

## Health Board Meeting in Public on 25<sup>th</sup> March 2021

<b>Consent level check</b>	Full Parental consent, use in all areas (external, online, web, facebook, etc)
<b>Report Title</b>	Thank you From Mia Lloyd
<b>Report Author</b>	Paul Drayton (Advanced Prosthetist, Swansea)
<b>Executive Lead</b>	Christine Williams, Director of Nursing and Patient Experience
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<b>Presenting</b>	Christine Williams
<b>Relates to DSU</b>	Morrison - WHSSC

### 1. Report Summary

#### Background to the story, What was the patient's journey to this point?

Miss ML was 10 years old when she was diagnosed with an Osteoblastic Osteosarcoma which is a form of bone cancer in May 2017. This resulted in her having a transfemoral amputation [i.e. through the femur] on the left side and was referred to Swansea ALAC [Artificial Limb & Appliance Centre], a specialist department, in Morrison Hospital in September 2017.

Prior to the amputation she was an extremely active child participating in a range of sports – her passion being athletics. She was extremely keen and motivated to return to these activities as soon as possible (despite still undergoing Chemotherapy).

Her first prosthesis was provided to her on 21<sup>st</sup> December 2017 and she was able to take her first steps on her prosthesis before Christmas; this was a big psychological 'boost' for her and her family!

As a huge Scarlets Rugby fan, She had asked for a Scarlets design on the device; we were able to carry out this request using a Training top that was provided to us.

She was able to walk with the new device and continued to improve throughout her rehabilitation at the Artificial Limb & Appliance Centre. As she went into remission of her cancer and her general health improved, her mobility also improved and she gradually returned to the majority of the activities that she had enjoyed prior to the amputation. However, there were some limitations: she struggled to be able to 'run' to the level that she had done prior to amputation.

This was because it is difficult for any amputee without a knee to run because they have to operate a prosthetic knee mechanism at a faster speed than they do when walking.



ML and her family were involved at all stages of her prosthetic rehabilitation and the family were keen to explore the options that were available to help ML to return to her previous level of mobility; returning to running was always one of ML's main goals. We discussed options and in 2018 she was provided with a more dynamic foot and knee to try to help her running. The provision of a 'Variflex Junior' foot help her with higher impact activities due to the dynamic nature of the foot. She was the first person in Wales to be provided with the Otto Bock 3R67 knee joint (this was a newly released, high activity- paediatric prosthetic knee joint); the 3R67 uses hydraulic swing control to offer varied walking speeds and higher impact activities. Provision of these components helped to increase her activities further.



Variflex Junior Foot



Otto Bock 3R67 knee

Having had a period of time on the new components, her activity level had increased but she was still finding running difficult. She had been in conversation

with Disability Sport Wales and was cited as a potential Paralympic athlete of the future. She had looked at (adult) Sports prostheses and was keen to have one.

Her trial of the Sports Prosthesis was extremely successful. ML's face lit up at the sight of the new device and she was in her element when using it. Her family were present and it was an extremely emotional moment for them. In the coming weeks, a definitive prosthetic device was provided for her and she was given physiotherapy input to help to optimise her ability to use this new device.

It is impossible for me to stress the importance of this recreational device has become to this patient and her family. The provision of this device helps her to return to her previous activities despite the difficulties that she has faced. I feel that it is important for her physical and mental wellbeing as well as her development as a child / young adult.

Since this story has taken place, a Paediatric Recreational / Sports prosthesis policy has enabled us to provide of these types of devices to other young people in Wales. Hopefully, the provision of such devices will have the same level of positive impact for other young patients and their families.

Miss ML made a video of her journey to show us what the provision of this device (and the provision of prostheses) by Swansea ALAC has meant to her

Miss ML is now using an Adult prosthesis as her 'everyday' prosthesis.

She has enquired about a Microprocessor controlled knee, hopefully, this will be something that can be considered for prosthetic prescription her in the future.

**The great news is ALAS [Artificial Limb & Appliance Service] has been to commissioned to provide a Microprocessor Knee (MPK) Service starting from April the 1<sup>st</sup> 2021.**



## 2. Key points to note

*(Including decisions taken)*

The story above demonstrates that the provision of 'recreational prosthetic devices' via our ALAS for young people is beneficial for development, mental wellbeing and physical wellbeing; this extends not only to the service user but also to their family.

Provision of devices such as these helps the child / young person to undertake sports and hobbies as their peers would be able to and this is an important part of meeting the overall service aim of maximising the mobility, independence and quality of life of the patient or service user.

## 4. Advice and Recommendations

*(Support and Board/Committee decisions requested):*

- This report is for **INFORMATION**.

## 5. History of the paper

**Please include details of where paper has previously been received.**

N/A