



# What is the S2 Route?

Travelling to Europe for Medical Treatment

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# How we became aware



In November 2016 a patient not known to our service transferred into our prosthetic care via a GP referral



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# Case Study

2002 - Male 50 years old Brachial Plexus Injury

Failed nerve re-construction surgery

2015 - Patient saw a news report on national TV

2016 April - Patient's surgeon referred him to the S2 route

2016 June - Successfully using a trans-radial two site myo-electric arm



# The bionic hand that is controlled by thought alone

**ALOK JHA** FORMER SCIENCE CORRESPONDENT



*Three men have had bionic hands grafted onto their arms.  
Photo: Otto Bock Healthcare*

Milo Marinkovic used to find it difficult to put toothpaste on his brush. He couldn't tie his shoelaces and couldn't open a bottle or a packet of crisps. He couldn't do anything that required two hands, in fact, because his right hand was useless. It hung limply from his arm, unable to move after a motorcycle accident damaged the nerves in his shoulder more than 16 years ago and left the lower part of his arm immobile. Years of surgery to reconstruct the nerves and repair damage had not helped and the limb caused him intense pain whenever anything knocked into it.

That began to change five years ago, after he met Prof Oskar Aszmann at the Medical University of Vienna. Marinkovic now has one of the most advanced bionic hands in the world in the place of his paralysed hand, a mechanical device that he controls by thought alone.



# Patients' Plan of action

The patient googled Professor Aszmann. Two days later he received a reply requesting a video from the patient and inviting him to Vienna for a Free Consultation



Patient visited his GP who referred him back to his original Surgeon



Surgeon had never heard of S2 but researched it & supported application



Patient submitted S2 application and this was approved in 2 days

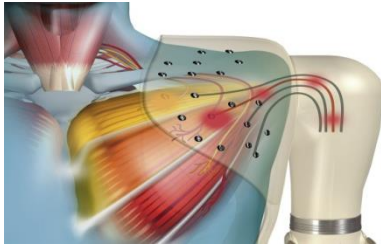


# Patients Consultation

Medial anterior nerve activity present

Lateral posterior nerve activity was on the boundary of amputation

A tri-cep to bi-cep transfer would gain elbow flexion



# European Treatment Versus UK

*The concept of TMR is based on triggering a natural repair mechanism artificially. A muscle that is no longer functional after the amputation is divided into several segments surgically to establish a new connection.*



# Care package

- 1 Pt had a consultation in Vienna
- 2 Investigation into existing Nerve activity
- 3 Myo/nerve site training with arm intact
- 4 Operation tri-cep/bi-cep transfer to gain elbow flexion
- 5 Trans-radial amputation
- 6 Prosthetic Intervention





# Prescription



# What is the S2 route?

May entitle you to NHS funded treatment in another European economic Area (EEA) country or Switzerland.

In order to be approved NHS England need to be satisfied you've met the set criteria.

It is a direct funding agreement between the NHS and the state healthcare provider of the country of choice, you must get prior authorisation from NHS England before receiving any treatment.

The NHS will cover the cost of the treatment however you may have to contribute towards healthcare costs, depending on what the common practice is in the country of your choice.



# Eligibility Criteria



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You are ordinarily resident in England and entitled to treatment on the NHS

The requested treatment would normally be provided on the NHS to an individual in your circumstances.



You have provided written evidence that you've had a full clinical assessment.



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The requested treatment is available under the treating country's state healthcare scheme.



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NHS England has determined that the same or equivalent treatment cannot be provided to you on the NHS within a time period that is medically justifiable.



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The requested treatment is not experimental or part of a drug trial.

The requested treatment is not an emergency treatment.






# How to Apply

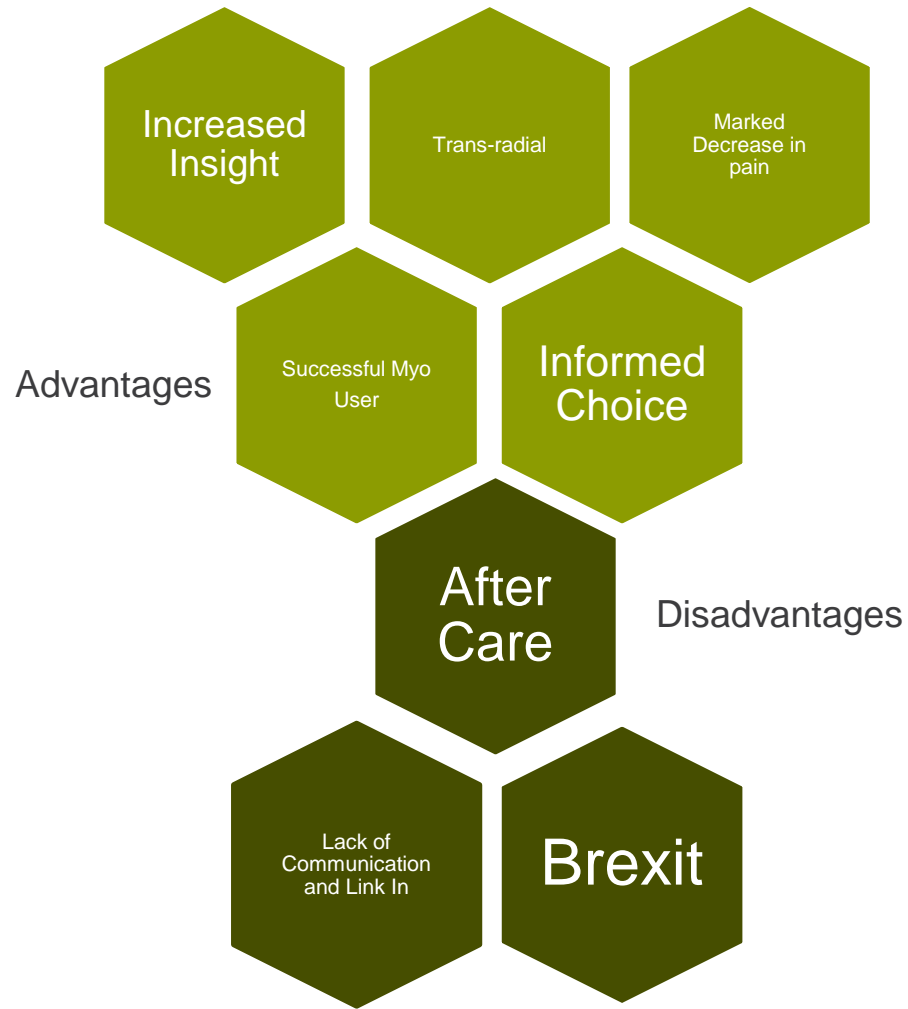
Download a form offline from the NHS Choices website

A large, solid green arrow pointing downwards, indicating the flow from the first step to the second.

The application should include evidence demonstrating that eligibility criteria has been met

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Including the type of treatment – proposed provider – admission and discharge dates – estimated costs



# Man sacrifices hand for a bionic arm that works



Nick Smith's arm was paralysed by injuries he suffered when a car pulled out in front of him in 2002  
FABIO DE PAOLA FOR THE TIMES

Thank you



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# References

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