Public Health Key Documents July – August 2019

NIHR

The 4 'A's test for detecting delirium in acute medical patients: a diagnostic accuracy study
This project evaluated the usability, diagnostic cost and accuracy of the 4 'A's test (Arousal, Attention, Abbreviated Mental Test – 4, Acute change) - a screening tool designed for routine use. While generalisability was limited as all patients were aged 70 or over, findings support the use of the 4AT as a rapid delirium assessment instrument.
https://www.journalslibrary.nihr.ac.uk/hta/hta23400/#/abstract

Low-dose oral theophylline combined with inhaled corticosteroids for people with chronic obstructive pulmonary disease and high risk of exacerbations: a RCT
Laboratory investigations have demonstrated that at low plasma concentrations (1–5 mg/l) theophylline markedly enhances the anti-inflammatory effects of corticosteroids in COPD.
The trial sought to determine the clinical effectiveness, and cost-effectiveness, of adding low-dose theophylline to a drug regimen containing ICSs in people with COPD at high risk of exacerbation. Low-dose theophylline had no significant effects on lung function, incidence of pneumonia, mortality, breathlessness or measures of quality of life or disease impact. Hospital admissions due to COPD exacerbation were less frequent with low-dose theophylline. However, most of the excess hospital admissions in the placebo group related to 10 participants having three or more exacerbations. There were no differences in the reporting of theophylline side effects between the theophylline and placebo arms. For people with COPD at high risk of exacerbation, the addition of low-dose oral theophylline to a drug regimen that includes ICSs confers no overall clinical or health economic benefit.
https://www.journalslibrary.nihr.ac.uk/hta/hta23370/#/abstract

Exercise- and strategy-based physiotherapy-delivered intervention for preventing repeat falls in people with Parkinson's: the PDSAFE RCT
People with Parkinson's disease are twice as likely to experience a fall as a healthy older person, often leading to reduced confidence, activity levels and quality of life. 474 people with Parkinson's disease were recruited and assigned to a physiotherapy programme or usual care. All participants received routine care; the usual-care group received a DVD and a single advice session at trial completion. The intervention group had an individually tailored, progressive, home-based fall avoidance strategy training programme with balance and strengthening exercises: PDSAFE.
PDSAFE was not effective in reducing repeat falling. Other functional tasks and self-efficacy improved and demonstrated differential patterns of intervention impact in accordance with disease severity and FoG, supporting previous secondary research findings and merits further primary evaluation. Further trials of falls prevention on targeted groups of people with Parkinson's disease are recommended.
https://www.journalslibrary.nihr.ac.uk/hta/hta23360/#/abstract

Tranexamic acid to improve functional status in adults with spontaneous intracerebral haemorrhage: the TICH-2 RCT
Tranexamic acid reduces death due to bleeding after trauma and postpartum haemorrhage.
The TICH-2 (Tranexamic acid for hyperacute primary IntraCerebral Haemorrhage) study was a pragmatic, Phase III, prospective, double-blind, randomised placebo-controlled trial involving acute stroke services at 124 hospitals in 12 countries including the UK. It aimed to assess the safety and efficacy of tranexamic acid in adults with spontaneous intracerebral haemorrhage (ICH). Participants received 1 g of an intravenous tranexamic acid bolus followed by an 8-hour 1-g infusion or matching placebo. Although there were significant issues with enrolling patients (most had had severe strokes and were from the UK) it was concluded that Tranexamic acid did not affect a patient's functional

status at 90 days after ICH, despite there being significant modest reductions in early death (by 7 days), haematoma expansion and SAEs, which is consistent with an antifibrinolytic effect. Tranexamic acid was safe, with no increase in thromboembolic events. Future work should focus on enrolling and treating patients early after stroke and identify which participants are most likely to benefit from haemostatic therapy.
https://www.journalslibrary.nihr.ac.uk/hta/hta23350/#/abstract

Anaesthetic analgesic ear drops to reduce antibiotic consumption in children with acute otitis media: the CEDAR RCT
Acute otitis media (AOM) is a common reason for primary care consultations and antibiotic prescribing in children. Options for improved pain control may influence antibiotic prescribing and consumption. The Children's Ear Pain Study (CEDAR), a multicentre, randomised, parallel-group (two-group initially, then three-group) trial in primary care practices in England and Wales,investigated whether or not providing anaesthetic–analgesic ear drops reduced antibiotic consumption in children with AOM. Secondary objectives included pain control and cost-effectiveness. Participants were 1- to 10-year-old children presenting within 1 week of suspected AOM onset with ear pain during the preceding 24 hours and not requiring immediate antibiotics. Children were given the painkilling drops, placebo (dummy) drops or usual care. Results suggest reduced antibiotic use can be achieved in children with AOM by combining a no or delayed antibiotic prescribing strategy with anaesthetic–analgesic ear drops. Whether or not the active drops relieved ear pain was not established. A larger study is required to confirm results and future work should establish if the effect of ear drops is due to pain relief.
https://www.journalslibrary.nihr.ac.uk/hta/hta23340/#/abstract

Cultural adaptation of an existing children's weight management programme: the CHANGE intervention and feasibility RCT
Families from minority ethnic communities are less likely to complete community-based children's weight management programmes. A culturally adapted children's weight management programme, designed to be more suited to Pakistani and Bangladeshi communities but inclusive of all families, comprising six sessions targeting diet and physical activity and incorporating behaviour change techniques, was developed and delivered to children aged 4-11 and parents in Birmingham. It proved highly acceptable to children and families of all ethnicities. Consideration should be given to a future trial to evaluate clinical effectiveness and cost-effectiveness of the programme. The design of a future trial must also address data collection issues, participant burden and study attrition.
https://www.journalslibrary.nihr.ac.uk/hta/hta23330/#/abstract

The Arthroplasty Candidacy Help Engine tool to select candidates for hip and knee replacement surgery: development and economic modelling
Despite a lack of evidence to support the use of patient-reported outcome measures (PROMs) in setting preoperative thresholds for referral for hip and knee replacement surgery, they are widely used in the NHS. The study sought to establish if clinical outcome tools could be used to set thresholds for hip or knee replacement. The Oxford Knee Score (OKS) and Oxford Hip Score (OHS) were selected as the most appropriate scores for use in developing the Arthroplasty Candidacy Help Engine (ACHE) tool. Markov models were used to assess the cost-effectiveness of total hip/knee arthroplasty in the NHS for different preoperative values of OKS/OHSs over a 10-year period. It was concluded that the OKS and OHS can be used to assess individuals' suitability for surgery. Surgery nearly always costs less than £20,000 per QALY (Quality-adjusted life year).
https://www.journalslibrary.nihr.ac.uk/hta/hta23320/#/abstract

Selective laser trabeculoplasty versus drops for newly diagnosed ocular hypertension and glaucoma: the LiGHT RCT

Newly diagnosed open-angle glaucoma (OAG) and ocular hypertension (OHT) are habitually treated with intraocular pressure (IOP)-lowering eyedrops. Selective laser trabeculoplasty (SLT) is a safe alternative to drops but is rarely used as first-line treatment. Results from a a 36-month pragmatic, unmasked, multicentre RCT showed that , compared with medication, SLT provided a stable, drop-free IOP control to 74.2% of patients for at least 3 years, with a reduced need for surgery, lower cost and comparable HRQoL (Health-related quality of life). SLT seems to be the most cost-effective first-line treatment option for OAG and OHT and provides better clinical outcomes.
https://www.journalslibrary.nihr.ac.uk/hta/hta23310/#/abstract

Tumour profiling tests to guide adjuvant chemotherapy decisions in early breast cancer: a systematic review and economic analysis

The study examined five tumour profiling tests - onco*type* DX®(Genomic Health, Inc., Redwood City, CA, USA), MammaPrint® (Agendia, Inc., Amsterdam, the Netherlands), Prosigna®(NanoString Technologies, Inc., Seattle, WA, USA), EndoPredict® (Myriad Genetics Ltd, London, UK) and immunohistochemistry 4 (IHC4). While there were limitations in the evidence, it suggests that all five tests can provide prognostic information although the estimates of cost/QALY (Quality-adjusted life year) varied widely.
https://www.journalslibrary.nihr.ac.uk/hta/hta23300/#/abstract

Kings Fund

Nil

Scottish Medicines Consortium – SMC Advice

tezacaftor-ivacaftor (Symkevi®)

Not recommended for use within NHSScotland.
In phase III studies in patients ≥12 years of age with cystic fibrosis who were homozygous for the F508del CFTR mutation or heterozygous for the F508del CFTR mutation and a second allele with a CFTR mutation with residual function, tezacaftor-ivacaftor was superior to placebo for absolute change in the percent predicted forced expiratory volume in one second (ppFEV1) from the baseline. However, the submitting company's justification of the treatment's cost in relation to its health benefits was not sufficient and the company did not present a sufficiently robust clinical and economic analysis to gain acceptance by SMC.
https://www.scottishmedicines.org.uk/medicines-advice/tezacaftor-ivacaftor-symkevi-full-smc2183/

inotersen (Tegsedi®)

Accepted for use for the treatment of stage 1 or stage 2 polyneuropathy in adult patients with hereditary transthyretin amyloidosis (hATTR).
https://www.scottishmedicines.org.uk/medicines-advice/inotersen-tegsedi-full-smc2188/

buprenorphine (Buvidal®)

Accepted for restricted use for the treatment of opioid dependence within a framework of medical, social and psychological treatment. Treatment is intended for use in adults and adolescents aged 16 years or over. Restricted to patients for whom methadone is not suitable and for whom the use of buprenorphine is considered appropriate.
https://www.scottishmedicines.org.uk/medicines-advice/buprenorphine-buvidal-full-smc2169/

tildrakizumab (Ilumetri®)
Accepted for restricted use for the treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. Restricted to patients who have failed to respond to conventional systemic therapies, are intolerant to, or have a contraindication to these treatments.
https://www.scottishmedicines.org.uk/medicines-advice/tildrakizumab-ilumetri-full-smc2167/

perampanel (Fycompa®)
Accepted for restricted use for the adjunctive treatment of partial-onset seizures with or without secondarily generalised seizures in adult and adolescent patients from 12 years of age with epilepsy. Restricted to use as a second-line adjunctive treatment in patients with refractory partial onset epilepsy who are unable to swallow perampanel tablets. Treatment should be initiated only by physicians who have appropriate experience in the treatment of epilepsy.
https://www.scottishmedicines.org.uk/medicines-advice/perampanel-fycompa-abbreviated-smc2172/

venetoclax (Venclyxto®)
Accepted for use in combination with rituximab for the treatment of adult patients with chronic lymphocytic leukaemia (CLL) who have received at least one prior therapy. Progression-free survival was significantly longer in the venetoclax plus rituximab group compared with chemoimmunotherapy in a phase III study of patients with relapsed or refractory CLL.
https://www.scottishmedicines.org.uk/medicines-advice/venetoclax-venclyxto-full-smc2166/

empagliflozin/linagliptin (Glyxambi®)
Accepted for restricted in adults aged 18 years and older with type 2 diabetes mellitus to improve glycaemic control when metformin and/or sulphonylurea (SU), and one of the monocomponents of Glyxambi, do not provide adequate glycaemic control and when the recipient is already being treated with the free combination of empagliflozin and linagliptin.
In patients for whom this combination is appropriate, empagliflozin/linagliptin (Glyxambi®) offers a single tablet at a lower cost per dose compared with the individual components.
https://www.scottishmedicines.org.uk/medicines-advice/empagliflozin-linagliptin-fixed-dose-combination-glyxambi-abbreviatedsubmission-smc123617/

lumacaftor-ivacaftor (Orkambi®)
Not recommended for use for the treatment of cystic fibrosis in patients aged 6 years and older (tablets) and aged 2 to 5 years (granules) who are homozygous for the F508del mutation in the cystic fibrosis transmembrane conductance regulator (CFTR) gene. Compared with placebo, it improved measures of lung function but the submitting company's justification of the treatment's cost in relation to its health benefits was not sufficient and it did not present a sufficiently robust clinical and economic analysis.
https://www.scottishmedicines.org.uk/medicines-advice/lumacaftor-ivacaftor-orkambi-full-smc2182/

darvadstrocel (Alofisel®)
Not recommended for use for the treatment of complex perianal fistulas in adult patients with non-active / mildly active luminal Crohn's disease, when fistulas have shown an inadequate response to at least one conventional or biologic therapy. Although, a study showed the rate of combined remission at week 24 was significantly higher with darvadstrocel than placebo in patients with Crohn's disease and complex perianal fistulas, a robust economic analysis was not provided.
https://www.scottishmedicines.org.uk/medicines-advice/darvadstrocel-alofisel-fullsubmission-smc2115/

encorafenib (Braftovi®)
Not recommended for use In combination with binimetinib for the treatment of adult patients with unresectable or metastatic melanoma with a BRAF V600 mutation.
Progression-free survival was significantly longer in the encorafenib plus binimetinib group compared with BRAF inhibitor monotherapy in a phase III study of patients with unresectable or metastatic BRAF V600 melanoma but a sufficiently robust economic analysis was not provided.
https://www.scottishmedicines.org.uk/medicines-advice/encorafenib-braftovi-full-submission-smc2145/

palbociclib (Ibrance®)
Accepted for use for the treatment of hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative locally advanced or metastatic breast cancer in combination with an aromatase inhibitor or in combination with fulvestrant in women who have received prior endocrine therapy. In pre- or perimenopausal women, the endocrine therapy should be combined with a luteinizing hormone-releasing hormone (LHRH) agonist.
https://www.scottishmedicines.org.uk/medicines-advice/palbociclib-ibrance-full-submission-smc2149/

arsenic trioxide (Trisenox®)
Accepted for use in combination with all-*trans*-retinoic acid (ATRA [tretinoin]) for the induction of remission, and consolidation in adult patients with newly diagnosed, low-to-intermediate risk acute promyelocytic leukaemia (APL) (white blood cell count ≤10 x 10^3/µl), characterised by the presence of the t(15;17) translocation and/or the presence of the Pro Myelocytic Leukaemia/Retinoic-Acid-Receptor-alpha (PML/RAR-alpha) gene.
https://www.scottishmedicines.org.uk/medicines-advice/arsenic-trioxide-trisenox-resubmission-smc2181/

daratumumab (Darzalex®)
Accepted for restricted use in combination with lenalidomide and dexamethasone, or bortezomib and dexamethasone, for the treatment of adult patients with multiple myeloma who have received at least one prior therapy.
https://www.scottishmedicines.org.uk/medicines-advice/daratumumab-darzalex-fullsubmission-smc2180/

Scottish Government

Public Health Scotland: analysis of consultation responses
Analysis of responses received. Public Health Scotland will take over the relevant functions of Health Protection Scotland, Information Services Division and NHS Health Scotland from 1 April 2020.
https://www.gov.scot/publications/public-health-scotland-analysis-responses-public-consultation/

Growing up in Scotland: life at age 12
Initial findings about the lives of 12-year-old children living in Scotland, using data collected from the Growing Up in Scotland study (GUS).
https://www.gov.scot/publications/life-age-12-initial-findings-growing-up-scotland-study/

SIGN

SIGN 158 British guideline on the management of asthma (updated)
The 2019 update includes a complete revision of the section on monitoring asthma including new information on predicting future risk of asthma attacks, and updates to the sections on

pharmacological management of asthma, supported self management, non-pharmacological management of asthma, and management of acute asthma in adults and children. It also includes a new checklist of information for patients and carers.
https://www.sign.ac.uk/sign-158-british-guideline-on-the-management-of-asthma.html

NHS Health Scotland

Minimum Unit Pricing (MUP) for alcohol evaluation: Compliance (licensing) study
The study found that minimum unit pricing was, in the main, well implemented and compliance among licensed premises was high.
http://www.healthscotland.scot/publications/minimum-unit-pricing-evaluation-compliance-study

Summary of highly processed evidence on components of effective weight management interventions for children and young people
Summary of highly processed evidence that reviews the effectiveness of child healthy weight interventions since the publication of NICE guidance in 2013. The findings informed the development of minimum standards for child and young people's weight management services (see below). Drawing firm conclusions on the individual components of effective interventions was difficult due to the heterogeneity of the primary studies included in the reviews. Interventions with more frequent contacts tended to be more efficacious. Providing a practical component appears to be a common factor in effective interventions across all age groups including for parents. Engagement of parents may have a positive impact on weight outcomes, especially for younger children.
http://www.healthscotland.scot/media/2657/summary-of-evidence-for-effective-weight-management-interventions.pdf

Standards for the delivery of tier 2 and tier 3 weight management services in Scotland
See http://www.healthscotland.scot/publications/standards-for-the-delivery-of-tier-2-and-tier-3-weight-management-services-in-scotland

Child poverty: Scale, trends and distribution: Briefing paper
Almost one in four children in Scotland were living in relative poverty in 2017/18. Current levels of child poverty are not inevitable but are likely to increase unless concerted action is taken.
http://www.healthscotland.scot/publications/child-poverty-scale-trends-and-distribution

NICE – Guidelines

Alcohol interventions in secondary and further education NICE guideline [NG135]
Covers interventions in secondary and further education to prevent and reduce alcohol use among children and young people aged 11 up to and including 18. It also covers people aged 11 to 25 with special educational needs or disabilities in full-time education. It will also be relevant to children aged 11 in year 6 of primary school.
https://www.nice.org.uk/guidance/ng135

NICE – Technology Appraisal guidance

Cemiplimab for treating metastatic or locally advanced cutaneous squamous cell carcinoma [TA592]
Cemiplimab is recommended as an option for treating locally advanced or metastatic cutaneous squamous cell carcinoma in adults when curative surgery or curative radiotherapy is not

appropriate. Treatment should be continued until disease progression or for up to 24 months (whichever is sooner).
https://www.nice.org.uk/guidance/ta592

Ribociclib with fulvestrant for treating hormone receptor-positive, HER2-negative, advanced breast cancer [TA593]
Ribociclib with fulvestrant is recommended for use as an option for treating hormone receptor-positive, human epidermal growth factor receptor 2 (HER2)-negative, locally advanced or metastatic breast cancer in people who have had previous endocrine therapy only if exemestane plus everolimus is the most appropriate alternative to a cyclin-dependent kinase 4 and 6 (CDK 4/6) inhibitor.
https://www.nice.org.uk/guidance/ta593

Dacomitinib for untreated EGFR mutation-positive non-small-cell lung cancer [TA595]
Dacomitinib is recommended as an option for untreated locally advanced or metastatic epidermal growth factor receptor (EGFR) mutation-positive non-small-cell lung cancer (NSCLC) in adults.
https://www.nice.org.uk/guidance/ta595

Nusinersen for treating spinal muscular atrophy [TA588]
Nusinersen is recommended as an option for treating 5q spinal muscular atrophy (SMA) only if people have pre-symptomatic SMA, or SMA types 1, 2 or 3.
https://www.nice.org.uk/guidance/ta588

Blinatumomab for treating acute lymphoblastic leukaemia in remission with minimal residual disease activity [TA589]
Blinatumomab is recommended as an option for treating Philadelphia-chromosome-negative CD19 positive B precursor acute lymphoblastic leukaemia in adults with minimal residual disease (MRD) of at least 0.1%, only if the disease is in first complete remission.
https://www.nice.org.uk/guidance/ta589

Fluocinolone acetonide intravitreal implant for treating recurrent non-infectious uveitis [TA590]
Fluocinolone acetonide intravitreal implant is recommended as an option for preventing relapse in recurrent non-infectious uveitis affecting the posterior segment of the eye.
https://www.nice.org.uk/guidance/ta590

Letermovir for preventing cytomegalovirus disease after a stem cell transplant [TA591]
Letermovir is recommended as an option for preventing cytomegalovirus (CMV) reactivation and disease after an allogeneic haematopoietic stem cell transplant (HSCT) in adults who are seropositive for CMV [TA591]
https://www.nice.org.uk/guidance/ta591

NICE – Diagnostics guidance

Therapeutic monitoring of TNF-alpha inhibitors in rheumatoid arthritis [DG36]
Enzyme-linked immunosorbent assay (ELISA) tests for therapeutic monitoring of tumour necrosis factor (TNF)-alpha inhibitors (drug serum levels and antidrug antibodies) show promise but there is currently insufficient evidence to recommend their routine adoption in rheumatoid arthritis. The ELISA tests covered by this guidance are Promonitor, IDKmonitor, LISA-TRACKER, RIDASCREEN, MabTrack, and tests used by Sanquin Diagnostic Services. Laboratories currently using ELISA tests for therapeutic monitoring of TNF-alpha inhibitors in rheumatoid arthritis should do so as part of

research and further data collection. Further research is recommended on the clinical effectiveness of using ELISA tests for therapeutic monitoring of TNF-alpha inhibitors in rheumatoid arthritis.
https://www.nice.org.uk/guidance/dg36

EPPI Centre

Public health service provision by community pharmacies: a systematic map of evidence
The research literature on public health interventions provided by community pharmacies is expanding and diverse. A broad range of community pharmacy public health interventions was evaluated. The UK and USA are the predominant sources of research evidence. Community pharmacy would benefit from a greater number of RCTs. Key evidence gaps exist around: antimicrobial resistance; particular hard to reach populations; UK studies on HIV testing; studies that focus on dementia risk and identification in the elderly; cancer risk and identification studies; and public health service provision for children.
https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3753

AHRQ (Agency for Healthcare Research and Quality – USA)
Nil

Health Foundation

Building healthier communities: the role of the NHS as an anchor institution
The size and reach of the NHS means it influences the health and wellbeing of communities simply by being there. The conclusions sets out actions and opportunities for the NHS to harness its considerable influence to have an even greater positive impact on communities.
https://www.health.org.uk/publications/reports/building-healthier-communities-role-of-nhs-as-anchor-institution

Canadian Agency for drugs and Technologies in Health (CADTH)

Lyophilized versus Frozen Fecal Microbiota Transplant for Recurrent Clostridium Difficile Infection, Inflammatory Bowel Disease, and Irritable Bowel Syndrome: A Review of Clinical Effectiveness, Cost-Effectiveness, and Guidelines
Evidence of limited quality identified no statistically significant difference in cure rates for CDI between lyophilized and frozen fecal microbiota transplant via colonoscopy, and no difference in adverse events between oral lyophilized fecal microbiota transplant and frozen fecal microbiota transplant enema. No relevant literature was found regarding clinical effectiveness of lyophilized versus frozen FMT for the IBD and IBS indications, or the cost-effectiveness of lyophilized versus frozen FMT for CDI, IBD and IBS. No relevant evidence-based guidelines were identified.
https://www.cadth.ca/lyophilized-versus-frozen-fecal-microbiota-transplant-recurrent-clostridium-difficile-infection

Portable Stroke Detection Devices for Patients with Stroke Symptoms: A Review of Diagnostic Accuracy and Cost-Effectiveness
No relevant literature was identified regarding the diagnostic accuracy of portable stroke detection devices for patients with stroke symptoms. Additionally, no evidence regarding the cost-effectiveness of the portable stroke detection devices of interest was identified.
https://www.cadth.ca/portable-stroke-detection-devices-patients-stroke-symptoms-review-diagnostic-accuracy-and-cost

Sugammadex for the Reversal of Neuromuscular Blockade in Surgical Patients: A Review of Clinical Effectiveness and Cost-Effectiveness
The small quantity of heterogenous evidence suggests that the clinical effectiveness of rocuronium with sugammadex in patients requiring rapid sequence induction was better or no different compared with succinylcholine. However, there were three outcomes that favoured low-dose succinylcholine compared to low-dose rocuronium and sugammadex. Sugammadex may lead to economic savings in the hospital setting, however, the certainty of the findings is unclear.
https://cadth.ca/sugammadex-reversal-neuromuscular-blockade-surgical-patients-review-clinical-effectiveness-and-cost

N-Acetylcysteine Instillation During Bronchoscopy for Patients Requiring Non-Cystic Fibrosis-Related Mucus Secretion Clearance: A Review of Clinical Effectiveness and Guidelines
No relevant literature was identified regarding the comparative clinical effectiveness of N-acetylcysteine instillation versus saline (normal or hypertonic) during bronchoscopy for non-cystic fibrosis patients requiring mucus secretion clearance. Additionally, no relevant evidence-based guidelines were identified.
https://www.cadth.ca/n-acetylcysteine-instillation-during-bronchoscopy-patients-requiring-non-cystic-fibrosis-related

Lipid Formulations for Patients Requiring Parenteral Nutrition: A Review of Clinical Effectiveness, Cost-Effectiveness, and Guidelines – An Update
Evidence of low to very low quality was insufficient to determine the comparative clinical effectiveness of different types of lipid formulations for parenteral nutrition in preterm, term, or late preterm infants (with or without surgical conditions or parenteral nutrition-associated liver disease/cholestasis). In hospitalized adult patients, patients with fish oil enriched parenteral nutrition had significantly reduced infection rate and length of hospital stay, and improved liver function and inflammatory status in comparison to patients with non-fish oil enriched parenteral nutrition, despite no difference in mortality. In adult patients requiring long-term parenteral nutrition, there were no significant differences between different lipid emulsions including those containing fish oil with respect to liver function, inflammatory status and other biochemical outcomes.
https://www.cadth.ca/lipid-formulations-patients-requiring-parenteral-nutrition-review-clinical-effectiveness-cost

Buprenorphine-Naloxone Sublingual Film Versus Methadone for the Treatment of Patients with Opioid Use Disorder: A Review of Clinical Effectiveness, Cost-Effectiveness, and Guidelines
No clear patterns emerged regarding the comparative effectiveness of BUP-NAL and methadone. Two evidence-based guidelines were identified regarding the use of BUP-NAL or methadone for the treatment of OUD. One guideline indicates that BUP-NAL may be preferred since it is easier to implement, while methadone may be preferred due to a possible higher retention rate (both strong recommendations, based on moderate quality evidence). The second guideline recommends BUP-NAL as a first line therapy for individuals who require opioid agonist treatment (strong recommendation based on high quality evidence). The limitations of the included studies, such as several with lack of blinding to treatment, should be considered when interpreting the results.
https://www.cadth.ca/buprenorphine-naloxone-sublingual-film-versus-methadone-treatment-patients-opioid-use-disorder

Post-operative Procedures for Caesarean Sections: A Review of Clinical Effectiveness and Guidelines
No relevant evidence regarding the timing of removal or replacement of surgical dressings after caesarean section, or the use of different types of surgical dressings after caesarean section, was

identified. One rigorously-developed guideline indicated that no recommendation could be made for or against the routine use of negative pressure dressing therapy, barrier retractors, and subcutaneous trains, for the reduction of wound infection in mothers with a body mass index of 30 kg/m2 (based on low- to moderate-quality evidence). No guidelines on the use of other types of surgical dressings were identified.
https://www.cadth.ca/post-operative-procedures-caesarean-sections-review-clinical-effectiveness-and-guidelines

Carbetocin for the Prevention of Post-Partum Hemorrhage: A Review of Clinical Effectiveness, Cost-Effectiveness, and Guidelines
There is evidence to support the use of carbetocin for the prevention of post-partum hemorrhage (PPH) of 500 mL or greater, or 1,000 mL or greater based on a network meta-analysis. In a subgroup analysis, and a smaller systematic review, carbetocin was more effective than oxytocin for PPH prevention for cesarean delivery, and not vaginal delivery. In the primary studies, carbetocin was associated with similar or more effectiveness regarding the prevention of PPH, reducing additional uterotonic use, or hemoglobin drops. In the systematic review of economic evaluations, carbetocin was more cost-effective than oxytocin for the prevention of PPH. From a UK perspective, carbetocin, oxytocin and another uterotonic agent were considered the most cost-effective strategies for preventing PPH.
https://www.cadth.ca/carbetocin-prevention-post-partum-hemorrhage-review-clinical-effectiveness-cost-effectiveness-and-0

Standardized Hospital Order Sets in Acute Care: A Review of Clinical Evidence, Cost-Effectiveness, and Guidelines
Evidence from fourteen non-randomized studies suggests that standardized order sets implemented in the acute setting reduced hospital length of stay, reduced mortality, and reduced medication errors. The studies focused on patients with respiratory conditions, diabetic conditions, laryngectomies, EOL care, ischemic stroke, coronary heart failure, or who received vancomycin. No evidence regarding cost-effectiveness and no evidence-based guidelines were identified.
https://www.cadth.ca/standardized-hospital-order-sets-acute-care-review-clinical-evidence-cost-effectiveness-and

Intra-Articular Hyaluronic Acid for Viscosupplementation in Osteoarthritis of the Hand, Shoulder, and Temporomandibular Joint: A Review of Clinical Effectiveness and Safety
For shoulder osteoarthritis, there were no significant differences between intra-articular hyaluronic acid and placebo or between intra-articular hyaluronic acid and intra-articular corticosteroid with respect to pain reduction and functional outcomes. Adverse events were considered unrelated to the study products.
For temporomandibular joint osteoarthritis, there were no significant differences between intra-articular hyaluronic acid and intra-articular corticosteroid, or between intra-articular hyaluronic acid and no injection during arthrocentesis with respect to pain reduction and functional outcomes. There was no significant difference in adverse events between intra-articular hyaluronic acid and intra-articular corticosteroid.
For hand osteoarthritis, evidence was mixed for the comparison between intra-articular hyaluronic acid and intra-articular corticosteroid with respect to pain reduction and functional outcomes. There was no significant difference in pain reduction or functional outcomes between intra-articular hyaluronic acid and placebo. Adverse events were local and considered unrelated to study products.
https://www.cadth.ca/intra-articular-hyaluronic-acid-viscosupplementation-osteoarthritis-hand-shoulder-and

Medical Cannabis for the Treatment of Chronic Pain: A Review of Clinical Effectiveness and Guidelines

There is some suggestion of benefit with cannabis-based medicines for neuropathic pain. However, benefits need to be weighed against harms. Findings are inconsistent for effect of cannabis-based medicines in patients with fibromyalgia, musculoskeletal pain, Crohn's disease, and multiple sclerosis. Six evidence-based guidelines were identified. The majority of the guidelines present recommendations for chronic neuropathic pain. The guidelines report that cannabis-based medicines may be considered as a treatment option for patients with neuropathic pain, with chronic non-cancer pain, and with chronic non-cancer, non-neuropathic pain, but with some caveats. Recommendations are against the use of cannabis-based medicines for pain associated with fibromyalgia and back pain in two guidelines and for pain associated with headache, rheumatoid arthritis and osteoarthritis in one guideline. For pain management in multiple sclerosis patients, one guideline mentions that cannabis-based medicines may or may not be offered, depending on the type cannabis-based medicine and patient condition. Findings need to be interpreted considering the limitations (variable quality, studies of short duration).
https://www.cadth.ca/medical-cannabis-treatment-chronic-pain-review-clinical-effectiveness-and-guidelines-0

Walkers with Wheels Versus Walkers Without Wheels for Fall Prevention in Older Adults: A Review of the Comparative Clinical Effectiveness

One systematic review was identified regarding the comparative effectiveness of walkers with wheels versus walkers without wheels for fall prevention in older adults. Evidence of limited quality from the systematic review suggested that older patients walking with a non-wheeled frame would cover shorter distances and use more energy than those walking with wheeled frames. The evidence should be interpreted with caution based on the limitations and lack of comparative data.
https://www.cadth.ca/walkers-wheels-versus-walkers-without-wheels-fall-prevention-older-adults-review-comparative

Fall Prevention Guidelines for Patients in Wheelchairs or Patients with Delirium: A Review of Evidence-Based Guidelines

One evidence-based guideline was included in this review. For patients in wheelchairs, multifactorial fall prevention interventions that include individualized gait, balance and functional coordination exercises are recommended (level II evidence). In addition, it is recommended that fall prevention for patients in wheelchairs include: supervised exercise; assessment of a patient's ability to use their wheelchair (including transfers) and whether this mobility aid is appropriate for the patient; and ensuring the wheelchair is in good condition (clinical experience and expert consensus). For patients with delirium, it is recommended that multifactorial fall prevention interventions address individual fall risk factors for patients in long-term care facilities (level I evidence) and in acute care facilities (level II evidence). Based on clinical experience and expert consensus, the guideline also recommends: treating delirium as well as the reversible causes of delirium, assessing the presence of delirium in older adults after a fall, modifying regular fall prevention interventions to suit the individual patient's situation, and avoiding the use of restraints unless all other options have been exhausted. Lastly, it is recommended that older adults with cognitive impairments be assessed for fall risk (expert opinion).
https://www.cadth.ca/fall-prevention-guidelines-patients-wheelchairs-or-patients-delirium-review-evidence-based

Medical Cannabis for the Treatment of Dementia: A Review of Clinical Effectiveness and Guidelines

Limited evidence from one systematic review and one uncontrolled before-and-after study suggested that medical cannabis may be effective for treating agitation, disinhibition, irritability,

aberrant motor behaviour, and nocturnal behaviour disorders as well as aberrant vocalization and resting care, which are neuropsychiatric symptoms associated with dementia. There was also limited evidence of improvement in rigidity and cognitive scores as assessed by Mini-Mental State Examination. The evidence from the systematic review came from four of its primary studies, whereas its remaining eight included studies did not find favourable or unfavourable evidence regarding the effectiveness of cannabinoids in the treatment of dementia. Sources of uncertainty included the low quality of evidence in the primary studies of the systematic review and the fact that the uncontrolled before-and-after study was a nonrandomized pilot study in 10 dementia patients that reported descriptive outcomes without statistical analysis. No relevant evidence-based clinical guidelines were identified.
https://www.cadth.ca/medical-cannabis-treatment-dementia-review-clinical-effectiveness-and-guidelines-0

Vibrating Mesh Nebulizers for Patients with Respiratory Conditions: Clinical Effectiveness, Cost-Effectiveness, and Guidelines
Limited research is currently available. Future high-quality studies are required to make conclusions on comparative clinical effectiveness and safety. No cost-effectiveness evidence or relevant evidence-based guidelines were identified.
https://www.cadth.ca/vibrating-mesh-nebulizers-patients-respiratory-conditions-clinical-effectiveness-cost-effectiveness

Intra-Articular Hyaluronic Acid for Osteoarthritis of the Hip or Ankle: A Review of Clinical Effectiveness
With respect to osteoarthritis in the hip, no significant differences in pain or adverse events were found when compared with placebo or with methylprednisolone and no differences in function or patients' global assessment were found when compared with methylprednisolone. For osteoarthritis of the ankle, the injection of hyaluronic acid was significantly associated with an improvement in measures of pain and disability scores when compared with saline. The results of this review should be interpreted with consideration of its limitations - the dosages of hyaluronic acid were not described in detail and many of the studies included in the SRs were case series.
https://www.cadth.ca/intra-articular-hyaluronic-acid-osteoarthritis-hip-or-ankle-review-clinical-effectiveness

Triclosan in Single Use Medical Devices for Preventing Infections: A Review of Clinical Effectiveness, Safety and Guidelines
Overall, patients treated with triclosan-coated sutures had outcomes that were better or not different than patients treated with uncoated sutures.
https://www.cadth.ca/triclosan-single-use-medical-devices-preventing-infections-review-clinical-effectiveness-safety-and

Vital Pulp Therapy for Endodontic Treatment of Mature Teeth: A Review of Clinical Effectiveness, Cost-Effectiveness, and Guidelines
Evidence from one very low-quality systematic review, and four very low to moderate-quality primary studies suggests that clinical success rates for teeth treated with vital pulp therapy or pulpotomy may not significantly differ from teeth treated with root canal therapy or pulpectomy. Findings were comparable between vital pulp therapy and root canal or in favour of vital pulp therapy for short-term (one week) post-operative pain reduction. One economic evaluation from Germany found that direct pulp capping was cost-effective when compared with root canal in most cases, including when the willingness-to-pay ceiling value was adjusted (from 0 to 250 euro).

Sensitivity analyses found direct pulp capping was not cost-effective in patients aged over 40 or with teeth with a proximal pulp exposure. No relevant guidelines were identified.
https://www.cadth.ca/vital-pulp-therapy-endodontic-treatment-mature-teeth-review-clinical-effectiveness-cost

Thrombolytics for Acute Myocardial Infarction in a Prehospital Setting: A Review of Comparative Safety, and Guidelines
One relevant systematic review was identified regarding the safety of thrombolytic administration performed in a prehospital setting versus hospital setting for the treatment acute myocardial infarction. The systematic review included one relevant primary study, which revealed uncertainty in the safety findings between prehospital and hospital administration of thrombolytics. No evidence was found regarding the comparative safety of thrombolytic administration performed in a prehospital setting compared with no or significantly delayed thrombolytic administration for the treatment of acute myocardial infarction. Five relevant evidence-based guidelines were identified. Three guidelines provided optimal timing recommendations for the administration of thrombolytics. Two other guidelines recommended prehospital administration of thrombolytics, under specific protocols and dependent on expected transportation time. One guideline did not recommend the use of thrombolytics in patients with non-ST-elevation acute coronary syndrome. The limitations of the included study and guidelines, such as gender equity in the applicability of the evidence and incomplete outcome reporting, should be considered when interpreting the results.
https://www.cadth.ca/thrombolytics-acute-myocardial-infarction-prehospital-setting-review-comparative-safety-and

Yoga for Chronic Non-Malignant Pain Management: A Review of Clinical Effectiveness, Cost-Effectiveness and Guidelines
Evidence of limited quality from one randomized study suggested that yoga plus conventional treatment with analgesics was effective for reducing chronic pelvic pain, while conventional treatment with analgesics alone was not. One high-quality systematic review did not identify any studies of relevance to this report. No evidence regarding the cost-effectiveness of yoga compared with pharmacological treatments was identified. Seven guidelines of moderate- to-high methodological quality included recommendations in favour of yoga for the treatment of non-malignant chronic pain.
https://www.cadth.ca/yoga-chronic-non-malignant-pain-management-review-clinical-effectiveness-cost-effectiveness-and

Acetylcysteine for Patients Requiring Secretion Clearance: A Review of Guidelines
Six relevant guidelines were identified. Three guidelines suggest the use of oral acetylcysteine (NAC) for patients with chronic obstructive pulmonary disease (weak or conditional recommendations based on low- or moderate-quality evidence). The remaining three guidelines did not indicate the strength of the recommendations. Of these, one guideline does not recommend for or against the use of NAC preparations, because of insufficient evidence; one guideline recommends against the use of NAC for acute cough; and one guideline does not recommend the use of aerosolized NAC for hospitalized patients, and patients with neuromuscular disease, respiratory muscle weakness or impaired cough.
https://www.cadth.ca/acetylcysteine-patients-requiring-secretion-clearance-review-guidelines

Portable Stroke Diagnosis Devices for Adults with Stroke Symptoms: A Review of Diagnostic Accuracy and Cost-Effectiveness
One relevant non-randomized study was identified regarding diagnostic accuracy of bioimpedance spectroscopy visors for adults with stroke symptoms. This evidence of limited quality suggested that

the device accurately differentiated patients requiring severe stroke triage from those who were healthy or who experienced a minor stroke, with a sensitivity of 93% and specificity of 87%.No evidence regarding the diagnostic accuracy of the combination device (i.e., combination of transcranial Doppler ultrasound, robotic headset blood flow monitor, and machine learning) or of the microwave tomography system for adults with stroke symptoms was identified. Additionally, no evidence regarding the cost-effectiveness of the portable stroke diagnostic devices of interest was identified. The limitations of the included study (e.g., its open-label nature, unclear recruitment methods, industry-funded status, and potentially limited generalizability) and of this report should be considered when interpreting the results. Further research could reduce uncertainty.
https://www.cadth.ca/portable-stroke-diagnosis-devices-adults-stroke-symptoms-review-diagnostic-accuracy-and-cost-0

Treatment for Methamphetamine Addiction: A Review of Guidelines
One evidence based guideline made a variety of recommendations regarding treatment immediately after acute detoxification and post-treatment care for patients with methamphetamine addiction. Needs-centred or motivation-centred psychotherapeutic counselling, sports therapy such as exercise therapy and physical conditioning were recommended. Sertraline, combined intravenous pharmacotherapy with flumazenil, gabapentin and hydroxyzine should not be given to patients with methamphetamine-related disorder. The guideline also recommended that needs-specific self-help groups and family support should be an integral part of all services offered.
https://cadth.ca/treatment-methamphetamine-addiction-review-guidelines-0

Repetitive Transcranial Magnetic Stimulation for Patients with Depression: A Review of Clinical Effectiveness, Cost-Effectiveness and Guidelines – An Update
Three systematic reviews and five RCTs assessed the clinical effectiveness of repetitive transcranial magnetic stimulation for the management of treatment-resistant major depression. The rates of response to treatment and remission of symptoms were significantly greater with repetitive transcranial magnetic stimulation than sham treatment in all three systematic reviews, but significantly lower than with electroconvulsive therapy in the systematic review that included this comparator. One systematic review reported that repetitive transcranial magnetic stimulation was associated with a higher odds ratio for response than aripiprazole. The clinical relevance of the magnitude of the change in depressive symptoms in all studies was unclear. The cost-effectiveness evidence of repetitive transcranial magnetic stimulation was conflicting. In contrast, electroconvulsive therapy was found to be cost-effective relative to repetitive transcranial magnetic stimulation. One guideline provided a weak recommendation for repetitive transcranial magnetic stimulation for the management of treatment resistant major depressive disorder, but the level of evidence on which the recommendation was based was not reported. Another guideline, based on high quality evidence, recommended high-frequency repetitive transcranial magnetic stimulation to the left dorsolateral prefrontal cortex and low-frequency repetitive transcranial magnetic stimulation to the right dorsolateral prefrontal cortex as first-line options for individuals who failed to response to one antidepressant.
https://www.cadth.ca/repetitive-transcranial-magnetic-stimulation-patients-depression-review-clinical-effectiveness-cost

McGill University Health Centre (Canada)
Nil

Health Information & Quality Authority (Ireland)
Nil

Campbell Collaboration
Nil

Glasgow Centre for Population Health
Nil

NICE FORWARD PLANNING – Publications due September 2019

Twin and triplet pregnancy (update)
Clinical Guideline
Termination of pregnancy
Clinical Guideline

Suicide prevention
Quality Standard

Sodium zirconium cyclosilicate for treating hyperkalaemia
Single Technology Appraisal

Idelalisib for treating follicular lymphoma refractory to 2 treatments
Single Technology Appraisal

Pneumonia (community-acquired): antimicrobial prescribing
Antimicrobial prescribing guideline

Pneumonia (hospital-acquired): antimicrobial prescribing
Antimicrobial prescribing guideline

Cellulitis and erysipelas: antimicrobial prescribing
Antimicrobial prescribing guideline