The Clinical Effectiveness Bulletin aims to highlight some key pieces of evidence, published in the previous month.

Where possible, links to the full text documents are included. If you are employed by UHN, MPFT, Stoke on Trent Public Health or you are CCG or practice staff in North Staffordshire, get in touch to find out more about your NHS library service.
Current Sources:

Cochrane Library  http://www.thecochranelibrary.com/
Health Technology Assessment (HTA) Database  http://www.journalslibrary.nihr.ac.uk/hta
Department of Health  http://www.gov.uk/dh
King’s Fund  http://www.kingsfund.org.uk/
Nice Guidance  https://www.nice.org.uk/guidance/published
Social Care Institute for Excellence  https://www.scie.org.uk/news/
SIGN  http://www.sign.ac.uk/our-guidelines.html
Primary Care Commissioning  www.pcc-cic.org.uk
Chartered Society of Physiotherapy  www.csp.org.uk
Queen’s Nursing Institute:  http://www.qni.org.uk/
NMC  https://www.nmc.org.uk/news/
RCN  https://www.rcn.org.uk/professional-development/publications
Campbell Collaboration  http://www.campbellcollaboration.org/
Local patient and public information groups
https://bmcmusculoskeletaldisord.biomedcentral.com/
https://archivesphysiotherapy.biomedcentral.com/
Meridian  https://meridian.wmahsn.org/subdomain/meridian/end/home

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Cannabis scheduling review: part 1

DHSC
Professor Dame Sally Davies, Chief Medical Officer for England and Chief Medical Adviser to the UK government, has reviewed evidence for the therapeutic benefit of cannabis-based medicinal products.

The review summarises the results of recent reviews and discusses the quality of evidence. Professor Davies concludes that cannabis-based medicinal products should be moved out of a Schedule 1 classification. Schedule 1 drugs by definition have little or no therapeutic potential.

This review forms part of a series of measures announced by the Home Secretary on 19 June 2018 looking at the scheduling of cannabis. Its conclusion signals the start of a second review, which will be led by the Advisory Council on the Misuse of Drugs (ACMD).

The ACMD will not reassess the evidence issued by Professor Dame Sally Davies but will provide an assessment, based on the balance of harms and public health needs, of what (if anything) should be rescheduled.

The NHS 10-year plan: how should the extra funding be spent?

King’s Fund
The government has announced increases in NHS funding over five years, beginning in 2019/20, and has asked the NHS to come up with a 10-year plan for how this funding will be used. After eight years of austerity, growing financial and service pressures within the NHS and the damaging and distracting changes brought about by the Health and Social Care Act 2012, there is now an opportunity to tackle the issues that matter most to patients and communities and to improve health and care.

Blood pressure-lowering treatment for preventing recurrent stroke, major vascular events, and dementia in patients with a history of stroke or transient ischaemic attack

Cochrane Review
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Omega-3 fatty acids for the primary and secondary prevention of cardiovascular disease

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This is the most extensive systematic assessment of effects of omega-3 fats on cardiovascular health to date. Moderate- and high-quality evidence suggests that increasing EPA and DHA has little or no effect on mortality or cardiovascular health (evidence mainly from supplement trials). Previous suggestions of benefits from EPA and DHA supplements appear to spring from trials with higher risk of bias. Low-quality evidence suggests ALA may slightly reduce CVD event risk, CHD mortality and arrhythmia.
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**Polyunsaturated fatty acids for the primary and secondary prevention of cardiovascular disease**
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This is the most extensive systematic review of RCTs conducted to date to assess effects of increasing PUFA on cardiovascular disease, mortality, lipids or adiposity. Increasing PUFA intake probably slightly reduces risk of coronary heart disease and cardiovascular disease events, may slightly reduce risk of coronary heart disease mortality and stroke (though not ruling out harms), but has little or no effect on all-cause or cardiovascular disease mortality. The mechanism may be via lipid reduction, but increasing PUFA probably slightly increases weight.

**Nurses as substitutes for doctors in primary care**
**Cochrane Review**
This review shows that for some ongoing and urgent physical complaints and for chronic conditions, trained nurses, such as nurse practitioners, practice nurses, and registered nurses, probably provide equal or possibly even better quality of care compared to primary care doctors, and probably achieve equal or better health outcomes for patients. Nurses probably achieve higher levels of patient satisfaction, compared to primary care doctors. Furthermore, consultation length is probably longer when nurses deliver care and the frequency of attended return visits is probably slightly higher for nurses, compared to doctors. Other utilisation outcomes are probably the same. The effects of nurse-led care on process of care and the costs of care are uncertain, and we also cannot ascertain what level of nursing education leads to the best outcomes when nurses are substituted for doctors.

**Public Health and Lifestyle Services**

**GPs have lower awareness of non-traditional tobacco products, study finds**
**Research Institute for Primary Care and Health Sciences, Keele University**
A study led by Keele University’s Research Institute for Primary Care and Health Sciences has found that general practitioners (GPs) perceive non-traditional tobacco products, such as waterpipe smoking and smokeless tobacco, to be less harmful than cigarettes. This led to GPs providing less cessation advice for these users, in comparison to cigarette smokers.
A pedometer-based walking intervention in 45- to 75-year-olds, with and without practice nurse support: the PACE-UP three-arm cluster RCT

NIHR

Background: Guidelines recommend walking to increase moderate to vigorous physical activity (MVPA) for health benefits.

Objectives: To assess the effectiveness, cost-effectiveness and acceptability of a pedometer-based walking intervention in inactive adults, delivered postally or through dedicated practice nurse physical activity (PA) consultations.

Design: Parallel three-arm trial, cluster randomised by household.

Setting: Seven London-based general practices.

Participants: A total of 11,015 people without PA contraindications, aged 45–75 years, randomly selected from practices, were invited. A total of 6399 people were non-responders, and 548 people self-reporting achieving PA guidelines were excluded. A total of 1023 people from 922 households were randomised to usual care (n = 338), postal intervention (n = 339) or nurse support (n = 346). The recruitment rate was 10% (1023/10,467). A total of 956 participants (93%) provided outcome data.

Interventions: Intervention groups received pedometers, 12-week walking programmes advising participants to gradually add ‘3000 steps in 30 minutes’ most days weekly and PA diaries. The nurse group was offered three dedicated PA consultations.

Main outcome measures: The primary and main secondary outcomes were changes from baseline to 12 months in average daily step counts and time in MVPA (in ≥ 10-minute bouts), respectively, from 7-day accelerometry. Individual resource-use data informed the within-trial economic evaluation and the Markov model for simulating long-term cost-effectiveness. Qualitative evaluations assessed nurse and participant views. A 3-year follow-up was conducted.

Results: Baseline average daily step count was 7479 [standard deviation (SD) 2671], average minutes per week in MVPA bouts was 94 minutes (SD 102 minutes) for those randomised. PA increased significantly at 12 months in both intervention groups compared with the control group, with no difference between interventions; additional steps per day were 642 steps [95% confidence interval (CI) 329 to 955 steps] for the postal group and 677 steps (95% CI 365 to 989 steps) for nurse support, and additional MVPA in bouts (minutes per week) was 33 minutes per week (95% CI 17 to 49 minutes per week) for the postal group and 35 minutes per week (95% CI 19 to 51 minutes per week) for nurse support. Intervention groups showed no increase in adverse events. Incremental cost per step was 19p and £3.61 per minute in a ≥ 10-minute MVPA bout for nurse support, whereas the postal group took more steps and cost less than the control group. The postal group had a 50% chance of being cost-effective at a £20,000 per quality-adjusted life-year (QALY) threshold within 1 year and had both lower costs [–£11M (95% CI –£12M to –£10M) per 100,000 population] and more QALYs [759 QALYs gained (95% CI 400 to 1247 QALYs)] than the nurse support and control groups in the long term. Participants and nurses found the interventions acceptable and enjoyable. Three-year follow-up data showed persistent intervention effects (nurse support plus postal vs. control) on steps per day [648 steps (95% CI 272 to 1024 steps)] and MVPA bouts [26 minutes per week (95% CI 8 to 44 minutes per week)].
Limitations: The 10% recruitment level, with lower levels in Asian and socioeconomically deprived participants, limits the generalisability of the findings. Assessors were unmasked to the group.

Conclusions: A primary care pedometer-based walking intervention in 45- to 75-year-olds increased 12-month step counts by around one-tenth, and time in MVPA bouts by around one-third, with similar effects for the nurse support and postal groups, and persistent 3-year effects. The postal intervention provides cost-effective, long-term quality-of-life benefits. A primary care pedometer intervention delivered by post could help address the public health physical inactivity challenge.

**HPV vaccine to be given to boys in England**
DHSC
The government has announced that adolescent boys will be offered the human papilloma virus (HPV) vaccine to protect them from cancer.

**Social prescribing schemes across England to receive £4.5 million**
DHSC
The funding will allow GPs to refer more patients to social activities and other types of support to improve health and wellbeing and reduce demand on NHS services.

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**Metformin for women who are overweight or obese during pregnancy for improving maternal and infant outcomes**
Cochrane Review
There is insufficient evidence to support the use of metformin for women with obesity in pregnancy for improving maternal and infant outcomes. Metformin was, however, associated with increased risk
of adverse effects, particularly diarrhoea. The quality of the evidence in this review varied from high to low, with downgrading decisions based on study limitations and inconsistency.

There were only a small number of studies included in this review. Furthermore, none of the included studies included women categorised as 'overweight' and no trials looked at metformin in combination with another treatment.

Future research is required in order to further evaluate the role of metformin therapy in pregnant women with obesity or who are overweight, as a strategy to improve maternal and infant health, alone or as an adjuvant to dietary and lifestyle advice.

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coronary heart disease mortality and stroke (though not ruling out harms), but has little or no effect on all-cause or cardiovascular disease mortality. The mechanism may be via lipid reduction, but increasing PUFA probably slightly increases weight.

**The association between body fat and musculoskeletal pain: a systematic review and meta-analysis**

*BMC Musculoskeletal Disorders*

Background: Obesity and musculoskeletal pain are strongly related, but there is emerging evidence that body fat, not body weight, may be a better indicator of risk. There is, therefore, a need to determine if body fat is associated with musculoskeletal pain as it may improve management strategies. The aim of this systematic review was to investigate the association between body fat and musculoskeletal pain.

Methods: Seven electronic databases were searched from inception to 8th January 2018. Cross-sectional and longitudinal studies investigating the association between measures of body fat and musculoskeletal pain were included. All included articles were assessed for methodological rigour using the Epidemiology Appraisal Instrument. Standardised mean differences (SMDs) and effect estimates were pooled for meta-analysis.

Results: A total of 10,221 citations were identified through the database searching, which after abstract and full-text review, yielded 28 unique articles. Fourteen studies were included in the meta-analyses, which found significant cross-sectional associations between total body fat mass and widespread pain (SMD 0.49, 95% CI 0.37–0.61, p < 0.001). Individuals with low-back pain and knee pain had a higher body fat percentage than asymptomatic controls (SMD 0.34, 95% CI 0.17–0.52, p < 0.001 and SMD 0.18, 95% CI 0.05–0.32, p = 0.009, respectively). Fat mass index was significantly, albeit weakly, associated with foot pain (SMD 0.05, 95% CI 0.03–0.06, p < 0.001). Longitudinal studies (n = 8) were unsuitable for meta-analysis, but were largely indicative of elevated body fat increasing the risk of incident and worsening joint pain. There was conflicting evidence for an association between body fat percentage and incident low-back pain (3 studies, follow-up 4–20 years). Increasing knee pain (1 study) and incident foot pain (2 studies) were positively associated with body fat percentage and fat mass index. The percentage of items in the EAI graded as ‘yes’ for each study ranged from 23 to 85%, indicating variable methodological quality of the included studies.

Conclusions: This systematic review and meta-analysis identified positive cross-sectional associations between increased body fat and widespread and single-site joint pain in the low-back, knee and foot. Longitudinal studies suggest elevated body fat may infer increased risk of incident and worsening joint pain, although further high-quality studies are required.

**Prevention of Illness**

*Meridian*

How do we work towards the primary prevention of illnesses and challenging the set of conditions caused by poor life-styles and high risk factors?
General Practice

**GPs have lower awareness of non-traditional tobacco products, study finds**

Research Institute for Primary Care and Health Sciences, Keele University

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**Rheumatoid arthritis in adults: management**

NICE

This guideline covers diagnosing and managing rheumatoid arthritis. It aims to improve quality of life by ensuring that people with rheumatoid arthritis have the right treatment to slow the progression of their condition and control their symptoms. People should also have rapid access to specialist care if their condition suddenly worsens.

**Early and locally advanced breast cancer: diagnosis and management**

NICE

This guideline covers diagnosing and managing early and locally advanced breast cancer. It aims to help healthcare professionals offer the right treatments to people, taking into account the person’s individual preferences. NICE has also produced guidelines on advanced breast cancer, familial breast cancer and suspected cancer recognition and referral.

**Medicines management for people receiving social care in the community**

NICE

This quality standard covers assessing if people need help with their medicines and deciding what medicines support is needed to enable people to manage their medicines. It also includes communication between health and social care staff, to ensure people have the medicines support they need. It describes high-quality care in priority areas for improvement.

**Antibiotics for prolonged wet cough in children**

Cochrane Review

Evidence suggests antibiotics are efficacious for the treatment of children with chronic wet cough (greater than four weeks) with an NNTB of three. However, antibiotics have adverse effects and this review reported only uncertainty as to the risk of increased adverse effects when they were used in this setting. The inclusion of a more robust study strengthened the previous Cochrane review and its results.

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**Medically Unexplained Symptoms - Digital tools and identification system**

*Meridian*

How can we identify MUS patients with medically unexplained symptoms (MUS) using primary and/or secondary patient information systems and assist in treating along a care pathway
**Rehabilitation and Occupational Health**

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**Multifactorial and multiple component interventions for preventing falls in older people living in the community**

**Cochrane Review**

Multifactorial interventions may reduce the rate of falls compared with usual care or attention control. However, there may be little or no effect on other fall-related outcomes. Multiple component interventions, usually including exercise, may reduce the rate of falls and risk of falling compared with usual care or attention control.

**Mirror therapy for improving motor function after stroke**

**Cochrane Review**

The results indicate evidence for the effectiveness of mirror therapy for improving upper extremity motor function, motor impairment, activities of daily living, and pain, at least as an adjunct to conventional rehabilitation for people after stroke. Major limitations are small sample sizes and lack of reporting of methodological details, resulting in uncertain evidence quality.

**Diagnostic strategy for elderly patients with isolated greater trochanter fractures on plain radiographs**

**BMC Musculoskeletal Disorders**

Background: Isolated greater trochanter (GT) fractures are relatively rare and few studies have assessed the appropriate diagnostic and therapeutic strategies for these fractures. When initial plain radiographs show an isolated GT fracture, underestimation of occult intertrochanteric extension may result in displacement of a previously non-displaced fracture. This study examined the clinical results and value of different diagnostic strategies in elderly patients with isolated GT fractures on plain radiographs.

Methods: Between January 2010 and January 2015, 30 patients with initial plain radiographs showing isolated GT fractures were examined using MRI, bone scanning and/or CT for suspected occult intertrochanteric extension. We assessed the sensitivity, specificity, and positive and negative predictive value of each test. In addition, we noted the location of the fracture or soft-tissue injury on MRI in addition to treatment results.

Results: All 30 patients had osteoporosis and fractures caused by minor trauma. MRI revealed isolated GT fractures in nine patients and occult intertrochanteric fractures in 21 patients. Using the MRI-based diagnosis as a reference, the results showed that plain radiographs, bone scans, and CT scans can be used for supplementary examination but they are not appropriate as confirmatory tests for
these fractures. However, in patients with both isolated GT fractures seen on plain radiographs and increased uptake in only the GT area on bone scans, MRI revealed isolated GT fractures. The fractures were treated surgically in 20 patients and conservatively in 10 patients with satisfactory clinical results.

Conclusions: We confirmed that MRI-based examination is useful in all symptomatic elderly patients whose plain radiographic findings reveal isolated GT fractures. However, we suggest that there is a need to establish a diagnostic strategy through increased understanding of the available diagnostic methods. We believe that surgical treatment should be considered in patients with occult intertrochanteric fractures that are detected on MRI.

**Associations between post-operative rehabilitation of hip fracture and outcomes: national database analysis (90 characters)**

**BMC Musculoskeletal Disorders**

**Background:** Rehabilitation programmes are used to improve hip fracture outcomes. There is little published trial clinical trial or population-based data on the effects of the type or provider of rehabilitation treatments on hip fracture outcomes. We evaluated the associations of rehabilitation interventions with post-operative hip fracture outcomes.

**Methods:** Cross-sectional (2013–2015) analysis of data from the English National Hip Fracture Database (NHFD) from all 191 English hospitals treating hip fractures. Of 62,844 NHFD patients, we included 17,708 patients with rehabilitation treatment and 30-day mobility data, and 34,142 patients with rehabilitation treatment and discharge destination data. The intervention was early mobilisation rehabilitation treatments delivered by a physiotherapist (PT, physical therapist in North America) or other clinical staff as identifiable in NHFD. We used ordinal logistic and propensity scoring regression models to adjust for confounding variables including age, sex, pre-fracture mobility, operative delay, and cognitive function and peri-operative risk scores.

**Results:** In both the adjusted multivariate and propensity-weighted analyses, mobilisation on the day or the day following surgery is associated with better mobility function 30 days after discharge. However patients mobilised by a PT did not have better mobility compared to mobilisation by other professionals. Patients who received a PT assessment were not protected from poorer mobility 30 days after discharge, compared with those who did not receive an assessment. The discharge destination outcome is also better in mobilised than unmobilised patients, whether done by a PT or another health professional, and the difference persists, slightly attenuated, after propensity weighting.

**Conclusions:** In addition to the type of health professional initiating mobilisation, data on rehabilitation treatment activity and post-operative gait speed is needed to determine optimum rehabilitation dosage and functional outcome. After adjustment patients mobilised by non-PTs did as well as patients mobilised by PTs, suggesting that PTs’ current roles in very early rehabilitation should be reconsidered, with a view to redeploying them to more specialised later rehabilitation activity.
Physiotherapy

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Associations among knee muscle strength, structural damage, and pain and mobility in individuals with osteoarthritis and symptomatic meniscal tear
BMC Musculoskeletal Disorders
Background: Sufficient lower extremity muscle strength is necessary for performing functional tasks, and individuals with knee osteoarthritis demonstrate thigh muscle weakness compared to controls. It has been suggested that lower muscle strength is associated with a variety of clinical features including pain, mobility, and functional performance, yet these relationships have not been fully explored in patients with symptomatic meniscal tear in addition to knee osteoarthritis. Our purpose was to evaluate the associations of quadriceps and hamstrings muscle strength with structural damage and clinical features in individuals with knee osteoarthritis and symptomatic meniscal tear.

Methods: We performed a cross-sectional study using baseline data from the Meniscal Tear in Osteoarthritis Research (MeTeOR) trial. We assessed structural damage using Kellgren-Lawrence grade and the magnetic resonance imaging osteoarthritis knee score (MOAKS) for cartilage damage. We used the Knee Injury and Osteoarthritis Outcomes Score (KOOS) to evaluate pain, symptoms, and activities of daily living (ADL), and the Timed Up and Go (TUG) test to assess mobility. We assessed quadriceps and hamstrings strength using a hand-held dynamometer and classified each into quartiles (Q). We used Chi square tests to evaluate the association between strength and structural damage; and separate analysis of covariance models to establish the association between pain, symptoms, ADL and mobility with strength, after adjusting for demographic characteristics (age, sex and BMI) and structural damage.
Results: Two hundred fifty two participants were evaluated. For quadriceps strength, subjects in the strongest quartile scored 14 and 13 points higher on the KOOS Pain and ADL subscales, respectively, and completed the TUG two seconds faster than subjects in the weakest quartile. For hamstrings strength, subjects in the strongest quartile scored 13 and 14 points higher on the KOOS pain and ADL subscales, respectively, and completed the TUG two seconds faster than subjects in the weakest quartile. Strength was not associated with structural damage.

Conclusions: Greater quadriceps and hamstrings muscle strength was associated with less pain, less difficulty completing activities of daily living, and better mobility. These relationships should be evaluated longitudinally.

Construction of an adherence rating scale for exercise therapy for patients with knee osteoarthritis

BMC Musculoskeletal Disorders

Background: Knee osteoarthritis (KOA) is one of the most common chronic diseases in the elderly and is the primary cause of the loss of motor function and disability in this population. Exercise therapy is a core, basic and mature treatment method of treating patients with KOA. Exercise therapy is “strongly recommended” or “recommended” in the diagnosis and treatment guidelines of osteoarthritis in many countries, and most scholars advocate exercise therapy as the preferred rehabilitation method for KOA patients. However, poor long-term adherence is a serious problem affecting the therapeutic effect of this mature treatment. The objective of this study was to construct a concise and practical adherence rating scale (ARS) based on the exercise therapy adherence prediction model in patients with knee osteoarthritis.

Methods: A binary logistic regression model was established, with the adherence of 218 cases of KOA patients as the dependent variable. The patients’ general information, exercise habits, knowledge, attitude, and exercise therapy were independent variables. The regression coefficients were assigned to various variables in the model, and the ARS was constructed accordingly. Receiver operating characteristic curves and curve fitting were used to analyse the effect of the ARS in predicting the adherence and to determine the goodness of fit for the adherence. The external validity of the ARS was examined in a randomized controlled trial.

Results: The construction of the adherence model and the ARS included the following variables: age (1 point), education level (1 point), degree of social support (2 points), exercise habits (3 points), knowledge of KOA prevention and treatment (2 points), degree of care needed to treat the disease (1 point), familiarity with exercise therapy (4 points) and treatment confidence (3 points). The critical value of the total score of the ARS was 6.50, with a sensitivity of 87.20% and a specificity of 76.34%.

Conclusions: A KOA exercise therapy adherence model and a simple and practical ARS were constructed. The ARS has good internal validity and external validity and can be used to evaluate the adherence to exercise therapy in patients with KOA.
Agreement among physiotherapists in assessing patient performance of exercises for low-back pain
BMC Musculoskeletal Disorders

Background: There is no agreement for the performance assessment of patients who practice exercises. (2 points to withdraw) This assessment is currently left to the physiotherapist’s personal judgement. We studied the agreement among physiotherapists in rating patient performance during exercises recommended for chronic low-back pain (LBP).

Methods: A vignette-based method was used. We first identified ten exercises recommended for LBP in the literature. Then, 42 patients with chronic LBP participating in a rehabilitation program were videotaped during their performance of one of the ten exercises. A vignette was an exercise video preceded by clinical information. Ten physiotherapists from primary (4) and tertiary care (6) viewed the 42 vignettes twice, one month apart, and rated patient performance from zero (worse performance) to ten (excellent performance) by considering the position and duration of the contraction or stretching. Intra-class correlation coefficients (ICCs) and 95% confidence intervals (95% CIs) were computed to assess inter- and intra-rater reliability.

Results: The overall inter-rater agreement was fair (ICC 0.48 [95% CI 0.33–0.56]) but was better for stretching exercises (0.55 [0.35–0.64]) than strengthening exercises (0.42 [0.20–0.52]) and for tertiary-care physiotherapists (0.66 [0.54–0.76]) than primary-care physiotherapists (0.28 [0.09–0.37]). The intra-rater agreement was overall good (0.72 [0.57–0.81] to 0.88 [0.79–0.94]). It was better for stretching exercises (from 0.68 [0.46–0.81] to 0.96 [0.91–0.98]) than strengthening exercises (from 0.68 [0.38–0.84] to 0.82 [0.56–0.92]).

Conclusion: The agreement in rating patient performance of exercises for LBP is good among physiotherapists trained in managing LBP but is low among non-trained physiotherapists.

Level of participation in physical therapy or an internet-based exercise training program: associations with outcomes for patients with knee osteoarthritis
BMC Musculoskeletal Disorders

Background: To examine whether number of physical therapy (PT) visits or amount of use of an internet-based exercise training (IBET) program is associated with differential improvement in outcomes for participants with knee osteoarthritis (OA).

Methods: A secondary analysis was performed using data from participants in 2 arms of a randomized control trial for individuals with symptomatic knee OA: PT (N = 135) or IBET (N = 124). We examined associations of number of PT visits attended (up to 8) or number of days the IBET website was accessed during the initial 4-month study period with changes in Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) total, pain and function subscales, as well as a 2-min Step Test, at 4-month and 12-month follow-up.

Results: Participants with more PT visits experienced greater improvement in WOMAC total score (estimate per additional visit = −1.18, CI 95% = −1.91, 0.46, p < 0.001) and function subscore (estimate = −0.80, CI 95% = −1.33, −0.28, p < 0.001) across follow-up periods. For WOMAC pain subscale, the association with number of PT visits varied significantly between 4- and 12-month
follow-up, with a stronger relationship at 4-months. There was a non-significant trend for more PT visits to be associated with greater improvement in 2-min Step Test. More frequent use of the IBET website was not associated with greater improvement for any outcome, at either time point.

Conclusion: Increased number of PT visits was associated with improved outcomes, and some of this benefit persisted 8 months after PT ended. This provides guidance for PT clinical practice and policies.

The association between body fat and musculoskeletal pain: a systematic review and meta-analysis

BMC Musculoskeletal Disorders

Background: Obesity and musculoskeletal pain are strongly related, but there is emerging evidence that body fat, not body weight, may be a better indicator of risk. There is, therefore, a need to determine if body fat is associated with musculoskeletal pain as it may improve management strategies. The aim of this systematic review was to investigate the association between body fat and musculoskeletal pain.

Methods: Seven electronic databases were searched from inception to 8th January 2018. Cross-sectional and longitudinal studies investigating the association between measures of body fat and musculoskeletal pain were included. All included articles were assessed for methodological rigour using the Epidemiology Appraisal Instrument. Standardised mean differences (SMDs) and effect estimates were pooled for meta-analysis.

Results: A total of 10,221 citations were identified through the database searching, which after abstract and full-text review, yielded 28 unique articles. Fourteen studies were included in the meta-analyses, which found significant cross-sectional associations between total body fat mass and widespread pain (SMD 0.49, 95% CI 0.37–0.61, p < 0.001). Individuals with low-back pain and knee pain had a higher body fat percentage than asymptomatic controls (SMD 0.34, 95% CI 0.17–0.52, p < 0.001 and SMD 0.18, 95% CI 0.05–0.32, p = 0.009, respectively). Fat mass index was significantly, albeit weakly, associated with foot pain (SMD 0.05, 95% CI 0.03–0.06, p < 0.001). Longitudinal studies (n = 8) were unsuitable for meta-analysis, but were largely indicative of elevated body fat increasing the risk of incident and worsening joint pain. There was conflicting evidence for an association between body fat percentage and incident low-back pain (3 studies, follow-up 4–20 years). Increasing knee pain (1 study) and incident foot pain (2 studies) were positively associated with body fat percentage and fat mass index. The percentage of items in the EAI graded as ‘yes’ for each study ranged from 23 to 85%, indicating variable methodological quality of the included studies.

Conclusions: This systematic review and meta-analysis identified positive cross-sectional associations between increased body fat and widespread and single-site joint pain in the low-back, knee and foot. Longitudinal studies suggest elevated body fat may infer increased risk of incident and worsening joint pain, although further high-quality studies are required.
The development of a district nursing caseload review tool
British Journal of Community Nursing
District Nursing (DN) caseloads are increasingly unwieldy. (Queen’s Nursing Institute, 2016). They can also be difficult to manage due to the unpredictability and increasing complexity of the patient’s needs. It is an essential component of DN teams that caseloads are reviewed on a regular basis to support the delivery of efficient, effective and safe patient care. This article illustrates how a caseload review tool was developed, which would standardise the process in all teams, analyse and monitor the outcomes, identify any trends and themes and give assurance that DN caseloads were productive and safe. The testing, piloting and evaluation of the DN caseload review tool was over a period of 12 months and included 35 DN teams across the Trust. The method used was standardised and systematic, in order to ensure that the results were consistent across the pilot site. It also allowed for standardised challenges to be made by the reviewers, ensuring that the process was efficient and meaningful, the outcomes measured and documented and the clinical systems updated appropriately. Results from the initial reviews have been positive. They have produced both qualitative and quantitative data, which has supported further development of the tool. In addition, actions and outcomes identified for individual patients have been documented and addressed, where possible, at local level. A governance process is in place which supports unaddressed challenges, themes and trends. The conclusion of the pilot has confirmed that this process is valid and will continue to be used within the organisation.

Just about to graduate: What you need to know
RCN
A guide for newly qualified nurses, explaining registration, preceptorship, professional indemnity, revalidation, as well as aspects such as the principles of nursing practice, and various guides on working in England, Scotland or Wales.

RCN Competencies: Caring for Infants, Children and Young People requiring Palliative Care
RCN
This document is a revision of the first RCN competence framework produced for nurses and health care support workers in the UK involved in the care of infants, children and young people requiring palliative care. This newly revised competence framework builds on a number of best practice guidance documents and resources.

Government response to 'The nursing workforce' report from the Health and Social Care Select Committee
DHSC
This paper is the government’s response to the House of Commons Health and Social Care Select Committee's second report of session 2017 to 2019
**Nurses as substitutes for doctors in primary care**

*Cochrane Review*

This review shows that for some ongoing and urgent physical complaints and for chronic conditions, trained nurses, such as nurse practitioners, practice nurses, and registered nurses, probably provide equal or possibly even better quality of care compared to primary care doctors, and probably achieve equal or better health outcomes for patients. Nurses probably achieve higher levels of patient satisfaction, compared to primary care doctors. Furthermore, consultation length is probably longer when nurses deliver care and the frequency of attended return visits is probably slightly higher for nurses, compared to doctors. Other utilisation outcomes are probably the same. The effects of nurse-led care on process of care and the costs of care are uncertain, and we also cannot ascertain what level of nursing education leads to the best outcomes when nurses are substituted for doctors.

**Negative pressure wound therapy for open traumatic wounds**

*Cochrane Review*

There is moderate-certainty evidence for no clear difference between NPWT and standard care on the proportion of wounds healed at six weeks for open fracture wounds. There is moderate-certainty evidence that NPWT is not a cost-effective treatment for open fracture wounds. Moderate-certainty evidence means that the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different. It is uncertain whether there is a difference in risk of wound infection, adverse events, time to closure or coverage surgery, pain or health-related quality of life between NPWT and standard care for any type of open traumatic wound.

**Advanced Level Nursing Practice: Introduction**

*RCN*

An introduction to the RCN Standards for advanced level nursing practice, advanced nurse practitioners, RCN accreditation and RCN credentialing. More information from the RCN on advanced nursing practice can be found at [www.rcn.org.uk/ANP](http://www.rcn.org.uk/ANP).

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**Social Care**

**Medicines management for people receiving social care in the community**

*NICE*

This quality standard covers assessing if people need help with their medicines and deciding what medicines support is needed to enable people to manage their medicines. It also includes communication between health and social care staff, to ensure people have the medicines support they need. It describes high-quality care in priority areas for improvement.

**Delivering integrated care: the role of the multidisciplinary team**

*SCIE*

Multidisciplinary teams (MDTs) are promoted as a means to enable practitioners and other professionals in health and social care to collaborate successfully. Research suggests that MDTs can be effective in meeting the needs of some populations. They are identified in SCIE’s Integration Logic Model as a core desire of what good integrated care looks like. Sufficient diversity of professions and
disciplines, suitable leadership and team dynamics, and supportive organisations are important enablers.

Programme evaluation – final report
SCIE
The Department of Health and Social Care initiated the Named Social Worker programme to build an understanding of how having a named social worker can contribute to people with learning disabilities, autism or mental health needs achieving better outcomes. The project looked specifically at how they and their family can be in control of decisions about their own future, and are supported to live with dignity and independence. This programme piloted new ideas and generated early and indicative evidence about their impact. This report is a final evaluation of the programme.

All SCIE resources are free to download, however to access the following download you will need a free MySCIE account:
- Register now
- Log into your account

Therapeutic interventions after abuse and neglect
A quick guide for practitioners and managers supporting children, young people and families.
SCIE
Abuse and neglect can have a long-lasting impact on the health and wellbeing of children and young people, so a fast and effective response is vital. This quick guide gives an overview of evidence-based interventions that may be effective when working with children and young people who have experienced physical abuse, emotional abuse or neglect. It includes information about the types of therapy that are appropriate for different age groups and describes the aims of each therapy. The guide also covers the principles that children and young people identified as being most important for people who work with them following abuse and neglect.

General Synod hears from abuse survivors and pledges reform of safeguarding
Church Times
THE pain and harm experienced by survivors of abuse, and demands for independent scrutiny of the Church of England’s safeguarding practices, were at the heart of a debate of the General Synod, meeting in York, on Saturday. After presentation from the survivors’ group MACSAS, and the Social Care Institute for Excellence (SCIE), which drew a standing ovation, Synod members voted overwhelmingly in favour of a motion to “take note” of a report from the House of Bishops committing the Church to improving its safeguarding practices (News, 29 June).

Multifactorial and multiple component interventions for preventing falls in older people living in the community
Cochrane Review
Multifactorial interventions may reduce the rate of falls compared with usual care or attention control. However, there may be little or no effect on other fall-related outcomes. Multiple component
interventions, usually including exercise, may reduce the rate of falls and risk of falling compared with usual care or attention control.

**Learning Disability**

**Think Autism strategy: governance refresh 2018**
DHSC
The way that the Department of Health and Social Care and other organisations monitor the progress of the autism strategy has been updated

**Diagnostic tests for autism spectrum disorder (ASD) in preschool children**
Cochrane Library
Autism spectrum disorder (ASD) is a behaviourally diagnosed condition. It is defined by impairments in social communication or the presence of restricted or repetitive behaviours, or both. Diagnosis is made according to existing classification systems. In recent years, especially following publication of the Diagnostic and Statistical Manual of Mental Disorders - Fifth Edition (DSM-5; APA 2013), children are given the diagnosis of ASD, rather than subclassifications of the spectrum such as autistic disorder, Asperger syndrome, or pervasive developmental disorder - not otherwise specified. Tests to diagnose ASD have been developed using parent or carer interview, child observation, or a combination of both.

**Mental Health**

**Music-based therapeutic interventions for people with dementia**
Cochrane Review
Providing people with dementia who are in institutional care with at least five sessions of a music-based therapeutic intervention probably reduces depressive symptoms and improves overall behavioural problems at the end of treatment. It may also improve emotional well-being and quality of life and reduce anxiety, but may have little or no effect on agitation or aggression or on cognition. We are uncertain about effects on social behaviour and about long-term effects. Future studies should examine the duration of effects in relation to the overall duration of treatment and the number of sessions.

**Older Adults**

**Delaying and managing the onset of frailty**
Meridian
How do we find people at risk of becoming mildly or moderately frail and what interventions, services or pathways need to be in place to manage someone's physical or mental deterioration appropriately at home or in the community?

Frailty is a broad term that isn’t yet universally recognised as a condition with a full appreciation of
what interventions or action should be taken when someone is scored with the electronic frailty index (https://www.england.nhs.uk/ourwork/ltc-op-eolc/older-people/frailty/supporting-resources-general-practice/). Further information on frailty can also be reviewed here.

Pharmacy

**Effects of long-term opioid analgesics on cognitive performance and plasma cytokine concentrations in patients with chronic low back pain: a cross-sectional pilot study**

**PAIN Reports**

Introduction: Cognitive performance and inflammation are altered in people with chronic low back pain (CLBP). Yet, the magnitude of these changes has been unclear because of the potential influence of opioid analgesics.

Objectives: This cross-sectional pilot study aimed to explore whether patients with CLBP receiving long-term opioid analgesics differed from patients not taking opioids on measures of cognitive performance and plasma cytokine concentrations.

Methods: Patients with CLBP who were either taking (N = 18) or not taking (N = 22) opioids daily for 3 or more months were recruited from a tertiary care private hospital and compared with healthy adults (N = 20). All groups were administered validated questionnaires to assess depression, anxiety, and stress; a cognitive test of memory, attention, and executive function; and a peripheral blood draw to measure proinflammatory (IL-1β, IL-2, IL-8, IL-12p70, TNF-α, and IFN-γ), anti-inflammatory (IL-4, IL-10, and IL-13), and pleiotropic (IL-6) cytokine concentrations. Patients also completed pain-specific questionnaires.

Results: Patients receiving opioid analgesics performed significantly (P < 0.05) worse in attention and had significantly (P < 0.05) lower pain self-efficacy beliefs than those patients not taking opioids. Patient groups did not differ in mean pain severity or pain interference scores, tests of memory and executive function, and mean plasma cytokine concentrations, despite long-term opioid analgesics.

Conclusion: Patients receiving long-term opioid analgesics for CLBP have minor differences when compared with patients not taking opioids. This has important clinical implications when considering long-term treatment for patients with CLBP.

**Medicines management for people receiving social care in the community**

**NICE**

This quality standard covers assessing if people need help with their medicines and deciding what medicines support is needed to enable people to manage their medicines. It also includes communication between health and social care staff, to ensure people have the medicines support they need. It describes high-quality care in priority areas for improvement.
Cannabis scheduling review: part 1
DHSC
Professor Dame Sally Davies, Chief Medical Officer for England and Chief Medical Adviser to the UK government, has reviewed evidence for the therapeutic benefit of cannabis-based medicinal products.

The review summarises the results of recent reviews and discusses the quality of evidence. Professor Davies concludes that cannabis-based medicinal products should be moved out of a Schedule 1 classification. Schedule 1 drugs by definition have little or no therapeutic potential.

This review forms part of a series of measures announced by the Home Secretary on 19 June 2018 looking at the scheduling of cannabis. Its conclusion signals the start of a second review, which will be led by the Advisory Council on the Misuse of Drugs (ACMD).

The ACMD will not reassess the evidence issued by Professor Dame Sally Davies but will provide an assessment, based on the balance of harms and public health needs, of what (if anything) should be rescheduled.