



## ISPO UK travel bursary report

### Carolyn Hirons, Pace Rehabilitation

With the support of the ISPO UK travel bursary I was able to attend and present at the 16<sup>th</sup> World Congress in Cape Town, in May 2017.

#### Introduction

This year, the World Congress theme was “**Assistive Technology for All**” - supporting the ISPO vision of a ‘world where all people have an equal opportunity for full participation in society.’

The ISPO President, 2015 to 2017, was Professor Rajiv Hanspal. During his introduction of Giles Duley’s Inspirational Lecture, Rajiv reflected on the fact that some people are imprisoned by their disability. He said that ‘*They must be freed, and this is rehabilitation.*’ Giles Duley’s message was ‘that every day we clinicians give a gift to somebody who has a disability’. A thought provoking start to the congress, an inspiration for the way we provide our specialist field in the UK.

Key learning points to share are outlined in this report.

#### **1) Proximal Mass Knee (PMK) for short stump transfemoral amputees (VGK-S) by Jacob Boender**

The biggest problem for the short femur residuum is that the knee equipment is too heavy and too distal, which causes high inertia within the socket and therefore increased forces. The VGK-S raises the centre of mass of the knee joint to reduce the inertia by 70%. Of course a good socket is still required but the components are important too. This knee works by dynamic fluid control and has stumble recovery, variable cadence and can be used on the blade also. A great solution.

#### **2) PLUS-M by Brian Hafner. [www.plus-m.org](http://www.plus-m.org)**

The PLUS-M is a self-reported questionnaire of mobility tasks, for adults with amputation, designed to monitor progress of and document the outcome of intervention.

Mobility is a fundamental rehabilitation outcome and the primary determinant in quality of life. The 12 item questionnaire is an ideal clinical tool; the percentile provides inherent context, such as above average, below average, by how much a change has occurred. The user’s guide displays normative values for different levels and ages. The PLUS-M can be completed in a paper, digital or electronic form, the latter has online auto scoring. A clinical report can be generated, with an interpretation of the results. The recommended use is to test prior to treatment, one to three months after delivery, and at follow-up.

#### **3) Comparative Effectiveness Research by Professor Robert Gailey**

• Health:	WOMAC
• Health:	MODI
• Socket Fit:	SFCS – PCASS
• Function/Satisfaction:	TAPES-R
• Prosthetic Mobility:	PLUS-M
• Balance:	ABC
• Function/Mobility:	AMP
• Mobility:	6 MWT or 2 MWT
• Fall Risk:	TUG / L-Test

Claude Tardiff, Knud Jensen lecture, discussed how in health care there is a history of spending the budget where there is the greatest demand. The problem for rehabilitation involving mobility devices is that it has no evidence base. Research and data is required to persuade the budget holders. This theme was continued into the keynote lecture, which examined how ‘comparative effectiveness research’ looks at measures useful in determining the value of treatment, i.e. which works best, which has the greatest benefit or does most harm? The level of evidence usually presented are systematic reviews and randomised control trials, however a randomised control trial cannot not be used in all activities, i.e. how to test a parachute’s effectiveness?!

Which interventions are the most effective for a transtibial or a transfemoral level, what is the level of complexity, how many visits are they going to use, which outcome measures are necessary for short and long-term input, what is the patient's satisfaction? Outcome measures using the gait laboratory are easy, but what about people who have a sedentary lifestyle? We all want one test but there is not one test, there are many tests, there are a huge number of outcome measures.

Other conditions have huge pools of data, such as joint replacements and low back pain. Amputee rehabilitation uses outcomes but there is no pool of data to demonstrate the value of rehabilitation. We need to document and demonstrate the changes, and all do the same, like they do in other fields of medicine. A prosthesis is a medical device, the same as a knee replacement. We need to use outcome measures to prove our worth, measure our intervention (see toolbox) and to show referrers how we rehabilitate people.

Value-based purchasing demands effectiveness **and** speed, quality **and** best value. As we know, research in rehabilitation is difficult due to its multi-faceted nature, perhaps a consensus conference would help provide legitimate evidence?

### TIME - The Tool Box

		Max Time	Min Time
• Prosthetic Mobility:	PLUS-M	5	3
• Prosthetic Function:	PEQ-MS	5	3
• Socket Fit:	SFCS	1	1
• Balance/Confidence:	ABC	10	5
• Low Back Pain:	OPDS	10	5
• OA knee or hip:	WOMAC	12	6
• Mobility/Function:	AMP	15	10
• Fall Risk/Agility :	TUG	5	5
• Mobility:	6 MWT	10	8
• Activity Level:	Pedometer	2	0
		Patient Time 43 min	23 min
		Clinician Time 32 min	23 min

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