent what would happen in UK practice. All patients receiving the video consultation had a nurse present with them for

CAT Lead: Kay Stevenson and Tina Hadley-Barrows

Email: <u>kay.stevenson@mpft.nhs.uk</u> Tina.Hadley-Barrows1@nhs.net Date completed:

their assessment. This was an orthopaedic setting and therefore the population may not be reflective of UK physiotherapy referrals.

Those studies that explored physiotherapy specifically varied in quality, but suggested that it was possible to undertake most assessments; however some were more challenging including orthopaedic special tests.

One key feature of all of the studies is that patient satisfaction with VC is high.

Implications for Practice/research

The use of video/tele consultation has become part of routine practice in light of the current COVID pandemic. The evidence suggests that this would be a reasonable first line approach as we move forward with restoration of services. Patients are satisfied with this form of assessment as there are benefits including reduced travel and waiting times. However issues such of lack of access to technology, poor internet and access to technology must be considered.

Video consultations will not suit every patient and will vary depending on context and presentation. It seems to be a reasonable, evidence based option as a first offer to a patient referred to musculoskeletal physiotherapy services.

Future research implications

Research should focus on the long-term impact of the use of virtual consultations on clinical and health outcomes in the UK context and potentially explore different settings ie First contacts, routine physiotherapy and interface services.

Research should explore access to technology, the impact of health literacy and subsequent health inequalities may also need to be explored.

What would you tweet? (140 characters)

Telephone consultations are a good place to start, but not suitable for all, highly rated by patients

References

Buvik A., Bugge E., Knutsen G., Smabrekke A. and Wilsgaard T. Patient satisfaction with remote orthopaedic consultation by using telemedicine: A randomised controlled trial (2018)

Grona SL., Bath B., Busch A., Rotter T., Trask C and Harrison E. Use of videoconferencing for physical therapy in people with musculoskeletal conditions: A systematic review (2017)

CAT Lead: Kay Stevenson and Tina Hadley-Barrows

Email: kay.stevenson@mpft.nhs.uk

Date completed:

Date CAT to be reviewed: 2021

Tina.Hadley-Barrows1@nhs.net

Mani S., Sharma S., Omar B., Paungmali A. and Joseph L. Validity and reliability of Internet-based physiotherapy assessment for musculoskeletal disorders: A systematic review (2016)

Salisbury Chris, Montgomery Alan A, Hollinghurst Sandra, Hopper Cherida, Bishop Annette, Franchini Angelo et al. Effectiveness of PhysioDirect telephone assessment and advice services for patients with musculoskeletal problems: pragmatic randomised controlled trial BMJ 2013; 346:f43

Thiyagarajan A., Grant C., Griffiths F. and Atherton H. Exploring patients' and clinicians' experiences of video consultations in primary care: A systematic scoping review (2019)

CAT Lead: Kay Stevenson and Tina Hadley-Barrows

Email: kay.stevenson@mpft.nhs.uk
Tina.Hadley-Barrows1@nhs.net

Date completed: