Six Month Pilot Analysis: Improving Rehabilitation for Men with Prostate Cancer in North East London

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Executive Summary

The Evidence
The incidence of prostate cancer in North East London is significantly higher than the national average\(^1\). Prostate cancer is the most commonly diagnosed cancer across North East London and trends indicate the number of men living with and after prostate cancer in this region is predicted to rise exponentially in the future\(^2\).

Despite robust evidence indicating that exercise reduces the risk of prostate cancer disease progression by 57\(^3\) and recurrence and mortality by 30\(^4\), men having undergone prostate cancer treatment have rehabilitation requirements, but hesitate to participate in services either due to inadequate expression of their needs or rehabilitation services appealing more to women\(^5\).

The Issues
This was concurrent with findings from our scoping exercise in North East London, which revealed that very few men accessed existing rehabilitation services in the area during the last financial year (April 2014- March 2015). At St Joseph's Hospice patients with a primary diagnosis of prostate cancer represented a very small percentage of patients accessing hospice services (2.5% of all cancers seen by the community palliative care team and 1% of physiotherapy out-patients). Likewise Barts Health Trust offer a comprehensive outpatient based 6 week survivorship course but to date, have had no men with prostate cancer engage with the programme.

From the scoping report, key reasons why men with prostate cancer do not engage with rehabilitation services in North East London are:

- An absence of health and wellbeing clinics for men and their partners/carers;
- A lack of referrals to palliative services at St Joseph’s Hospice;
- Because no concise prostate cancer pathway exists that would make info/advice/referrals easier to access;
- Poor engagement of men living with or beyond prostate cancer with information contained in posters/leaflets and hand-outs;
- Because there is no physiotherapy provision to educate men on pelvic floor/bladder training and best exercise prescription.

Action
To address these discrepancies in rehabilitation service uptake by men with prostate cancer - despite clear evidence of rehabilitation need and benefit - our Prostate Cancer UK (PCUK) Rehabilitation Project has piloted an innovative six month programme with the explicit objective of engaging more men with prostate cancer in timely rehabilitative support.

The programme has incorporated three different rehabilitation interventions:

1. Health and Wellbeing Clinics to provide face to face exercise and health promotion for all men referred in Prostate clinics.
2. Individual, one to one physiotherapy sessions for men with prostate cancer experiencing physical impairment.
3. Engaging and teaching clinicians and men to improve health beliefs and increase uptake of men into appropriate rehabilitative programmes.

This stratified approach enabled the project to pilot various strategies and better tailor physiotherapy interventions to men’s individual needs whilst intrinsically being service user led:

<table>
<thead>
<tr>
<th>Problem/Impairment</th>
<th>Physiotherapy Intervention</th>
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<tbody>
<tr>
<td>Post-operative urinary incontinence</td>
<td>• Pre- operative pelvic floor muscle training</td>
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<tr>
<td></td>
<td>• Post-operative pelvic floor muscle training</td>
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<tr>
<td>Frequency/urgency of urine</td>
<td>• Bladder training</td>
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<td></td>
<td>• Hydration advice</td>
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<td></td>
<td>• Urge Suppression techniques</td>
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<td>Fatigue</td>
<td>• Graded exercise training</td>
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<td></td>
<td>• Goal setting</td>
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<td></td>
<td>• Exercise on prescription referral</td>
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<td>Low level of physical activity</td>
<td>• Individualised physical assessment and exercise programme.</td>
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<td></td>
<td>• Graded support</td>
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<td></td>
<td>• Education on evidence</td>
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<tr>
<td>Reduced mobility</td>
<td>• Individualised exercise programme</td>
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<td></td>
<td>• Referral to onward service</td>
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<tr>
<td>Lack of information and access to rehabilitative services</td>
<td>• Education in health and wellbeing clinic</td>
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<td></td>
<td>• Signposted to local Rehab services</td>
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**Six months of Success**

This report evaluated the prostate cancer rehabilitation pilot during the six month period of operation between 3rd November 2014 and 8th May 2015. During this time a total of 193 men and partners/carers have been successfully engaged with the project; receiving rehabilitative assessment, treatment or education. This represents a significant achievement as engaging men to participate in rehabilitation programmes were the primary issue challenging the project.

Significantly, the programme has successfully engaged men across the whole prostate cancer pathway showing that rehabilitation tailored to patients needs is appropriate from diagnosis to death. Indeed the number of men with advanced prostate cancer participating in out-patient Physiotherapy at St Joseph’s Hospice has tripled due to the pilot rehabilitation programme.

This is evidence to support the instatement of a specialised out-patient Physiotherapist, as men obviously have needs that previously are not being met. Once their physical symptoms are improved or managed in order to improve confidence; there has been a vast increase in engagement of men with other rehabilitative services.

This reinforces the value of an out-patient Specialist Physiotherapist for men with prostate cancer at all stages of the disease trajectory. When bench marking against other specialist Oncology Trusts men with prostate cancer have access to a specialist oncology physiotherapist, therefore a key
The six month pilot of a specialist prostate cancer Physiotherapist has been shown to:

- Cost £3160 per QALY gained
- Improve urinary incontinence by 17%
- Improve lower urinary tract symptoms by 57% from moderate severity to mild
- Increase individual levels of physical activity by 209%
- Increase self-reported global health by 17%
- Improve confidence in self-managing side-effects post physiotherapy intervention (and maintained up to 6 months later) by 25%
- Support men to reduce unscheduled GP visits by 45% and a reduce Hospital admissions by 100% over six months
- 48 onward referrals to other appropriate services

**Patient Impact**

This pilot shows that proactive bladder training pre radiotherapy reduces lower urinary tract symptoms by 57%, enabling men to tolerate curative radiotherapy. More importantly men are reporting a significant impact of rehabilitation input on their quality of life:

“This service has given me a new lease of life, it has given me the confidence to go out and look for work.”

Of particular note 82% of men reported their main issue was caused by lower urinary tract symptoms. During the latter 3 months of the pilot the most frequently referred issue impacting on men was urinary frequency and urgency in the radiotherapy treatment pathway.

Participation in rehabilitation and specifically bladder training was found to effectively improve men's continence control and associated global health (see above). This highlights an innovative opportunity to develop the Physiotherapy role in the radiotherapy pathway by providing bladder training and pelvic floor exercise to all men prior to receiving radiotherapy or surgery.

Presently physiotherapy training pre prostatectomy or radiotherapy is not routinely in place for men within Barts Health NHS Trust. Outcomes from our pilot suggest this may represent an area which needs addressing to ensure prostate cancer services are providing a multi-disciplinary approach to men and to help proactively reduce future costs associated with long term continence management.

Likewise exercise rehabilitation contributed to improved physical outcomes for a smaller number of men who were experiencing physical impairments related to their illness. Benefits included a 209% increase in individual physical activity and although not a formal metric; four men were supported to return to work through this programme.

The role of the Specialist prostate cancer Physiotherapist does fill major gaps within the Prostate Cancer Pathway. But more importantly the project has proved there are many physical impairments
caused by prostate cancer which have comprehensively improved following formal training (fatigue/exercise/lower urinary tract symptoms) that only a Specialist Physiotherapist can provide.

**Economic Impact of Specialist Physiotherapy Intervention**

Participation in the one to one Physiotherapy intervention was linked with a reduced utilisation of other health services with 45% fewer unscheduled GP visits recorded and a 100% reduction in hospital admissions and consequent savings across the health economy.

Generally the National Institute for Health and Care Guidance recommends considering interventions costing the NHS between £20,000 and £30,000 per Quality Adjusted Life Year (QALY) gained cost effective vi. The predicted cost/impact of the specialist prostate cancer Physiotherapist is £3160 per Quality adjusted Life Year gained. Consequently very cost efficient when evaluated against the NICE guidance.

Income generation is successfully implemented across other Tertiary Cancer Hospitals for Oncology Physiotherapy out-patient roles and within Barts Health NHS Trust for women with breast cancer. If this large collection of positive outcomes is pro-actively utilised and entered into Barts Health’s commissioning intentions the development of a dedicated Specialist out-patient post open to all patients in Oncology (not just breast cancer) could be self-sustaining thanks to income generation.

Furthermore, the holistic needs assessment is a core feature of the recovery package, which is part of the Commission for Quality and Innovation Payment Framework vii. This is of financial consequence as a Specialist out-patient Physiotherapist would be well placed to complete the Holistic needs assessment and consequently has a financial remuneration attached.

**Strategic Impact of Specialist Physiotherapy Intervention**

Both running three successful health and wellbeing clinics’ and supporting return to work strategically link with the NHS Five Year Forward View viii. This key document is directing healthcare providers to do more to support people to manage their own health, stay healthy, make informed choices about treatment, managing conditions and avoiding complications. However if the specialist Physiotherapy role is not commissioned beyond this project these men will return to receiving minimal support to manage their own health.

**Promoting Professional Awareness**

Alongside a clinical service, this project aimed to raise awareness of the consequences of prostate cancer and improve individual clinician/professional’s confidence to:

- Proactively identify men’s rehabilitation needs
- Proactively promote exercise as the fourth cancer treatment ix
- Proactively refer men to rehabilitation services

During the project the specialist prostate Physiotherapist facilitated six teaching sessions to 77 clinicians who come into therapeutic contact with men with prostate cancer within their role. Sessions highlighted a lack of professional knowledge and awareness around the importance of rehabilitation and exercise for men with prostate cancer.
Sessions were positively reviewed and showed a significant improvement in clinicians’ self-reported knowledge and awareness of symptoms and how to manage them (minimum 83%) and an increased awareness of available rehabilitation and community support services (minimum 82%). The education of professionals has been key to raising awareness of men’s rehabilitation needs and supporting onward referral to appropriate rehabilitation services throughout the pathway.

**Conclusion**
Findings from the Prostate Cancer Rehabilitation pilot are resoundingly positive. The programme has been evaluated through the rigorous use of outcome measures and subjective feedback to assess acceptability and effectiveness of rehabilitations interventions for men with prostate cancer. This enables us to report with confidence that rehabilitation interventions have significant positive impacts on symptoms, specifically lower urinary tract, physical activity and wellbeing for men with Prostate cancer.

**Recommendation**

- It is an explicit recommendation to establish a dedicated Specialist Oncology out-patient Physiotherapist accessible to men with Prostate Cancer within Barts Health NHS Trust. Consequently expanding the potential to in-come generate, addressing the inadequacies of the oncology Physiotherapy provision when benchmarked across other tertiary centres and contributing to key aspects of the delivery and consequent commissioning (against the Commission for Quality and Innovation payment framework) attached to the Recovery Package.

- Implementation of an improved surgical pathway to improve post-operative advice and continence support at the surgical site; as follow up at their local centre has meant the men are receiving inconsistent rehabilitative support.

- Explore the possibility of future research to provide a foundation for specialist physiotherapy within the radiotherapy treatment pathway, in particular to support the findings within this document on improving lower urinary tract symptoms.

- No change in service delivery or expertise is required within the St Joseph’s Hospice therapies team and men are happily engaging with the services on offer once through the door, the challenge is to continue the increased proactive referral of men into St Joseph’s Hospice services. This will depend on the continuation of the health and wellbeing clinics with St Joseph’s Hospice representation present, the carryover of the teaching sessions delivered to healthcare professionals and the investment of a permanent specialist out-patient Physiotherapist to recognise and refer men with prostate cancer to palliative care in a timely way.
References


2 http://publications.cancerresearchuk.org/downloads/Product/CS_KF_PROSTATE.pdf


9 http://www.macmillan.org.uk/Documents/AboutUs/Newsroom/Physicalactivityreport.pdf