

# Proposed National Rehabilitation Centre in East Midlands:

## Equality Impact Assessment

Revised: October 2019

## Introduction

### Our approach

This short report presents the findings and recommendations of a high-level Equality Impact Assessment of the Pre-Consultation Business Case for the National Rehabilitation Centre (NRC) at Stanford Hall, near Loughborough.

The assessment was conducted during June 2019 and reviewed again in October 2019 by the independent consultancy Imogen Blood & Associates (IBA).

Imogen Blood and Sarah Chalmers-Page of IBA, who have extensive expertise of Equality, Diversity and Inclusion and the NHS – reviewed the following documents in June 2019:

- Pre-consultation Business Case (PCBC) for the National Rehabilitation Centre (NRC)
- Stage 2 Clinical Assurance Evidence Pack

In October 2019, they reviewed the following additional documents:

- NRC Engagement Events, Interim Report, 25 October 2019, prepared by necs
- Version 15 of the Pre-Consultation Business Case (October 2019), with particular focus on the updated Care Model (S5.2) and the findings of the Travel Impact Assessment (TIA) (S5.4)

Telephone meetings were held between senior leaders in the team working on the NRC and Imogen Blood. These allowed clarification of points in the document and the scope of the Equality Impact Assessment (EIA).

At the current time, workforce is outwith the scope of this document.

### Purpose and status of Equality Impact Assessment (EIA)

Under the Public Sector Equality Duty (PSED) (S.149 of the Equality Act 2010), a public authority such as a Clinical Commissioning Group, must, in the exercise of its functions, have due regard to the need to:

- Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
- Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it; and
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The following characteristics are protected under the Act:

- age;
- disability;
- gender reassignment;
- marriage and civil partnership;

- pregnancy and maternity;
- race;
- religion or belief;
- sex;
- sexual orientation.

In addition, the NHS Equality Delivery System applies to CCGs and NHS England commissioning decisions. It is a set of outcomes covering patient care, access, and experience which adds to the protected characteristics a number of 'Inclusion Health groups', including (NHS 2013):

- People who are homeless
- People who live in poverty
- People who are long-term unemployed
- People in stigmatised occupations (such as women and men involved in prostitution)
- People who misuse drugs
- People with limited family or social networks
- People who are geographically isolated

### **What is an EIA and why conduct one?**

An Equality Impact Assessment ("EIA") is an analysis of a proposed organisational policy, or (in this case) a change to the way in which services are delivered, which assesses whether plans are likely to have a disparate impact on persons with protected characteristics. (House of Commons Library 2018, p.23).

Although not explicitly required by law, EIAs are one way in which a public authority can demonstrate its compliance with the PSED:

- They can help an authority to evidence that it has considered potential equality impacts systematically and can help it to identify the actions it can take to promote equality of opportunity.
- EIAs allow authorities to pre-empt and mitigate potential 'indirect discrimination', in which a practice, policy or rule which applies to everyone in the same way but has a worse effect on some people than others.

### **The proposed change**

The National Rehabilitation Centre (NRC) aims:

'To create the first National Rehabilitation Centre in England, bringing together experts in the field to deliver best practice, train our future workforce and research in the field to maximise the advances in technology and engineering to benefit this patient group'. (PCBC, v2)

The core aims of the service are:

- To reduce delays in accessing care and increase capacity to treat patients. The proposed centre will treat around 800 patients a year.
- To improve outcomes by increasing the intensity of rehabilitation, with improved return to work or other social outcomes.
- To improve facilities, equipment and knowledge through co-location with the defence facility.

Patients will be referred to the service based on clinical need, avoiding the current geographical variations in care. Access will widen from neurological patients to include major trauma, complex MSK, traumatic amputees, incomplete spinal cord injury and severely deconditioned patients. These additional patient groups are currently cared for in acute beds but do not benefit from treatment in specialist rehabilitation facilities. Rehabilitation aims to enable people to return as far as possible to their day to day lives and roles.

The centre will share facilities and learning with the UK defence medical services, whose Rehabilitation Centre is co-located at Stanford Hall Rehabilitation estate in state of the art, bespoke new facilities, some of which the NHS patients will be able to share. This includes the hydrotherapy pool, diagnostics equipment such as X ray and MRI, highly sophisticated gait lab and a virtual reality Computer Aided Rehabilitation Environment (CAREN). Such facilities are currently not available on the NHS; currently, defence returns 85% of trauma patients to duty, compared to 35% of people returning to work in the civilian population. Although the populations may not be directly comparable, the UK also lags behind the USA and Europe on return to work (NSCARI report cited in PCBC). This report also acknowledged that rehabilitation provision for patients is not adequate in England.

The proposed NHS facility at the NRC would contain 63 beds, comprising 40 neurological rehabilitation beds, 19 complex MSK beds and four traumatic amputee rehabilitation beds. It would treat 796 patients per year. Part of the proposal is that Linden Lodge (the rehabilitation unit at Nottingham University Hospitals (NUH)) will close, since the estate is no longer at the required standard and there is no space to expand. 21 of the current 24 beds at Linden Lodge would be moved to the NRC, with 3 rehabilitation beds moving to another location with the NUH campus. 18 beds for MSK rehab may also be relocated to the NRC. It is expected that the proposal will be cost neutral due to the relocation of rehab beds, improved lengths of stay for rehab and better outcomes for patients which in turn, will reduce demand on services over the longer term.

### The population of the East Midlands

Life expectancy and healthy life expectancy in the East Midlands are lower than the average for England (Public Health England 2017). In terms of deprivation, levels are lower than the English average (PCBC v2) but there is a significant urban-rural divide (with deprivation higher in the urban areas), which means that this should be included in the equality analysis where possible. In Rutland, males and females live 10.7 and 14.6 years respectively in ill health, whereas in Nottingham City they live 20.1 and 24.2 years in ill health (Public Health England 2017). There are also pockets of significantly poorer health outcomes in the former coalfields in Leicestershire and along the Lincolnshire coast.

The Global Burden of Disease data quoted in Public Health England (2017) indicate the most common risk factors for years lived in disability in the East Midlands are obesity, alcohol and drug use, poor diet, occupational risks and smoking.

## Overview of key themes highlighted in the EIA

NB: In the remainder of the report, we have highlighted mitigations, questions and recommendations in italics.

### Opportunities to advance equality of opportunity through the NRC

#### **Narrowing inequalities through reducing disability and improving clinical outcomes**

The NRC will improve outcomes for patients, which should benefit all groups accessing the centre. The NCASRI final report on the provision of specialist rehabilitation following major trauma found that only 40% of patients in major trauma centres identified as needing specialist rehabilitation received it, but of those who did receive it, 94% showed signs of functional improvement. This indicates that there is a need for the NRC and that it will reduce impairments.

The NRC will aim to return people to their usual activities (such as work or caring), rather than facilitate a safe discharge as soon as it is medically possible. This will draw from the defence model of intensive rehabilitation to facilitate a return to duties. This will reduce long term disability and dependence, and in turn reduce the risk of family members becoming carers.

*The public involvement on these proposals should include people from a range of backgrounds, and proactively reach out to people who are within the EDS2 Inclusion Groups or who have a protected characteristic, to ensure that their perspectives are included in the development of the services.*

#### **Reducing geographical inequalities in care and outcomes**

The PCBC indicates that there are currently wide variations in waiting time and service based on the area of the East Midlands that a patient is treated in. These are not clinically justified. The NRC will reduce this unfair variation, and therefore reduce inequality based on location.

#### **Opportunity to design a new-build, purpose-built facility**

The fact that the NRC will occupy a purpose-built facility creates a number of opportunities to promote equality of access and experience for different protected characteristic groups, *assuming these are fully considered at the design stage*. The centre should be designed to the highest access standards (including staff and research spaces as well as public-facing spaces), and should also consider acoustics, dementia-friendliness, lighting and psychologically informed approaches in layout, signage, interior design, etc. Making sure that free and/or disabled parking, multi-faith prayer spaces, single rooms, visiting family/

breast-feeding spaces, etc are designed in from the outset should promote equality for a range of protected characteristics amongst patients, visitors and workforce.

Access to the parkland and other facilities on the site will allow patients from across the East Midlands to experience the benefits of green space, which has been shown to improve recovery outcomes (Houses of Parliament 2016) and was picked up as a theme within the necs engagement events. This will particularly benefit patients from urban areas, and those who do not have access to transport to go to the countryside.

The importance of designing the building in such a way that it maximises patients' ability to be independent is integral to the proposed Care Model; *however, it is important that accessibility in relation to other protected characteristics (eg. religion, language/ learning ability, etc) is also built in from the outset.*

### Possible risks for equality of opportunity through the NRC

*NB: Mitigations and considerations moving forwards are included in italics.*

#### **Admission and assessment**

The NRC admission criteria have been revised and refined to reduce the risk of groups of patients being excluded from the opportunity to rehabilitate at the NRC on account of: their geographical location within the East Midlands; the presence of absence of specific clinical conditions; and vocational and occupational benefit. This positive step is in direct response to the previous version of this EIA, which highlighted the risk that assumptions might be made about the value of or potential for 'vocational or occupational benefit' of different protected characteristic and Inclusion Health groups (eg. older people, unpaid carers, people with pre-existing disabilities, people experiencing homelessness or long-term unemployment, those who misuse drugs or work in stigmatised professions).

The revised criteria are clear about:

- how the 'potential to benefit' will be measured objectively (i.e. using the rehab complexity score),
- the justification for exclusions which might otherwise incur indirect discrimination (e.g. a dementia diagnosis, on the basis that a person's other needs cannot be met at NRC); and
- how patient choice and shared decision-making will inform the assessment about whether the patient is willing and able to commit to intensive rehabilitation, and whether this is compatible with their personal functional goals.

It will, nevertheless, be important to support and monitor the implementation of this referral system to ensure that people from different protected characteristic and Inclusion Health groups receive sufficient information and opportunity to make and express their choices and participate in shared decision making. The engagement event facilitated by nec at Linden Lodge suggests that, at present, some rehab patients do not even receive proper explanation of where they are being taken, let alone genuine opportunities for shared decision-making.

This will, therefore, require cultural, workforce and procedural change if staff assumptions (which will be subject to unconscious bias) are not to become a short-cut in practice to effective shared decision-making. Within such a scenario, patients who are older, poorer, do not speak English as a first language, or have alternative lifestyles risk being automatically excluded from the opportunity to consider whether they are willing and able to commit to the programme at the NRC.

*Referring hospitals should be offered advice in how to avoid making broad assumptions about who will benefit, all staff should be trained in equalities and unconscious bias, and supervision and mentorship should include reflection about how referral decisions are made and what unconscious biases could be affecting decisions. Shared decision-making should be recorded in writing in the notes, and support tools used where available.*

### **Risk of increased travel**

Although patients will not be making repeated journeys to the new centre, because they will be inpatients, their families may be affected by changes to travel. In some cases they will benefit from the centre being closer. However, the TIA shows that the average distance between patients' homes and the NRC is more than double the average distance between their homes and their nearest facility. Since the nearest facilities (with the exception of Linden Lodge in Nottingham) are not being affected by the proposal, patients will only be affected if they choose to attend the NRC. However, the impact on visitors' travel may well influence patients' decision-making regarding whether or not to commit to a stay at NRC. Feedback from the necs engagement events reminds us just how crucial it is to many rehabilitation patients' mental and emotional wellbeing to have their family around them at such a traumatic time.

Patients and their families who live close to the existing Linden Lodge at Nottingham City Hospital (since the majority of the beds from that facility will transfer to the NRC), those living on the Lincolnshire coast (given geography) and those who are reliant on public transport will be impacted the most in terms of travel time to the NRC location. People living in poverty are over-represented in each of these three groups, so mitigation will be important in this area. Linden Lodge cannot be refurbished to provide the clinical benefits of the NRC, and so staying in the current location without substantial capital investment is not an option moving forwards. The current proposals include a plan to retain 3 rehabilitation beds within the NUH campus. Although the assessment for these will be based on clinical need, this provides an alternative option for those who would prefer to stay closer to family and could therefore act as a mitigation.

The proposed NRC site is served by a bus route which runs between Nottingham and Loughborough every 20 minutes. We understand there are plans to explore an additional bus route with the Highways Authority. Concerns were raised by some at the engagement events about safety while walking for/ waiting for buses at the proposed NRC site, given its isolated position. The NRC will have ample free car parking and those family members who drive to visit patients at Linden Lodge contrasted this favourably with the current challenges to park at Nottingham City Hospital.

The NRC will provide facilities for families to stay on site and super-fast broadband so that people can stay in touch with families online. This will benefit families who are able to take up these offers, in relation to their personal circumstances and digital inclusion. Feedback at the engagement events highlighted the importance of the consistent provision of accurate information to families about available facilities. For example, some had not found out that they could save money parking at Linden Lodge by buying a monthly pass.

*The NHS should continue to negotiate with public transport providers and the Highways Authority to improve bus services to the NRC. The bus route will need to be adjusted so that buses stop on the site at a sheltered, well-lit stop with seating. The proposed facilities for families at the NRC are positive, but it will be important to ensure that information about them is provided consistently both at the point where patients are deciding whether or not to pursue a referral and at the point of admission to NRC. This information needs to be accessible and to address potential concerns of different protected characteristic groups (e.g. cost, accessibility, privacy and safety, access to food storage/ preparation facilities).*

## Equality Considerations for Protected Characteristics and Health Inclusion Groups

### Gender

Seventy percent of major trauma patients are men. This is based on case mix and will not need to be mitigated.

Historically, women may not have had their needs understood or met in areas such as pain management (Samulowitz 2018; Wiklund 2016) and as such may have been under treated. *The National Centre could use its expertise and large patient cohort to develop protocols that would prevent and respond positively to this, work with referring units to ensure that unconscious biases are addressed and gathering feedback from women patients to better understand and improve their experiences of rehabilitation.*

Women are more likely than men to be working part time, or to be working as unpaid carers or providing unpaid childcare. This, combined with the male majority case mix for the centre, means that women are more likely to be visiting the centre and may be at greater risk of becoming carers, depending on the outcomes of rehabilitation. These issues are picked up in more detail under the section on carers below.

### Sexual Orientation, Gender Re-assignment and Gender Identity

Sexual Orientation and Gender re-assignment are protected characteristics and non-binary people are protected from discrimination regardless of whether they have had, are undergoing, or plan to make a medical and legal transition, or not.

Long hospital stays can be a stressful time for people who identify as trans or non-binary, and for gay, lesbian and bisexual patients. It is positive that all patients at the new facility will be in single rooms, as this should reduce the risk of harassment by other patients, or the risk of people being placed in a ward that does not fit with their gender identity, and should afford privacy to trans people and to patients with visiting same sex partners. This will be an improvement over staying in a traditional bay in a local hospital.



## Age

It is positive that age is not an explicit criterion for referral to the centre, and older adults should not be discriminated against if they could benefit from rehabilitation medically and if it fits with their personal functional goals. Older patients are more likely than younger patients to be deemed unsuitable for NRC referral based on either a dementia diagnosis or other clinical complications impacting on their capability to undertake rehabilitation. This is medically justifiable; however, it is important that these decisions are made objectively, communicated to patients and their families where possible and recorded. There is a risk of referring hospitals making assumptions about older people's likely benefit based on their age alone and influenced by stereotypical views of older people as already weaker, less able to stick with an intensive programme or lacking in vocation or occupation which might motivate them to do so.

*The Centre should work with referring hospitals to make sure they understand that some older adults may benefit from rehabilitation and will be motivated enough and physically fit enough to benefit, and that these decisions should be made on a case by case basis, informed by objective and specialist medical assessment.*

Analysis of UK TARN data (Herron et al 2017) has identified the different types of needs which older people – as group – may have for rehabilitation compared to younger people. The findings of this study suggest that older patients with traumatic injuries will often benefit from being managed in an environment that is also capable of dealing with their complex needs. However, they will benefit from early assessment of their needs by senior decision-makers and specialist older people's physicians. The NRC proposal, which should widen choices and ensure that pathways are determined by clinical need stands to benefit this group, provided that the NRC does not have the (unintended) impact of reducing quality in existing acute hospital settings (early thinking is that it should improve quality by reducing patient numbers); and that there is effective, early clinical decision-making, free from unconscious bias about age. We understand that the major trauma centre will have regular input from ortho-geriatricians, and that speciality reviews can be requested as required.

Younger adults are more likely to be in RTAs as pedestrians or cyclists, and this affects injury severity and type (Department for Transport 2018). The co-location with the Defence Medical Rehabilitation Centre (DMRC) may improve services for younger adults (aged under 25), through greater familiarity with the effects of life changing injuries in younger people, and more experience with a model that aims to return younger people to demanding work.

## Race/ Ethnicity and migrants

People from Black, Asian and Minority Ethnic (BAME) backgrounds are more likely to derive their household income from work (Cabinet Office 2017), more likely to be in poor quality and overcrowded housing that would be difficult to adapt to the needs of a disabled resident (Cabinet Office 2017), and more likely to experience a severe occupational injury (Mekkodathil 2016) than people from white ethnic backgrounds. If the degree and impact of impairments and the need for adaptations can be reduced, there may be positive impacts from the proposals for these groups.

However, one in five people from Pakistani and Bangladeshi backgrounds do not speak English well or at all (Cabinet Office 2017), and this is more likely for women and older adults. This could make it harder to discuss referral and the likelihood of benefitting from rehabilitation with patients in this group, and they may struggle to advocate for themselves if their English is not fluent.

*Referring hospitals should ensure that they use appropriate translation services when discussing the option of a referral to the NRC.*

The BAME population is not distributed evenly across the East Midlands, so the proposal's impacts (both positive and negative) on geographical inequalities can also have an impact on racial inequality. Nottingham City has a large BAME population which accounts for just over one third (35 per cent) of the total population (Sheffield Hallam/ Nottingham City CCG 2015) and those living in the city will be particularly impacted by the proposals, given that the NRC will replace Linden Lodge as the primary specialist rehabilitation provision for the city.

*Accessible information regarding transport and overnight stay facilities will – as outlined above – be important to mitigate potential barriers to BAME families taking up the offer of a place at NRC.*

It should also be noted that worldwide, migrants are more vulnerable to occupational injury than other groups (Mekodathil 2016) and that migrants may be particularly benefited from having a service that aims to return them to work, since they may have reduced eligibility to UK disability benefits.

### **Religion and Belief**

People who have experienced a life-changing injury and who are receiving intensive rehabilitation may need spiritual support, as well as mental health support, especially if they already have a faith that is important to them. It is positive that the Care Model places a high value on the role of mental health, psychological and social support during rehabilitation.

*The diverse spiritual needs of patients should be taken into account, and links should be built with local faith communities to help provide appropriate spiritual support to those patients that would benefit from this.*

*Patients and families (especially those who are using – or considering using – the overnight stay facilities) should be given clear information about how their religious needs will be met within the NRC facility. This should include access to prayer facilities, chaplaincy, dietary needs, washing facilities, and consideration given to modesty and dignity.*

### **Physical disability and sensory impairment**

The centre will reduce impairments and their impact through improving clinical outcomes for people with rehabilitation needs, and by reducing variation in treatment. Extending rehabilitation from neurological patients to people who have had traumatic amputations,

major trauma or complex orthopaedic surgery will reduce variation in outcomes and provide more people with the chance to avoid long-term disability.

Care must be taken that people with pre-existing disabilities or sensory impairments, who have been living previously independent lives and who could still benefit from intensive rehabilitation, are not excluded from rehabilitation based on inaccurate assumptions about how much they could benefit from it.

*Referring hospitals should be offered advice on how to assess whether people with pre-existing disabilities or sensory impairment would benefit from intensive rehabilitation, and where there might and should not be clinical complications. Awareness raising and training will be important in order to reduce unconscious bias about the likely quality of life gains and independence of those with pre-existing disabilities.*

### **Learning Disability**

Some people with learning disabilities will lack the capacity to work towards functional goals within the intensive programme proposed at the NRC, and some will not have sufficient capacity to make the decision to commit to this programme. However, there will be others who will be able to do this, provided they are offered appropriate support in relation to communication and self-advocacy both during shared decision making and throughout the programme. There is a risk that health professionals will either not notice invisible disabilities and therefore not make reasonable adjustments to reduce the barriers experienced or will make assumptions about people's goals and their capacity to achieve them.

The provision of single rooms and family rooms for visitors is likely to be of particular benefit to people with autism and other learning disabilities, who can find unfamiliar and busy environments particularly stressful.

*Awareness raising in relation to autism, dyslexia and other learning disabilities is recommended for the NRC workforce and those in referring hospitals in order to promote inclusion during referral and treatment.*

### **Mental Health**

Mental health support was voted by those attending the necs engagement events to be their highest priority in relation to rehabilitation. It is positive that this is reflected in the proposed Care Model for the NRC, with provision of psychological and support work support being integral to the programme. This should help support patients to adapt to life changing injuries and decrease the risk of long term psychological harm preventing people returning to work, family, leisure and social life.

### **Pregnancy, Maternity and Parenthood**

Pregnancy is a protected characteristic. Parenthood is not, but is another potential source of inequality. The proposed service provides some rooms for family to stay on site. This may be particularly beneficial to parents, who might otherwise not see their families as

often during their stay, and may help to maintain family bonds. This in turn may reduce familial anxiety, and benefit the children of people who require rehabilitation. Psychological and social work support is a key part of the NRC's Care Model and this should help families cope with the aftermath of trauma and the rehabilitation programme and to prepare for discharge.

### **Carers**

The NRC service should benefit carers through reducing the long-term dependency of patients.

The main risk for carers is in the short term and relates to additional travel time to come and visit loved ones. This is likely to impact particularly on those living in poverty, those who do not have access to a car and/or those living in rural areas.

The provision of rooms on site should reduce anxiety for family members who would otherwise not have been able to see patients during their rehabilitation (e.g. adults who live in the East Midlands and whose families live elsewhere; this may be particularly beneficial to younger adults such as students). The provision of free and plentiful accessible parking will benefit carers, especially those who are on low incomes and/or have health problems or impairments themselves.

### **Socio-economic deprivation**

People who live in areas of socioeconomic deprivation are more likely to have road traffic accidents, more likely to be in occupations that have a high incidence of occupational injury (World Health Organisation Europe 2009) and more likely to be the victims of violence (World Health Organisation Europe 2009) and therefore may benefit highly from this service. They are also more likely to be casually employed, and therefore not to have sickness pay, critical injury insurance etc. This makes return to work rather than discharge home with ongoing needs a particularly positive outcome for this group.

More socioeconomically deprived families may be disproportionately disadvantaged if transport costs are higher to visit the NRC than to remain in local pathways, and this may influence them to seek care closer to home even if the outcomes may not be as good. As mentioned above, this can be mitigated with provision of free car parking, negotiating bus routes that include the NRC, and with facilities for families to stay on site where this is needed.

### **People using alcohol and other drugs harmfully and/or experiencing homelessness**

Members of these 'Health Inclusion' groups experience a heightened risk of traumatic injury, for example due to being victims of crime, involved in RTAs or other accidents while under the influence and/or sleeping rough, and amputation, where they have been injecting.

These groups are at risk of unconscious bias during the assessment process, and there is a risk that NRC is not offered since assumptions are made that the individual will not be sufficiently motivated or does not have enough rehabilitation potential to warrant a

referral. Whilst patients in this group may decide that they do not want to undergo an intensive rehabilitation programme, especially at a distance from their current networks, it is important that these options are presented and discussed fairly and honestly. For some, the opportunity to attend NRC may be a turning point.

## Conclusions and recommended next steps

**The centre has significant potential to improve clinical outcomes, reduce disability and address geographical inequalities in outcome for patients in the East Midlands. There is no evidence that the risks to equality outlined above cannot be successfully mitigated.**

### Recommendations

- 1) Support referring hospitals with detailed guidance on the referral criteria and training to address unconscious bias so that, on a case by case basis, older adults, people with existing disabilities (physical, sensory and learning) but a high level of motivation and ability to benefit and others who may be vulnerable to being discriminated against (e.g. people who are addicted to drugs) are considered for rehabilitation in a fair and consistent manner. Record and monitor shared decision-making practice and outcomes.
- 2) Ensure that universal accessibility principles, including consideration of the needs of different protected characteristics groups are built into the design of the building, workforce training, and processes at NRC from the outset.
- 3) Proactively reach out to people with protected characteristics and people in EDS2 inclusion groups during the public consultation for the NRC and take action on their concerns.
- 4) Negotiate improved public transport access to the site with local public transport providers.
- 5) Provide clear and accessible information for patients' families regarding how to get to the NRC and other facilities, such as the family rooms and broadband, both at referral stages and on admission.
- 6) Use the patient cohort at the NRC to identify and address equality issues, such as concerns raised that women are under treated due to unconscious biases around their pain response or need for rehabilitation, and other equality issues raised in the literature or during consultation.
- 7) Ensure that the NRC and referring hospitals seek appropriate translation services when necessary.
- 8) Take steps to address the spiritual and religious needs of patients both in the design of the facility and its services and by forming links with local faith communities.

## References

- Cabinet Office (2017) Race Disparity Audit: Summary Findings from the Ethnicity Facts and Figures website, Accessed 19/06/19 from:  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/686071/Revised\\_RDA\\_report\\_March\\_2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/686071/Revised_RDA_report_March_2018.pdf)
- Department for Transport (2018) Reported road casualties in Great Britain: 2017 annual report, Statistical release, 27 September 2018, Accessed 19/06/19 from:  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/744077/reported-road-casualties-annual-report-2017.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/744077/reported-road-casualties-annual-report-2017.pdf)
- Herron, J., Hutchinson, R., Lecky, F. et al. (4 more authors) (2017) The impact of age on major orthopaedic trauma: an analysis of the United Kingdom Trauma Audit Research Network database. *Bone and Joint Journal*, 99-B (12). pp. 1677-1680. ISSN 2049-4394
- House of Commons Library (2018) The Public Sector Equality Duty and Equality Impact Assessments, Briefing Paper Number 06591, 8 March 2018
- Houses of Parliament: Parliamentary Office of Science and Technology (2016) Green Space and Health, POSTnote 538 October 2016
- Mekkodathil A, El-Menyar A, Al-Thani H. (2016) Occupational injuries in workers from different ethnicities. *Int J Crit Illn Inj Sci*. 2016;6(1):25–32. doi:10.4103/2229-5151.177365
- National Audit Office Services for people with neurological conditions: progress review, HC 301 SESSION 2015-16 10 JULY 2015, Accessed 19/06/19 from:  
<https://www.nao.org.uk/wp-content/uploads/2015/07/Services-for-people-with-neurological-conditions-progress-review.pdf>
- NHS (2013) A refreshed Equality Delivery System for the NHS
- Office for National Statistics (2019) Exploring the UK's Digital Divide, Accessed 19/06/19 from:  
<https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/articles/exploringtheuksdigitaldivide/2019-03-04>
- Pre- Consultation Business Case for the National Rehabilitation Centre, June 2019, Version. 2
- Public Health England (2017) Health inequalities in the East Midlands  
 An evidence report, November 2017, Accessed 19/06/19 from:  
[https://www.emcouncils.gov.uk/write/Health\\_inequalities\\_in\\_the\\_East\\_Midlands\\_Final.pdf](https://www.emcouncils.gov.uk/write/Health_inequalities_in_the_East_Midlands_Final.pdf)
- ROSPA (2012) Social Factors in Road Safety: Policy Paper, Accessed 19/06/19 from  
<https://www.rospa.com/rospaweb/docs/advice-services/road-safety/social-factors-in-road-safety.pdf>

Samulowitz A, Gremyr I, Eriksson E, Hensing G. (2018) "Brave Men" and "Emotional Women": A Theory-Guided Literature Review on Gender Bias in Health Care and Gendered Norms towards Patients with Chronic Pain. *Pain Res Manag.* 2018; 2018:6358624. Published 2018 Feb 25. doi:10.1155/2018/6358624

Sheffield Hallam University/ Nottingham City Clinical Commissioning Group (2015) Increasing the uptake of primary and community long-term conditions services in Black and Minority Ethnic (BME) communities in Nottingham, an exploratory research study: interim report.

Wiklund, M., Fjellman-Wiklund, A., Stålnacke, B-M., Hammarström, A. & Lehti, A. (2016) *Access to rehabilitation: patient perceptions of inequalities in access to specialty pain rehabilitation from a gender and intersectional perspective*, *Global Health Action*, 9:1, DOI: [10.3402/gha.v9.31542](https://doi.org/10.3402/gha.v9.31542)

World Health Organisation Europe (2009) Socio-economic differences in injury risks: a review of findings and a discussion of potential countermeasures, Accessed 19/06/19 from: [http://www.euro.who.int/\\_data/assets/pdf\\_file/0012/111036/E91823.pdf](http://www.euro.who.int/_data/assets/pdf_file/0012/111036/E91823.pdf)