
Rachel Yeung (MSc, MCSP), Aine Thompson (MSc, MCSP) Dr Steven Hall (MCSP), Dr Kate Gafford (MCSP)

Background
Doncaster has significantly higher levels of physical inactivity than the national average (1). Physical activity supports the management of long term conditions including musculoskeletal (MSK). The Doncaster and Bassetlaw Hospitals NHS Foundation Trust (DBH) physiotherapy service has recorded sustained increased referrals. The Back Active/Stay Active (BA/SA) pathway was devised to support patients to become independently physically active for sustainable management of their MSK problem.

Figure 1: Service pathway

The objectives of this service evaluation were to:
- evaluate long term outcomes
- identify service limitations

Methods
The service evaluation was registered with Doncaster Royal Infirmary Research and Development Department. Retrospective analysis of records collected from the STarT Back questionnaire (STTB), EuroQoL 5D (EQ5D) and sit to stand repetitions (STSR) generated quantitative data. Data from all three tools was collected from 59 service users upon referral to and completion of the BA programme. The EQ5D was completed by 168 service users upon commencing the SA phase and repeated upon discharge from the SA programme. Qualitative data was gathered through semi-structured interviews with selected service providers and a random sample of service users.

Results
Retrospective data for a total of 208 service users across the Back Active/Stay Active pathway was included in the quantitative analysis. Eight service providers and eight service users were interviewed.

Table 1: Back Active Data

<table>
<thead>
<tr>
<th>Tool</th>
<th>Mean pre BA</th>
<th>Mean post BA</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBST</td>
<td>4</td>
<td>3</td>
<td>0.0002</td>
</tr>
<tr>
<td>EQ5D</td>
<td>0.58</td>
<td>0.63</td>
<td>0.005</td>
</tr>
<tr>
<td>STSR</td>
<td>24</td>
<td>33</td>
<td>0.001</td>
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Table 2: Stay Active Data

<table>
<thead>
<tr>
<th>Tool</th>
<th>Mean pre SA</th>
<th>Mean post SA</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ5D</td>
<td>0.63</td>
<td>0.81</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Figure 2: Quotes from Service Providers

The programme has the potential to meet the needs of a broad range of diagnostic groups. It could go beyond the musculoskeletal setting (Band 6 physiotherapist)

The reason that the instructor role came about was to try and bridge the gap between physiotherapy lead treatment to being out in the community exercising independently. (Service commissioner)

Figure 3: Quotes from Service Users

I've stopped getting the pain. It's well over a year. I've not had any pain since so it's obviously done me some good

I was 73 kilos, I'm now 60 kilos. I've gone down from size 16 to size 12, everything's a bit baggy on me. I play a tuba to lift and sit with it between my legs for a long time, you know, it was hurting, and I was limited. I can now play in the brass band again.

If I feel like my hip or knees are a bit weak, I'll have a couple of days where I do the exercises that I've been shown.

Discussion
Data analysed within this service evaluation indicate that the BA/SA pathway is a successful model of patient care. Quantitative data demonstrates improved physical performance and perceived wellbeing associated with attendance upon the programme. Qualitative data indicates sustained improvement in symptoms and a long term commitment to increased physical activity. Limitations associated with the service included session accessibility, none standardised core outcome set and employment of a lone fitness instructor.

Conclusion
The collaboration between NHS, CCG and leisure based facilities can decrease physical inactivity, improve physiotherapy outcomes and support resource management in the NHS. It is recommended that funding is made available to conduct a prospective study incorporating robust data collection methods to further evaluate the impact of the pathway.

References