CHARTERED
SOCIETY
OF
PHYSIOTHERAPY

Long Term Plan – Clinical Priorities: cardiovascular and respiratory disease

What actions should the NHS take as a priority over the next five to ten years to improve outcomes for those with cardiovascular or respiratory disease?

1. Developing rehabilitation services across pathways

1.1 Rehabilitation needs to be the next major area for research and service improvement to improve outcomes for patients with cardiovascular and respiratory diseases.

1.2 Rehabilitation services are inconsistently commissioned, with significant gaps and delays, and community-based rehabilitation services have been disinvested in over many years at a time when the direction of health policy and population need, should dictate the opposite.(1)

1.1 This has resulted in increased admissions and readmissions and more time spent in hospital. In 2015/16 waits for further non-acute NHS care was the second largest causal factor of delays in discharge from hospital, and the number of these delays are rising.(2) Discharge delays, weak handovers and waits for community services to start after discharge are causing patients to deteriorate unnecessarily and increases their risk of readmission.

1.2 For the older population, being in hospital means significant risks in terms of infection, deconditioning and deterioration but there is often a lack of viable alternatives. Most emergency admissions are the result of an escalation of a pre-existing condition. One in three emergency admissions are now for people with 5 or more long term conditions, such as heart disease, stroke, type 2 diabetes and hip fracture. This is up from one in 10 a decade earlier.(3)

1.3 Pulmonary rehabilitation (PR) reduces COPD exacerbations by 36.4%. If everyone with COPD in England eligible under current NICE guidelines for PR was referred (16 out of 100 COPD patients) were referred for PR there would be an annual reduction in exacerbations of 151 000, a reduction of one third. This would reduce COPD hospital admissions by 13.3% (27 000 annually), halve the length of time spent in hospital for those admitted – saving106 000 days spent in hospital and free up GP appointments, Social care costs would also be reduced – currently 4% of people in hospital with a COPD exacerbation are discharged to a residential or nursing home.(4)

1.4 The wealth of evidence on the effectiveness of pulmonary rehabilitation has resulted in Cochrane taking the unusual step of ceasing further systematic reviews comparing pulmonary rehabilitation to usual care.(5)

1.5 In spite of the strength of the evidence, only 40% of the COPD patients who NICE guidance say should be referred for pulmonary rehabilitation are ever referred.(6) We need to move to a position in the next five years where as a minimum all patients who meet the NICE threshold are referred. Currently services are often overstretched, which means long waiting lists – 37% of people wait for longer than three months.(6) So this is not just a question of improving referral patterns between different parts of the system. It is

3. dependent on rehabilitation services having significantly increased capacity to meet this need.

1.6 The impact of coronary rehabilitation on reducing cardiovascular risk is similarly well evidenced. Rehabilitation among people with heart diseases increases their fitness levels by an average of 25%. It is second only to aspirin and beta-blockers in terms of cost effectiveness (£1,100 per life year gained compared with £1,957), affirmed by NICE who have determined that the incremental cost of each additional Quality Adjusted Life Year (QALY) is around £8,000, well below the level usually considered to be affordable in the NHS (about £20,000 to £30,000 per QALY).[(7)]

1.7 In spite of this evidence, rehabilitation is only offered to a small proportion of people living with heart disease.[(8)] A study in 2013 commissioned by NHS Improvement reported that less than half of cardiac patients eligible for rehabilitation services receive it. The study found that if this proportion was increased to 65% there would be a saving of £30 million in acute care that could be redirected to rehabilitation care.[(9)]

2. Reforms to commissioning of community rehabilitation services

2.1 In spite of extensive evidence of benefit and value, rehabilitation services are inconsistently commissioned. The fragmented, poorly integrated nature of provision described above is both cause and effect of poor commissioning, combined with cuts to funding for community services, a lack of clarity within payment and commissioning systems, and problems with lack of awareness of commissioners in some areas.

2.2 Reversing this will require important reforms to commissioning and payment practices and systems. Currently rehabilitation activity is not specified within units of provision in enough detail, and the Commissioning Guidance for Rehabilitation published in 2016 did not address this. Where definitions of rehabilitation within tariffs are too vague, rehabilitation is assumed to be included within funding of episodes of care, when the reality of acute rehab provision is limited and nowhere near meets patient need. The new best value tariffs for COPD illustrates this. National prices for rehabilitation post discharge only apply when a single provider provides both acute and community services. Where this is not the case there can be reluctance by the CCGs to commission community services, because they perceive that they have already paid the full rehabilitation tariff to the acute sector, even though no community service is being provided.

2.3 As NHS payment and commissioning systems are developed they need to be able to properly identify the activities and staffing required to meet rehabilitation needs in the population – addressing the lack of clarity about what rehabilitation activity is included within payment for episodes of care and who pays for community–based rehabilitation activity. Opportunities to enhance currency approaches to community services should continue to be explored as a way to address this. The community healthcare funding currency models programme led by the NHS England Pricing Team needs to focus on how to address this through the NHS Long Term Plan, including across all the clinical priorities identified.

2.4 There is significant variability in how well community rehabilitation is understood by CCGs and the value of it to population health and reducing demand on the system. So as well as reforming payment and commissioning systems there is an urgent need for training and support for commissioners and providers so that rehabilitation needs within the population are better understood and reflected in commissioning decisions.

3. The need for integration of rehabilitation services within the community

3.1 Expansion is needed in rehabilitation, but it is not to have more of what is currently there The current picture or rehabilitation services is of piecemeal provision, often set up to

resolve a problem within one part of the system without regard to the rest of the healthcare system and other rehabilitation services. As a result they are not properly linked up or standardised, good practice is rarely scaled up, and they are usually focused on single diseases.

3.2 It is evident that there is both duplication and gaps in service provision. The scale of this challenge cannot be adequately quantified, because data are not collected nationally to priority (see 6.1-6.4).

3.3 To identify the gaps and the duplications, all areas need to conduct a review of current rehabilitation provision against population needs. Services should be integrated into community hubs, co-located where appropriate and feasible.

3.4 Community-based rehabilitation and frailty provision needs to be integrated into community hubs. They could be located with leisure services, with GP services, in local authority or other community venues. There should be a flexible approach to developing a model based on local circumstances and opportunities. They should share the following features:

- They need to be local (30-50k)
- Closely linked with social care and general practice, leisure and voluntary services
- Support integration in practice between health and social care
- Take a person-centred, holistic approach, building on shared decision-making and individually developed goals as a rehabilitation assessment or Comprehensive Geriatric Assessment, with a focus on self-management.
- As well as rehabilitation for cardiovascular and respiratory diseases, services within hubs should include frailty assessments and interventions, rehabilitation for joint replacements, cancer and other long-term conditions, fracture liaison clinics and falls prevention services.
- Staff in Community hubs should be deployed to work across acute and community sectors, to allow continuity of care through the patients journey from hospital to home, with a *'home first approach'*, understanding the risks of hospital deconditioning.
- MDTs in community hubs need to be able to access specialists for diagnostics in the acute sector and community based geriatricians
- Patients with long-term conditions and fluctuating rehab needs, need to be able to access services quickly and easily to prevent crises.

3.5 Where rehabilitation support for people with complex long-term conditions (including cardiovascular and respiratory) starts within the acute sector, to be most effective it must be continued with no break as patients are discharged into the community. Currently this is best achieved through early supported discharge and a '*home first approach'* (discharge to assess) with teams within hospitals working with patients after discharge. In the future, rehabilitation teams this should include 'in-reach' into hospital.

4. Moving to a symptoms based approach

4.1 Increasingly people have more than one long-term condition, which interrelate and often have common symptoms. For example, 15.6% of people with osteoarthritis of the hip or knee also have COPD or asthma and 8% have serious cardiac disorder or heart disease,[10] and common to all of these conditions will be the need to manage pain and anxiety.

4.2 There is growing awareness of the benefits of organising more services to respond to patients' needs and symptoms, not specific conditions, based on an assessment of a patient's mental and physical rehabilitation needs. The CSP believes redesigning services around patient symptoms (such as breathlessness, pain, muscle weakness deconditioning, fatigue, depression and anxiety) would improve outcomes for patients, respond better to needs of people with multiple morbidities or at risk of developing co-morbidities, and makes best use of existing resources. All rehabilitation services should incorporate a holistic approach, building on shared decision-making and individually-developed goals.

4.3 A randomised controlled trial published in 2010 found that patients with chronic heart failure develop similar symptoms of breathless and fatigue as patients with COPD and investigated whether combined exercise rehabilitation would be effective and feasible using the pulmonary rehabilitation model. This found that the same rehabilitation exercise programme had the same positive impact on both groups in terms of health status and physical activity levels. It suggested that combined programmes could be a way forward that target common disability rather than the disease or the organ.[11]

4.4 Rightcare are currently working with the CSP and a range of other stakeholders to develop a divergence/convergence approach to rehabilitation pathway design, based on patient need and symptoms at any given time. This approach would rely on rehabilitation services being integrated, operating with greater flexibility in terms of access. This would better address the needs of patients with cardiovascular and respiratory diseases who have co-morbidities and/or a risk of developing other long-term conditions, such as depression, diabetes, obesity and osteoporosis.

5. Common rehabilitation assessment

5.1 Everyone with a diagnosis of cardiovascular or respiratory diseases, and everyone leaving hospital following a COPD exacerbation, having had a stroke or a heart attack must be provided with a rehabilitation assessment of ongoing physical and mental rehabilitation needs.

5.2 The purpose of the assessments is to stratify patients in terms of their needs and their frailty risk and match them up with the appropriate care and rehabilitation offer – which will normally be services provided as part of an integrated community hub model, or for support in self-care from voluntary sector, primary care and leisure services.

5.3 Currently, rehabilitation assessments for specific conditions are usually carried out within the acute sector. This is a cause of unnecessary delays in discharge, with all the negative impact on the patient described above. The assessments are best carried out primarily by MDT frailty teams and community rehabilitation teams within the community.

5.4 Currently there are multiple assessment frameworks to assess need for people who are frail and/or have long-term conditions. An objective within the NHS Long Term plan should be to move towards a common assessment framework across a range of long-term conditions, that can be used by all health and care staff across all sectors. All common assessment frameworks agreed nationally should be mandated and embedded within the electronic health record systems across all sectors.

6. Reforms to address the data deficit

6.1 Related to the lack of any standardisation in provision and its fragmented nature, is the lack of visibility of the community sector in general and community rehabilitation services in particular. This is caused by a lack of data on patients' needs, patient outcomes and impact of rehabilitation services on other services. This presents significant challenges preventing commissioners from seing where the gaps are, and where rehabilitation outcomes need to be improved.

6.2 Lack of rehabilitation data leads to commissioning gaps within the community sector as a whole. In the acute sector rehabilitation data is often not recorded separately from operations or other medical intervention. The data deficit makes it difficult to commission services and this has contributed to the overall disinvestment in the community sector.

6.3 To address this, implementation of the Community Services Data Set needs to ensure that there is standardised data collected on rehabilitation across sectors and pathways. The

Data Set needs to be expanded and/or complemented with mandated data collection on community providers' activity. The data need to be both recorded and available, inclusive of all rehabilitation activity, across acute, primary care and community.

6.4 Development of community rehabilitation within integrated community hubs will rely on ensuring digital infrastructure integration. Community rehabilitation MDTs must have access to the data from acute and primary care services to enable them, and the other services, to offer the best level of care to patients. They should be digitally-abled and make best use of approaching telemedicine innovations – e.g. falls prevention monitoring devices, self-management technology or remote monitoring, with access to appropriate mobile devices with solutions to widespread issue of connectivity and barriers to personal use of technology.

7. Improving support for patients to self-manage conditions

7.1 The nature of cardiovascular and respiratory diseases is that they are ongoing and they require people diagnosed with diseases to be motivated to complete programmes of exercise and adhere to exercise advice subsequently.

7.2 Depression and anxiety are common co-morbidities with these conditions, which impacts on people's confidence and motivation to do this. Many physiotherapists take up opportunities for cognitive behavioural therapy (CBT) training to develop their capabilities to support patients better. This should become more common, and is an important area for workforce development.

7.3 There is strong evidence to suggest that online interactive rehabilitation programmes for patients with COPD and coronary heart disease are safe and can have the same impact on some indicators as face-to-face exercise programmes.(12) In the next ten years digital tools need to be incorporated into rehabilitation care pathways.

7.4 Recent research by the Richmond Group of charities into co-morbidities has shown that mobility is the main factor for people with long-term conditions in determining their quality of life, their likelihood of developing health issues and in inequality.(13) Supporting patients to become and remain mobile is central to rehabilitation services across pathways.

7.5 Rehabilitation staff also have an important part to play in raising the confidence and awareness of all health and social care professionals of the need to support patients in this. For example, being visited by physiotherapists and rehabilitation support workers are often the only opportunity that people in hospital beds who need help to walk get the opportunity to do so. This is a major factor in the deconditioning that people experience in hospital. (14)

7.6 At the end of all rehabilitation programmes there should be onward referral for supported physical activity, whether provided by exercise professionals within leisure services or local voluntary groups.

7.7 Because rehabilitation services often apply strict criteria that make it difficult for people to re-access services when they need further support or advice until there has been a significant deterioration in health. Improvements to how community based rehabilitation services need to include much easier access and re-access, including for advice and information as well as referrals for services. This needs to be available for patients, colleagues in primary care and in leisure and voluntary services.

8. Workforce development to improve patient outcomes

8.1 To develop frailty MDTs and community rehabilitation services, there needs to be an expansion of the rehabilitation workforce. Critical in this is an expansion of physiotherapy numbers.

The UK has a lower number of physiotherapists than most other European countries per head of population. Denmark has 3 times the number of physiotherapists per head of population than the UK. Older people in Denmark living with frailty, regardless of their diagnosis, will generally only need to spend 2 days in hospital and then discharged with a care package and a rehab plan. Anyone applying for social care will be offered rehab first to see if they can postpone needing the extra help. In most parts of Denmark fewer than 2% of the 85's and over live in institutional care, compared to an average of 15-20% in the UK.
Eurostat: Statistics Explained. Practising physiotherapists, 2010 and 2015
Eurostat: Statistics Explained. Very elderly population aged 85 years and over living in an institutional household, by NUTS level 2 region, 2011 (% share of very elderly population)

8.2 The registered physiotherapy workforce is going through a period of much needed expansion now that the cap on supply created by insufficient commissioning and insufficient funding for HEIs through the bursary system has been lifted. This expansion needs to be utilised in the development of community based rehabilitation services, and first contact physiotherapists (FCPs) in primary care to improve outcomes for people with cardiovascular and respiratory conditions.

8.3 Models of integration so far have not focused sufficiently on sharing teams and skill operationally across boundaries in a 'place-based' approach. On a recent service visit to stroke service in an acute hospital, CSP staff were told by CSP members that they had identified a need for in-service training for the community rehabilitation team as a requirement. However, CSP members within the acute trust were not allowed to provide this training because the community rehabilitation team was funded by a neighbouring CCG. It is the CSPs belief that this is a standard situation.

8.4 There is also an important leadership role to be played by physiotherapists and other AHPs to develop services and support integration, though posts such as Community Matrons and non-medical clinical leads. These roles are traditionally filled by nurses, but given the importance of physical activity within rehabilitation, arguably advanced practice physiotherapists in some situations will better meet the needs of the service. All job roles like these need to be updated so that they are explicitly based on capabilities to meet need (such as the advanced clinical practice capability standard) and not by profession.

8.5 Traditionally, most advanced practice roles for non-medical staff have been concentrated in acute care, and in particular the orthopaedic and rheumatism departments in hospitals. This has perpetuated a professional culture – found across all health professions - that tends to view community-based roles as lower in status than those based within a hospital setting. This needs to change if we want the system to be better at reducing demand on the acute sector and elective care.

8.6 Physiotherapy and AHP support worker roles are increasingly taking on greater degrees of responsibility for hands on patient care and exercise classes and potential from this needs to be fully utilised. These higher level support worker roles need to be invested in, recognised and standardised in line with the Nurse Associate role, with the necessary input from all the relevant professional bodies and the Professional Standards Authority.

9 Delivering better rehabilitation as part of the 10 year plan

9.1 While rehabilitation pathway development is becoming a priority for NHS England and other national stakeholders, so far this is uncoordinated. For example, NICE have various rehabilitation pathways, NHS England programmes such as Rightcare and Getting it Right First Time and departments like the Pricing Unit all consider rehabilitation requirements. What is missing is a single approach to bringing the various critical parts of the system that is necessary for successful design and delivery of rehabilitation together.

9.2 There needs to be national system leadership to align the different activities and agencies in this space. As such, rehabilitation needs to be a cross cutting theme for the Long Term Plan and the CSPs suggests that a task and finish group of national stakeholders to identify and exploit commonalities between different rehabilitation pathways, and forward the policy and service developments within the plan.

9.3 This cross cutting work includes: addressing the data deficit for rehabilitation; standardisation of rehabilitation assessments across sectors and settings; working with national and local stakeholders to improve commissioning and support service redesign and expansion of capacity, taking forward the work of Righcare on community rehabilitation pathways. It would also consider the recommendations from the Lung Taskforce (convened by the British Lung Foundation) and New Era for Stroke (led by the Stroke Association) for clinical guidance on referral for rehabilitation for people with cardiovascular and respiratory diseases.

Service examples

North Devon Healthcare Trust stroke therapy team provide an early supported discharge service, with physiotherapists working flexibly across the patient pathway. Care includes a fitness and self-management programme, psychological screening and intervention, vocational support, and integration with other community, health, social care and voluntary services. Where rehabilitation needs cannot be met by generic community services, input from the ESD team extends beyond six weeks.

Impact: Average length of stay reduced by six days, saving £833,700, hospital readmission rates reduced from 6 per cent to 3 per cent through strengthened links with community nurses, 13 per cent more patients returning home as opposed to a care home, saving over £75,500 per person.
The Chartered Society of Physiotherapy. Physiotherapy Works: Stroke. London: The Chartered Society of Physiotherapy; 2018

The NHS Greater Glasgow and Clyde community respiratory team deliver home PR, supporting patients going through an exacerbation of COPD in their home as an alternative to hospital admission, shifting the balance of care from hospital to the community in a safe and effective manner. The ethos of the service is to provide a personalised approach to care, enabling self-management by the patients On average, the service receives 91 referrals a month.

Impact: A clinically significant decrease in the COPD Assessment Test score (average decrease of 5 points), and a 10% improvement in health related quality of life (as measured by the EQ-5D-3L). Reducing the number of hospital admissions required and having the option for patients to self-refer directly into the community respiratory team, means an anticipated annual cost saving of between £463,780 to £1,087,564.
NHS Greater Glasgow and Clyde. Evaluation of COPD Change Fund interventions in Glasgow City, Interim Report. 2014.

Bradford Enablement Support Team is a multidisciplinary service that enables older people to remain living independently in the community. 91-year-old Mr A lives alone and is normally independent. He's a passionate cook who enjoys socialising. While walking the dog, he suffered a stroke, a fall and a broken hip. He had hip replacement surgery but the stroke left him with slight left-sided weakness and problems with concentration and executing tasks.
Mr A was transferred to a community hospital for rehabilitation where the therapy team, including physiotherapists and occupational therapists, facilitated recovery of mobility and balance: climbing stairs; independence with personal care; and kitchen tasks. He was discharged with four care visits daily. Joint physiotherapist and occupational therapist sessions were delivered.

Impact: Physiotherapists facilitated improvements in hip strength and independent mobility, ensuring safety and independence in his home and community. Goals were set in partnership with

Mr A. 6 weeks later he'd regained such mobility and independence that all support could be withdrawn and he returned to his usual active and social life.
The Chartered Society of Physiotherapy. Physiotherapy works for social care. London: The Chartered Society of Physiotherapy; 2014.

Hope is a social enterprise in Grimsby, which provides rehabilitation and support for patients with COPD and older people at risk of falls. This took two hospital based rehabilitation services for COPD and falls, to create one community based service. The multi-disciplinary team includes 80 volunteers - all former patients and carers - who act as motivators, role models and community educators – for example, giving talks to local residents groups.

The team took over Hope Street Medical Centre, a run-down GP surgery in an area of high deprivation. The centre was a target for vandalism, costing £3500 every month. They used Neighbourhood Renewal Funding to create a modern rehab centre, with a gym, garden and cafe

Impact: Prevented hospital admissions (£2600) one per patient; reduced numbers of hip fractures, 62% higher quit rate than the national average in their smoking cessation classes; significantly reduced levels of anxiety and depression and higher confidence and ability to undertake daily activity.
The Chartered Society of Physiotherapy. Think Physio for Primary Care. London: The Chartered Society of Physiotherapy; 2017

Leicester NHS Trust's breathlessness rehab programme - is open to people with a diagnosis of heart failure in addition to COPD. Participants are offered classes that include aerobic exercise and strength circuit sessions, between which they are provided guidance on home exercise. Classes are followed by education sessions, which provide guidance on self-management, symptom control, behaviour change, exercise and long-term management. Early evaluation of the programme indicates that patients are receiving quicker diagnoses, with reduced demand for follow-up visits.
Millet R. Cardiac and pulmonary rehab teams join forces for breathlessness rehab. London: The Chartered Society of Physiotherapy: 2018.

References

1. NHS Providers. NHS Community Services: taking centre stage London: NHS Providers; 2018. URL: https://nhsproviders.org/media/4885/state-of-the-provider-sector-0518.pdf
2. NHS England. Delayed transfers of care statistics for England: 2017/18. London: NHS England; 2018. URL: https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2018/06/2017-18-Delayed-Transfers-of-Care-Annual-Report-1.pdf
3. National Institute for Health Research. Comprehensive care: older people living with frailty in hospitals. London: National Institute for Health Research; 2017. URL: https://www.dc.nihr.ac.uk/themed-reviews/Comprehensive-Care-final.pdf
4. The Chartered Society of Physiotherapy. COPD Pulmonary Rehabilitation Impact Model on Exacerbations (PRIME) tool London: The Chartered Society of Physiotherapy; 2018. URL: https://www.csp.org.uk/documents/copd-prime-tool
5. McCarthy B, Casey D, Devane D, et al. Pulmonary rehabilitation for chronic obstructive pulmonary disease. Cochrane Database Syst Rev. 2015(2):CD003793. URL: https://www.ncbi.nlm.nih.gov/pubmed/25705944
6. Healthcare Quality Improvement Partnership. Pulmonary Rehabilitation: steps to breathe better - National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Clinical audit of Pulmonary Rehabilitation services in England and Wales 2015 - National Clinical Audit report 2016. London: National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme; 2016. URL: https://www.hqip.org.uk/resource/national-chronic-obstructive-pulmonary-disease-copd-audit-full-pulmonary-rehabilitation-report-2015-published-2016/
7. Fidan D, Unal B, Critchley J, et al. Economic analysis of treatments reducing coronary heart disease mortality in England and Wales, 2000-2010. QJM. 2007;100(5):277-89. URL: https://www.ncbi.nlm.nih.gov/pubmed/17449875

8. Scarborough P, Bhatnagar P, Wickramasinghe K, et al. Coronary heart disease statistics 2010. London: British Heart Foundation; 2010.
URL: https://www.bhf.org.uk/informationsupport/publications/statistics/coronary-heart-disease-statistics-2010
9. NHS Improvement. Making the case for cardiac rehabilitation: modelling potential impact on readmissions. London NHS Improvement; 2013.
URL: www.natcansat.nhs.uk/dlhandler.ashx?d=pubs&f=Case_for_CR.pdf
10. Reeuwijk KG, de Rooij M, van Dijk GM, et al. Osteoarthritis of the hip or knee: which coexisting disorders are disabling? Clin Rheumatol. 2010;29(7):739-47.
11. Evans RA, Singh SJ, Collier R, et al. Generic, symptom based, exercise rehabilitation; integrating patients with COPD and heart failure. Respiratory Medicine. 2010;104(10):1473-81.
URL: https://doi.org/10.1016/j.rmed.2010.04.024 [Accessed: 2018/09/25]
12. Bourne S, DeVos R, North M, et al. Online versus face-to-face pulmonary rehabilitation for patients with chronic obstructive pulmonary disease: randomised controlled trial. BMJ Open. 2017;7(7)
URL: http://bmjopen.bmj.com/content/7/7/e014580.abstract
13. Aiden H. Multimorbidity: understanding the challenge London: Richmond Group of Charities; 2018.
URL: https://richmondgroupofcharities.org.uk/sites/default/files/multimorbidity_-_understanding_the_challenge.pdf
14. Liu B, Moore JE, Almaawiy U, et al. Outcomes of Mobilisation of Vulnerable Elders in Ontario (MOVE ON): a multisite interrupted time series evaluation of an implementation intervention to increase patient mobilisation. Age Ageing. 2018;47(1):112-9.
URL: https://www.ncbi.nlm.nih.gov/pubmed/28985310