This month in Eyes on Evidence

**Prognosis of common mental health disorders in young people**
A prospective, longitudinal cohort study in Australia suggests that depression and anxiety in young adults frequently begin in adolescence. Mental health disorders in adolescents may persist into young adulthood, although a proportion of cases (especially those of brief duration) can be limited to teenage years.

**Inhaled therapies for chronic obstructive pulmonary disease and hospital admissions**
An English retrospective cohort study suggests that increases in prescribing rates of inhaled long-acting muscarinic antagonists and combined inhaled long-acting beta-2 agonist and corticosteroid medicines are associated with an increase in hospital admission rates in people with chronic obstructive pulmonary disease.

**Telehealth for health and social care**
A randomised controlled trial in Scotland finds that telehealth has no effect on hospital admissions in patients with chronic obstructive pulmonary disease and is associated with a high number of contacts with healthcare teams.

**Bracing for adolescent idiopathic scoliosis**
A multicentre cohort study in people with adolescent idiopathic scoliosis reports that using a brace is better than observation at preventing curve progression to the point of needing corrective surgery.

**Physical activity in older people and healthy ageing**
A cohort study of English people in their 60s reports that being physically active or taking up physical activity is associated with remaining healthy over the next 8 years.

**Evidence Updates**
NICE has recently published an Evidence Update on:

- Acute upper gastrointestinal bleeding

**Eyes on Evidence survey**
Help to shape the Eyes on Evidence publication by participating in a short online survey on your use and views of the bulletin.
Overview: Common mental health disorders – such as depression, generalised anxiety disorder, panic disorder and social anxiety disorder – may affect up to 15% of the population at any one time. Depression and anxiety disorders can be lifelong conditions of relapse and remission. The severity of common mental health disorders can vary considerably, but all can be associated with significant long-term disability.

Studies in adults indicate that most mental health disorders begin before the age of 25 years – often between 11 and 18 years (Kessler et al. 2005). Adolescence may therefore be seen as a time of vulnerability when much of the disease burden from mental health disorders emerges (Gore et al. 2011). But despite the frequency of anxiety and depression in young people, it is not clear the proportion of young people in whom syndromes persist into adulthood.

Current advice: NICE guidance on depression in children and young people (currently being updated) recommends that healthcare professionals in primary care, schools and other relevant community settings should be trained to detect symptoms of depression, and to assess children and young people who may be at risk of depression.

A stepped-care model should be used for treatment of depression in children and young people aged between 5 years and 18 years. Children and young people with mild depression (including dysthymia) should be treated with watchful waiting and non-directive supportive therapy, group cognitive behavioural therapy or guided self-help. Children and young people with moderate to severe depression, including those with signs of a recurrence of depression, should be referred to Child and Adolescent Mental Health Services (CAMHS) for treatment with brief psychological therapy and fluoxetine if depression is unresponsive to psychological therapy after 4–6 sessions.

After full remission, children and young people who have been depressed should be followed up for a year. Those at high risk of relapse, including those with recurrent depression, may benefit from an extended period of psychological therapy and practical help to self-monitor symptoms of relapse. They should be followed up for at least 2 years after remission, and should be seen urgently if they are re-referred to CAMHS.

The NICE Pathway on depression brings together all related NICE guidance and associated products on the condition in a set of interactive topic-based diagrams.

New evidence: A prospective, longitudinal cohort study by Patton et al. (2014) examined the persistence of common mental health disorders among young people aged between 1992 and 2008; depression and anxiety were assessed in a stratified random sample of 1943 students (mean age=15.5 years at study start, 29.1 years at study end) recruited from 44 secondary schools in Australia. Assessments were made using the Revised Clinical Interview Schedule (CIS-R) at 5 time points in adolescence and 3 in adulthood. A score of 12 or higher represented a level of mental disorder at which intervention by a family doctor would be expected.

A total of 734 participants had a common mental health disorder at least once during adolescence: 236 of 821 men (29%) and 498 of 929 women (54%). A total of 109 (47%) of these men and 323 (65%) of these women had at least one further episode as an adult. Among young people who had only 1 adolescent episode lasting less than 6 months, 39% of men and 54% of women had at least one further episode as an adult.

Factors among young people with mental health disorders that predicted the persistence of these disorders into adulthood were:

- longer duration of mental health disorders as a young person (odds ratio [OR] versus those without the factor=3.16, 95% confidence interval [CI] 1.86 to 5.37)
- being female (OR=2.12, 95% CI 1.29 to 3.48)
- background of parental separation or divorce (OR=1.62, 95% CI 1.03 to 2.53).
The rates of adolescent-onset mental health disorders fell to almost half in people in their late twenties (mean age=29.1 years) compared with those in their early twenties (mean age=20.7 years; OR=0.57, 95% CI 0.45 to 0.73).

The authors concluded that common mental health disorders in young adults frequently begin when they are young people. Mental health disorders in adolescents may persist into young adulthood, although a proportion of cases (especially those of brief duration) can be limited to teenage years.

**Commentary:** "Adolescent-limited anxiety or depression has been controversial since Stanley Hall’s legendary ‘highlighting’ of adolescent turmoil. This study by Patton et al. (2014) is important because careful attention was paid to identifying relatively minor common mental disorders to assess their significance for the future unfolding of psychopathology. The findings confirm that adolescent psychopathology foreshadows young adult psychopathology but far less so psychopathology in later adulthood.

"Epidemiology seems to confirm a special quality of the adolescent and young adult period. This links to an intensification of emotional experience that increases the risk for common mental disorders. These disorders, if they do not resolve quickly or if they recur, in turn substantially increase the risk of adult and perhaps lifelong disorders.

"Early intervention could potentially reduce the duration of adolescent mental disorder, which in turn might decrease the chance of recurrence and persistence in adulthood. This study adds further evidence to assist in the identification of young people who may be at risk of mental health disorders persisting into young adulthood. Current services are often organised around the optimistic assumption of spontaneous resolution. In addition, interventions are often delayed until risk and severity increase to a point where the long-term outcomes of adolescent disorder may be substantially less favourable. An ‘invest to save’ argument would strongly favour a rapid response to common adolescent mental health problems, particularly improving access to evidence-based psychological therapies.” – **Professor Peter Fonagy, Head, Research Department of Clinical, Educational and Health Psychology, University College London (UCL); Director, Integrated Mental Health Programme, UCL Partners Academic Health Science Partnership; and Chief Executive, The Anna Freud Centre, London**

**Study sponsorship:** National Health and Medical Research Council of Australia.

Inhaled therapies for chronic obstructive pulmonary disease and hospital admissions

**Overview:** Chronic obstructive pulmonary disease (COPD) is characterised by airflow obstruction, which is usually progressive and not fully reversible (NICE 2010). It is predominantly caused by smoking. About 900,000 people in the UK have diagnosed COPD and an estimated 2 million people have COPD that remains undiagnosed. COPD produces symptoms, disability and impaired quality of life, which may respond to pharmacological and other therapies that have limited or no impact on their airflow obstruction. Exacerbations often occur, during which there is a rapid and sustained worsening of symptoms beyond normal day-to-day variations.

A meta-analysis by Van den Bruel at al. (2010) found that inhaled long-acting muscarinic antagonists (LAMAs) reduce COPD exacerbations, but it is less clear whether they reduce exacerbation-related hospital admissions. Similarly, a Cochrane review (Nannini et al. 2012) compared the combination of long-acting beta-2 agonist (LABA) and an inhaled corticosteroid (ICS) with a LABA alone and found that the combination reduces COPD exacerbations but not admissions. However, few studies have looked at how these findings translate patients found in everyday practice who are not selected for trials.
Current advice: The NICE guideline on COPD advises that all people who are still smoking should be encouraged to stop, and offered help to do so, at every opportunity. Recommendations on inhaled treatments are summarised in the NICE Pathway on COPD. The key points are:

- Short-acting bronchodilators, as necessary, should be the initial empirical treatment for the relief of breathlessness and exercise limitation.
- A LAMA is an option for people with stable COPD who remain breathless or have exacerbations despite using short-acting bronchodilators as needed and in whom a decision has been made to commence regular maintenance bronchodilator therapy with a muscarinic antagonist.
- Either a LAMA or a combination inhaler containing a LABA+ICS should be offered if the person’s forced expired volume in 1 second (FEV₁) is less than 50% predicted.
- A LABA+ICS may also be considered in people with stable COPD and an FEV₁ of 50% predicted or more who remain breathless or have exacerbations despite maintenance therapy with a LABA.
- A LAMA may be used with a LABA if an ICS (plus LABA) is declined or not tolerated.

New evidence: A retrospective cohort study by Harries et al. (2014) aimed to determine whether increasing rates of use of LAMA and LABA+ICS inhaled therapies in general practice in England were reflected in reduced rates of admissions for COPD.

Prescribing data were obtained from the NHS Business Services Authority (NHS BSA) to determine costs of dispensed prescriptions for LAMA and LABA+ICS inhaled therapies. The study investigators considered prescribing costs to be the best available estimate of prescribing volume. For LABA+ICS, prescribing volume would be affected by the actual item prescribed because costs of individual products vary. Information on hospital admissions for COPD was obtained from the NHS Information Centre Hospital Episodes Statistics database. The relationship between LAMA and LABA+ICS prescription costs per practice patient and the rate of people with COPD admitted per 10,000 practice patients was examined for the years 2007 to 2010.

Data were included from 806 practices (5.26 million patients) in 15 primary care trusts. The annual prescribing cost per practice patient for LAMAs increased by 60% from a mean of £1.81 in 2007 to £2.90 in 2010, while for LABA+ICSs costs increased by 26% from a mean of £7.87 in 2007 to £9.89 in 2010. The annual rate of people with COPD admitted to hospital increased by 17% from a mean of 15.7 per 10,000 practice patients in 2001 to 18.3 per 10,000 practice patients in 2010.

After adjusting for potential confounders including COPD prevalence, deprivation, Quality and Outcomes Framework (QOF) points and practice size, higher practice prescribing volumes of LAMAs and LABA+ICSs were found to be associated with higher practice admission rates for COPD.

Limitations to the study include analysis of data at practice rather than patient level, which meant individual patient factors such as disease severity could not be accounted for. In addition, data relate to prescriptions dispensed, and it is not known whether patients actually used their medicines. NHS BSA prescribing data cannot provide information on the indication for which inhaled therapies are being prescribed; therefore it is possible in some practices that the increasing rate of prescribing of LABA+ICSs could have been attributable to patients with asthma, not COPD.

Commentary: "This is a useful 'real world' study that attempts to examine what happens in real life patients rather than idealised study patients, who are carefully selected. The overall message is that despite increased prescribing of LAMAs and LABA+ICS combinations in primary care, the rate of COPD hospitalisations of patients from practices that are high prescribers of these medications has not reduced. The study was not designed to look at other potential beneficial outcomes such as quality of life or exacerbations that did not result in hospital admissions.

"LAMAs and LABA+ICS combinations are expensive medications, and currently a LABA+ICS combination and a LAMA are included in the top 5 most costly medications to the NHS (NHS BSA: personal communication 2014). In COPD, these medications have been shown to reduce exacerbations but not necessarily hospitalisations."
"The study is confounded by the fact that LABA+ICS combinations are also widely used in asthma. It is also possible that the high COPD admission rate seen in practices in the study that were high volume prescribers of LAMAs and LABA+ICSs was because these practices had a higher prevalence of people with more severe COPD who might be expected to experience more exacerbations.

"Until there is more evidence of real world efficacy, prescribers should continue to follow NICE guidance but individualise treatment according to the needs of the patient, with regular review of response to treatments." – Dr Vincent Mak, Consultant Physician in Respiratory Integrated Care, Imperial College Healthcare and Central London Community Healthcare NHS Trusts; Clinical Director, Outer North West London Integrated Care Programme; and Member of NHS England (London Region) Respiratory Clinical Leadership Group – Lead in Medicines Management. Dr Mak has received honoraria for lecturing fees from AstraZeneca, GSK, Novartis and Almiral, and help with travel, accommodation, food and conference fees for international conferences from AstraZeneca, Boehringer Ingelheim and Almiral.

Study sponsorship: No study funding declared.

Telehealth for health and social care

Overview: The term 'telecare' covers a range of devices that allow 24-hour monitoring of people with health or social care needs. The devices monitor for changes in the person or their environment, and warn the person or a central control centre of any unusual changes. Examples of telicare devices include personal alarms, fall detectors and temperature extremes sensors. Telehealth devices remotely monitor people's vital signs – such as blood pressure or blood glucose – and report the data to a healthcare professional.

In 2006 the Department of Health set up the Whole System Demonstrator programme to test the clinical effectiveness and cost-effectiveness of telecare and telehealth. The programme is studying 6191 patients with chronic obstructive pulmonary disease (COPD), diabetes or heart failure in general practices in 3 regions of England: Cornwall, Kent and Newham (London). Findings to date indicate that telehealth is associated with lower mortality and emergency admission rates than usual care (March 2013 issue of Eyes on Evidence), but may not be cost effective (Henderson et al. 2013).

The Department of Health recently launched the '3millionlives' campaign to work with industry, the NHS, social care and professional partners to promote widespread adoption of telehealth and telicare. It is estimated that at least 3 million people with long-term conditions, social care needs or both could benefit from using telehealth and telicare.

New evidence: In their randomised controlled trial in Scotland, Pinnock et al. (2013) assigned patients with COPD to telehealth (n=128) or self-monitoring (n=128). People in the telehealth group were provided with a touch screen to record daily symptoms and treatment use, and their oxygen saturation was monitored using linked instruments. Both groups received similar care from existing clinical services.

During 1 year of follow-up, the likelihood of hospital admission for COPD exacerbation was similar in the telehealth group and in the self-monitoring group (adjusted hazard ratio=0.98, 95% confidence interval 0.66 to 1.44). In addition, telehealth patients had a similar number of hospital admissions as self-monitoring patients (1.2 admissions per person, standard deviation [SD] 1.9, versus 1.1 admissions per person, SD 1.6, p=0.59). The intervention made no significant difference to health-related quality of life in the telehealth group, but was associated with a high number of contacts with the healthcare teams (both in response to alerts from telehealth monitoring and in contacts not related to alerts).

The authors concluded that telehealth was not effective in reducing admissions among people with COPD, and suggested that the beneficial effect of telehealth reported in previous trials could be due to
enhancement of the underpinning clinical service rather than the telehealth programme itself. However, they cautioned that the confidence interval for hospital admission in their study was wide. As such, they could not rule out the possibility of a clinically meaningful effect of telehealth that was smaller than their study was powered to detect.

Commentary: "If you had asked GPs twenty years ago whether they would consider telephone triage of their patients, they would invariably have said no. Yet today this is regular practice in most GP surgeries. With the rise in the number of people with 1 or more chronic conditions, telehealth may one day become accepted practice in primary care. The only questions are when, how and with what level of clinical trial evidence to support its introduction.

"The trial of telemonitoring for managing people with COPD carried out by Pinnock et al. (2013) adds to the evidence that first-generation telehealth technology grafted onto existing clinical services has no positive effect on patient outcomes. This is not entirely surprising: first-generation telehealth systems such as the one used in this Scottish trial rely on dedicated equipment. These devices require patients to make measurements using technology normally used in the hospital or the GP surgery, without any help or support to record accurate readings or interpret the data. Next-generation telehealth, if it is to be fully integrated into people's lives and allow them to maintain health and wellbeing, will require modern digital platforms with easy-to-use software, including support for self-management." – Professor Lionel Tarassenko, Chair of Electrical Engineering, Institute of Biomedical Engineering, University of Oxford

Study sponsorship: Chief Scientist Office of the Scottish government and NHS Lothian.

Bracing for adolescent idiopathic scoliosis

Overview: Scoliosis is a 3-dimensional deformity of the spine comprising a sideways (lateral) curvature of more than 10° and vertebral rotation. Scoliosis can be caused by abnormally formed vertebrae (congenital scoliosis); a medical condition, such as a disorder of the neuromuscular, skeletal, or connective tissue systems (syndromic scoliosis); or have no known cause (idiopathic scoliosis).

The majority of children with scoliosis do not need treatment because the condition is mild and corrects itself as the child grows (NHS Choices 2013). Surgery is indicated in children who have curves of 45–50° with a high risk of continued worsening throughout adulthood. Those with a spinal curvature of more than 20° or progressive scoliosis are generally treated with back braces. However, little evidence exists on the efficacy of braces compared with observation in young people with adolescent idiopathic scoliosis (Negrini et al. 2010).

Current advice: The International Scientific Society on Scoliosis Orthopaedic and Rehabilitation Treatment has produced a consensus guideline on orthopaedic and rehabilitation treatment of idiopathic scoliosis during growth. Specific physiotherapy exercises are recommended as the first step in treating idiopathic scoliosis, to prevent or limit progression of the deformity. The exercises should be based around auto-correction in 3 dimensions, training in activities of daily living, stabilising the corrected posture, and patient education.

Using a brace is recommended in young people with curves of more than 20° who are still growing and show progression of deformity or elevated risk of worsening. The different approaches to bracing are soft bracing, night-time rigid bracing (8–12 hours per day), part-time rigid bracing (12–20 hours per day), and full-time rigid bracing (20–24 hours per day) or cast. It is recommended that braces are worn full time or no less than 18 hours a day at the beginning of treatment. People who use a rigid brace should also undertake specific physiotherapy exercises during brace treatment.

New evidence: A cohort study by Weinstein et al. (2013) compared bracing with observation in young people with adolescent idiopathic scoliosis at high risk of curve progression to the point of needing surgery. People aged 10–15 years with skeletal immaturity (defined as a Risser grade of 0, 1 or 2) and
a spinal curve of 20–40° were recruited from 25 institutions in the USA and Canada. Those who agreed to participate were randomly assigned to bracing or observation. Those who declined randomisation were offered entry into a preference group and offered the choice of 1 of the 2 treatments. Patients in the bracing group received a rigid thoracolumbosacral brace to be worn for a minimum of 18 hours a day. The primary outcome was either curve progression to 50° or more (treatment failure), or skeletal maturity (Risser grade of 4 for girls and 5 for boys) without curve progression to this level (treatment success).

Of the 1086 eligible patients, 383 (35%) provided consent to participate. The primary analysis comprised 242 people: 116 (48%) who were randomly allocated to either bracing (n=51) or observation (n=65), and 126 (52%) who chose either bracing (n=88) or observation (n=38). Participants were followed up for an average of 24.2 months in the bracing group and 21.3 months in the observation group (p=0.01). The study was stopped early because of the success of bracing in both the as-treated and intention-to-treat interim analyses.

In the final as-treated analysis, more than two-thirds (72%) of young people in the bracing group were successfully treated, compared with around half (48%) in the observation group (adjusted odds ratio [OR]=1.93, 95% confidence interval [CI] 1.08 to 3.46). The success rates were similar in the intention-to-treat analysis: 75% in patients randomly assigned to bracing and 42% among those randomly assigned to observation (unadjusted OR=4.11, 95% CI 1.85 to 9.16).

The authors concluded that bracing reduced the progression of high-risk curves to the threshold for surgery in patients with adolescent idiopathic scoliosis. However, this evidence was limited by the possibility of bias owing to non-random assignment of treatment in the preference group. In addition, a high proportion of those consenting to participate were not included in the final analyses (37%, n=141) because of withdrawals, loss to follow-up, wrong diagnosis and not reaching the end point by the time the study was stopped.

**Commentary:** "Previous studies have shown that patients with adolescent idiopathic scoliosis who wore a brace before surgery tend to have worse outcomes than those who were not braced (Diab et al, 2010). This is probably related to the adverse effects of wearing a brace and the medicalisation of the patient. Braces can cause psychological injury, skin irritation, and respiratory and feeding challenges. In addition, wearing a brace can turn a condition that is maybe known only to the individual into a visible condition.

"The primary outcome in Weinstein et al. (2013) was curve progression according to radiographic parameters. However, the decision to operate on a patient with progressive adolescent scoliosis is not decided purely on the angle of a curve on an X-ray. Patients’ individual perceptions of their spine have a role and can be multifactorial. Individuals with large curves may be unconcerned by their appearance or the clinical effects of their curve. On the other hand, patients with small curves may have significant concerns and adverse clinical effects (Danielsson et al, 2012).

"Patients who are braced have huge variations in brace compliance. Research has shown that patients often don’t comply with treatment recommendations because of the adverse effects of wearing a brace (Miller et al, 2012). If a treatment could have adverse effects, then its efficacy to prevent a more important clinical negative effect must be clear. Weinstein et al. (2013) have shown that the longer the brace is worn, the less likely that curve progression will occur. Wearing the brace for less than 6 hours a day was equivalent to observation as a treatment.

"As well constructed as this research is, it suggests a beneficial effect of bracing on the basis of a partially randomised trial using radiographic outcome parameters only. This doesn’t necessarily mean there is the same clinical effect. What patients need is a randomised controlled trial that shows improved patient-reported outcome measures compared with observation (or surgery) and a consequent reduction in surgical intervention. Unfortunately, the available literature still does not help us answer the question of whether bracing is associated with improved patient-relevant outcomes and allow us to give advice for our patients as we would wish.” – Mr Evan Davies, Consultant Paediatric Spinal Surgeon, Southampton Children’s Hospital, University Hospital Southampton

**Study sponsorship:** US National Institute of Arthritis and Musculoskeletal and Skin Diseases, Children’s Miracle Network, Canadian Institutes of Health Research, Shriners Hospitals for Children, University of Rochester, and Children’s Mercy Hospitals and Clinics.
Physical activity in older people and healthy ageing

Overview: Between 1985 and 2010, the proportion of people in the UK aged 65 years and older increased from 15% to 17% (Office for National Statistics 2012). People aged 65 years and over are expected to comprise nearly a quarter (23%) of the UK population by 2035.

Many of this increasing number of older people are not in good health. In the 2011 census of England and Wales (Office for National Statistics 2013), only 50% of people aged 65 years and over living at home considered themselves in good health, compared with 88% of people under 65 years. A similar proportion (52%) of older people reported a disability or a long-term health problem that limited their activity.

The phrase 'healthy ageing' describes growing old without clinical disease or physical disability, and with preserved cognitive, affective and social functioning. Physical activity has been shown to have beneficial effects on physical and cognitive function in older people (Villareal et al. 2011 and Lautenschlager et al. 2008) and has been associated with increased survival in the elderly (Stessman et al. 2009). However, little is known on the effects of taking up physical activity later in life.

Current advice: The Department of Health recommends that people aged 65 years and older should aim to be active on a daily basis. Total activity over a week should add up to at least 150 minutes (2.5 hours) of moderate intensity activity in bouts of 10 minutes or more. Older adults should also undertake activities to improve muscle strength at least 2 days a week.

NICE guidance on physical activity for adults in primary care recommends that healthcare professionals should identify people who are not currently meeting the Department of Health's physical activity guidelines. Adults who have been assessed as being inactive should be advised to do more physical activity and provided with information about local opportunities to be physically active.

The NICE Pathway on physical activity brings together all related NICE guidance and associated products on the condition in a set of interactive topic-based diagrams.

New evidence: A cohort study by Hamer et al. (2014) used data from the English Longitudinal Study of Ageing to assess the effect of physical activity on healthy ageing in older people. The English Longitudinal Study of Ageing is a national ongoing cohort study of community-dwelling adults born on or before 29 February 1952. Participants were interviewed at baseline (2002–3) and reassessed at 2-year intervals. Healthy ageing was assessed 8 years after baseline (2010–11). Healthy ageing was defined as survival without developing major chronic disease, symptoms of depression, or physical or cognitive impairment. Physical activity was measured at baseline and 4 years later (2006–07).

The study cohort comprised 11,391 adults, 3454 of whom were healthy at baseline (mean age=63.7, standard deviation 8.9 years). A total of 665 (19.3%) of these 3454 people met the criteria for healthy ageing at 8-years follow-up. People who were healthy at follow-up were more likely to have the following characteristics at baseline: older age, never smoker, regular alcohol consumption, physically active, married, and higher wealth. These factors were controlled for in adjusted analyses.

People who reported vigorous levels of physical activity at baseline were more than 3 times more likely to be healthy at follow-up than people who were inactive at baseline (adjusted odds ratio [aOR]=3.53, 95% confidence interval [CI] 2.54 to 4.89, p<0.001). Similarly, people who were moderately active were twice as likely to remain healthy than those who were inactive (aOR=2.67, 95% CI 1.95 to 3.64, p<0.001). Inactive people who took up physical activity during the first 4 years of the study improved their chances of staying healthy compared with those who remained inactive throughout the whole 8-year study (aOR=3.37, 95% CI 1.67 to 6.78, p<0.001).

Limitations of the study include its reliance on self-reporting for physical activity and disease outcomes. The people lost to follow-up were less physically active and less wealthy, which could have introduced
bias into the results. The results may have also been biased by residual confounding, although the analyses were adjusted for age, sex, smoking status, alcohol intake, marital status, and wealth.

**Commentary:** "Given the urgent need to tackle the increased health demands of an ageing population in a financially constrained environment, this paper by Hamer and colleagues (2014) is very timely. Although we have a strong evidence base supporting the relationship between physical activity and health, this new work helps to fill some of our knowledge gaps regarding physical activity and healthy ageing.

"The research supports the Department of Health’s guidance, suggesting a strong correlation between levels of physical activity and health related benefits throughout the life course. However, perhaps the most important finding is the health benefits accrued in those who become physically active relatively late in life.

"One potential problem acknowledged by the authors, and common to most longitudinal physical activity studies, is the reliance on a self-report tool, which may impact on the effect size. That aside, the results from this study are important to both policy makers and practitioners, providing further credible evidence to support interventions that promote physical activity throughout the life course.

"All we need now are effective interventions that can engage older people in regular, enjoyable physical activity, thereby improving their personal health and wellbeing while reducing their impact on health services.” – **Mr Malcolm Ward, Principal Health Promotion Specialist and Physical Activity Lead, Public Health Wales**

**Study sponsorship:** US National Institute on Aging and UK Government departments.

**Evidence Updates**

NICE has recently published an Evidence Update on:

- Acute upper gastrointestinal bleeding

This Evidence Update highlights and provides commentary on selected new evidence published since the NICE guidance was issued. The evidence was considered by an Evidence Update Advisory Group (EUAG): a panel of experts, most of whom were involved in developing the original NICE guidance.

The Evidence Update on **acute upper gastrointestinal bleeding** was published by NICE in August 2014. It includes commentary from the EUAG on 8 new articles (relevant to NICE clinical guideline 141), covering the following topics:

- Assessing risk with the Blatchford and Rockall scores
- Restrictive or liberal blood transfusion strategies
- Tranexamic acid for upper gastrointestinal bleeding
- Acid-suppression therapy for stress-ulcer prophylaxis
- Erythromycin for improved endoscopic imaging

**Eyes on Evidence survey**

NICE is conducting a short online survey of subscribers’ views on Eyes on Evidence to help us improve the content of this bulletin. The survey seeks information on how you use the bulletin and your satisfaction with the service, as well as details on your specialty and areas of interest. By filling in this survey, you can help to shape the future of Eyes on Evidence.
August issue of Eyes on Evidence

We are aware that some subscribers may not have received the August issue of Eyes on Evidence. If you did not receive the issue then you can view it here.

Eyes on Evidence helps contextualise important new evidence, highlighting areas that could signal a change in clinical practice. It does not constitute formal NICE guidance. The commentaries included are the opinions of contributors and do not necessarily reflect the views of NICE.