

The use of videoconferencing consultations in the management of complex shoulder instability – a usability study

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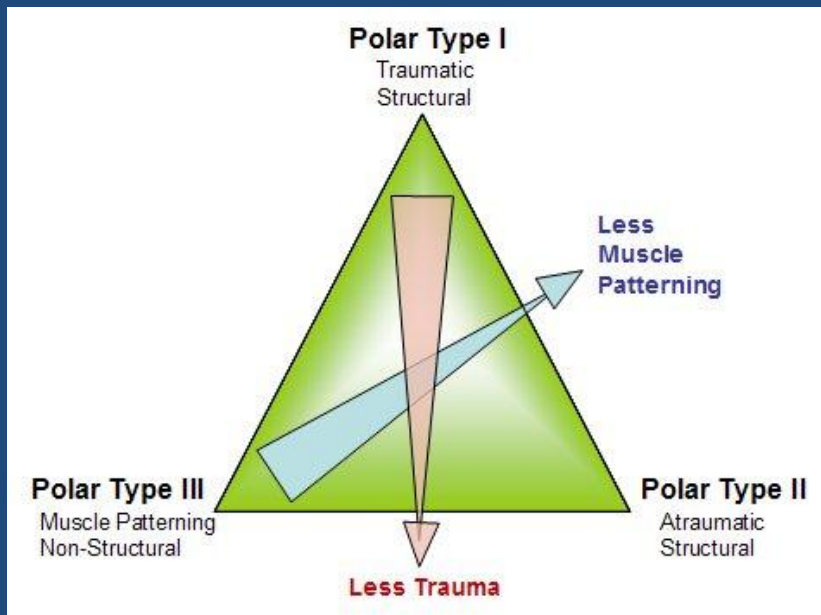
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Declaration

- The authors do not declare any conflicts of interest
- **SKYPE™** *is a trade mark of Skype and the authors are not affiliated, sponsored, authorised or otherwise associated with the Skype group of companies*
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1. Background to Study

(Lewis et al, Current Orthopaedics, 2004)



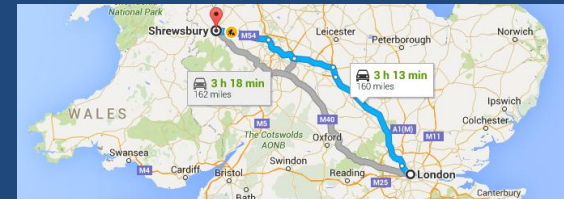
<https://www.shoulderdoc.co.uk/article/647>

Rehabilitation for Multi-Directional Shoulder instability



1. Background to Study

- **Virtual Outreach Project** (Wallace et al, the Lancet, 2002)
 - VC between London & Shrewsbury
 - RCT (VC vs FF)
 - VC positive outcomes
 - Increased satisfaction
 - Reduced investigations

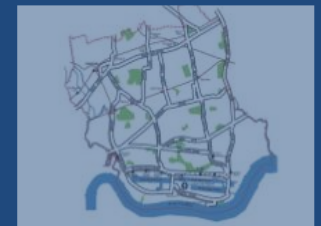


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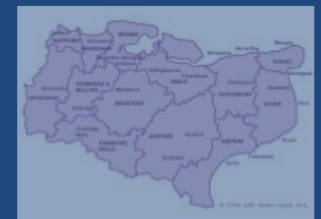
- **Whole Systems Demonstrator** (Steventon et al, Age & Ageing, 2013)
 - RCT with 6200 patients
 - Positive outcomes with telehealth
 - Reduce mortality
 - Reduce need for admissions to hospital
 - Reduce bed days in hospital
 - Reduce time in A&E



Cornwall



Newham



Kent

1. Background to Study

Determinants of successful telemedicine implementations: a literature study (Broens et al, *Journal of Telemedicine & Telecare*, 2007)

- 1) Technology
- 2) Acceptance

“more good quality studies exploring patient satisfaction and acceptability of telemedicine”

(Mair and Whitten *BMJ* 2000, Williams et al *Telemedicine Journal & E-Health* 2011)

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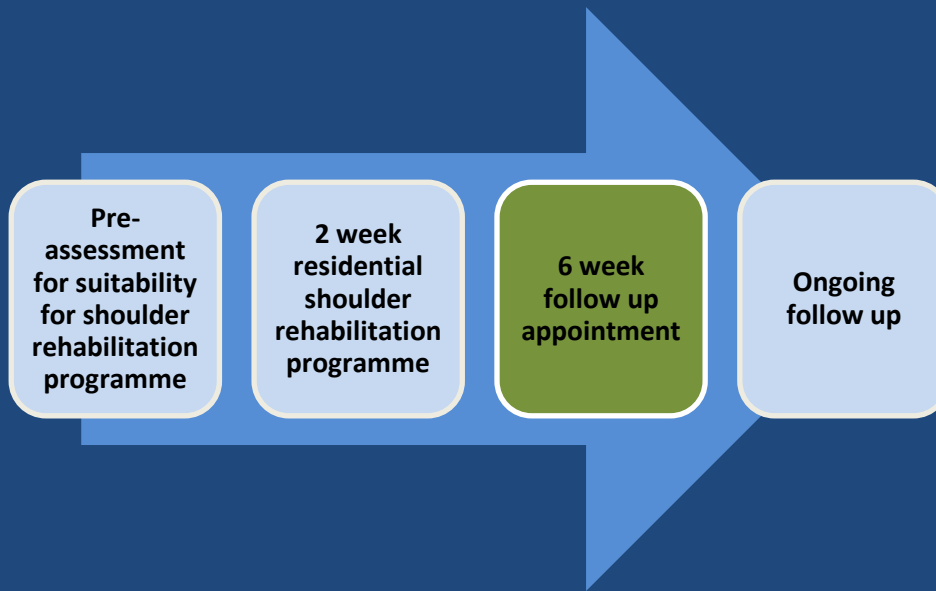
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**Qualitative Data
(Pope and Mays, BMA,
1995)**

2. Objectives

To ascertain the acceptability of real time 1:1 videoconferencing (VC) between clinicians and patients for a follow-up consultation 6 weeks after inpatient rehabilitation for multi-directional shoulder instability.



3. Study Design

Qualitative study of patient & Clinician preference after residential rehabilitation

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“Patient Choice”



**Conventional follow
up @ RNOH**

Follow up via VC

**Clinicians (both VC
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Semi Structured Interview

4. Data Analysis

Normalisation Process Theory (May 2013)

*which is a **theory** that focuses attention on the **factors that lead to a practice becoming established or not** and is concerned with ‘how and why things become, or don’t become, routine and normal components of every day work’*

Directed Content, Framework Analysis (*thematic*)

5. What did we find?

- 13 patients
- 8 clinicians
 - 7 patients chose VC via Skype
 - 6 patients chose face to face

Videoconferencing acceptable to patients and clinicians who chose to use



5. What did we find?

VC via SKYPE can assist with the long term management of these patients

5. What did we find?

VC via SKYPE can reduce both societal and NHS costs

- Reduced requirement to take time off work
- Reduced childcare costs
- Reduced travel costs
 - Patient funded
 - Hospital funded
- **Potential for A&E avoidance**

5. What did we find?

VC via SKYPE can improve patient and clinician experience

- Consultations more efficient

'Maybe because when people come in to the hospital, you almost want to start the consultation like "hi how are you, how was your journey", particularly for some of our patients who come from a long way away perhaps that takes up some of the consultation time without us realising' [C9]

5. What did we find?

VC via SKYPE can improve patient and clinician experience

- Patients in less pain, more relaxed

'I think very, because, the difference one session has made is massive because when I have a physio appointment it is so stressful because I think I am going to be in so much pain, it always takes me a few days to get over it... and not only that I think being at home in your own environment you have more freedom...' [P13]

5. What did we find?

VC via SKYPE was successful

- The same, as effective as face to face

'It just felt like I was talking to them as if they were in the room. I don't feel that because it was to a screen it was any different. I could still say what I wanted to say and I could hear what they were saying' [P15, VC patient]

5. What did we find?

VC via SKYPE was successful

- VC patients in the home enhanced the consultation

'once we had started doing it you do start to realise that is a patient is sat in their kitchen having a consultation if they just swivel their screen round and they can show you what they are having difficulty with, they can show you the cupboard they can't reach or what particular action they can't do in their environment... I think that opens up another whole dimension' [C1]

5. What did we find?

VC via SKYPE was not for everyone

- Some patients would rather travel

'Even though the travel is such a pain, and it's so awful, I would rather have the travel and see someone than not if you know what I mean' [Patient 10 = P10, face to face patient]

5. What did we find?

VC via SKYPE was not for everyone

- Some patients against the idea

'It would be really weird and detached. I like face to face interaction I don't like screens around me all the time I think it would create a bit of a detached sort of relationship...'
[P8, face to face patient]

5. What did we find?

VC via SKYPE was not for everyone

- Some patients just preferred face to face and 'hands on'

'my problems aren't visual, they are inside. You need to understand what muscles are moving, I've got a very accurate pectoral muscle and I don't think you would be able to see that over VC' [P10, face to face patient]

5. What did we find?

VC via SKYPE was not for everyone

- Some clinicians just preferred face to face

'As a junior member of the team I can't pick up so easily if someone is anteriorly, or subluxed posteriorly, I have to be hands on and look at people in lots of different angles or positions, whereas maybe if you are more senior you can do that easily from eyeballing somebody' [C4]

Conclusion

VC via SKYPE was not for everyone!

- **VC has the potential to aid management of patients with long term and complex conditions**
- **VC has the potential to bridge the gap between primary and specialist services**

Implementation 'issues'

- Information Governance
- Commissioning

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