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NICE GUIDANCE
(Click on topics to view)

Sore throat (acute): antimicrobial prescribing (NG84)
Evidence-based recommendations on an antimicrobial prescribing strategy for acute sore throat in all age groups. Antimicrobial prescribing guideline Published January 2018.

Atrial fibrillation and heart valve disease: self-monitoring coagulation status using point-of-care coagulometers (the CoaguChek XS system) (DG14)
Evidence-based recommendations on point-of-care coagulometers (the CoaguChek XS system) to self-monitor blood clotting. Diagnostics guidance Published September 2014 Last updated December 2017

People's experience in adult social care services: improving the experience of care and support for people using adult social care services (NG86)
Evidence-based recommendations on the care and support of adults receiving social care in their own homes, residential care and community settings. NICE guideline Published February 2018

Peristeen transanal irrigation system for managing bowel dysfunction (MTG36)
Evidence-based recommendations on the Peristeen transanal irrigation system for people with bowel dysfunction. Medical technologies guidance Published February 2018

KTT19: Psychotropic medicines in people with learning disabilities whose behaviour challenges should initially be prescribed and monitored by a specialist (an adult or child psychiatrist or a neurodevelopmental paediatrician).

KTT9: Antimicrobial stewardship: prescribing antibiotics
PHE advice and almost half required treatment with antibiotics before the child could be readmitted to nursery. In a questionnaire.

**MIB133: Next-generation sequencing panel for solid tumour cancers in children**
Advice on the use of the next-generation sequencing (NGS) panel for solid tumour cancers in children to aid local decision-making. Medtech innovation briefing Published January 2018

**Asthma: diagnosis, monitoring and chronic asthma management (NG80)**
Evidence-based recommendations on diagnosing and monitoring asthma, and managing chronic asthma, in adults, young people and children. NICE guideline Published November 2017

**Autism spectrum disorder in under 19s: recognition, referral and diagnosis (CG128)**
Evidence-based recommendations on the recognition, referral and diagnosis of autism spectrum disorder (ASD) in children and young people under 19. Clinical guideline Published September 2011 Last updated December 2017

**The CNO Commission on widening participation in nursing and midwifery education and careers** [PDF]
07 December 2017 - Publisher: Scottish Government
The aim of the Commission was to maximise opportunities to participate in nursing and midwifery education and careers. It has formed part of wider work to ensure Scotland’s nursing and midwifery...

### OTHER GUIDANCE/REPORTS

**PIER (PAEDIATRIC INNOVATION, EDUCATION AND RESEARCH NETWORK)**
**Summary:** The PIER guidelines have been created collaboratively with ratification through the relevant regional clinical network. They represent the views of the relevant clinical network and have been produced after consideration of the available evidence in conjunction with local expertise. Governance of these guidelines is managed by University Hospital Southampton [Click to view].

**FOUNDATION OF NURSING STUDIES**
**Person-centred paediatric care: capturing the experience and collaborating for the future**
The aim of this project was to conduct a multidisciplinary practice development initiative supporting a clinical team to ‘hear’ the voices of children, young people and their families to help make person-centred paediatric care a reality. [Click to view]

**NIHR SIGNAL**
**Inhaled anaesthesia with anti-sickness medication in children has the same risk of vomiting as intravenous anaesthesia**
Anaesthesia and pain | Gastrointestinal disorders | Paediatric and neonatal medicine
Expert commentary is provided for a review of 4 RCTs which found no difference in post-operative vomiting for IV vs inhaled anaesthetics (33% vs 32%, RR 0.99, 95% CI 0.77-1.27). This is a reminder that IV anaesthesia does not confer as much advantage for post-operative vomiting. [Click to view]

**DEVON INTEGRATED CHILDREN’S SERVICES**
**Implementing an oxygen weaning guideline for babies with chronic neonatal lung disease**
This project was conducted to develop a standardised pathway to support a structured and safe weaning programme for babies that met referral criteria. The project related to NICE QS 120 on safe and effective use of medicines. [Click to view]

**PUBLIC HEALTH ENGLAND**
**Healthy Child Programme: rapid review on safeguarding**
This rapid review updates the evidence regarding safeguarding guidance, focusing on prevention and early intervention. Key areas include child abuse and neglect, child sexual abuse and exploitation, intimate partner violence, female genital mutilation and gang violence. [Click to view]
**THIS MONTH’S CLINICAL QUESTION(S)**

For infants with acute bronchiolitis, what are the benefits and harms of nebulized hypertonic saline solution? [Click to view answer](#)

What are the benefits and harms of isoniazid tuberculosis prophylaxis for HIV-infected children receiving antiretroviral therapy? [Click to view answer](#)

For people with asthma, how does shared decision-making affect outcomes? [Click to view answer](#)

How do cephalosporin and macrolides compare with penicillin for people with group A streptococcal pharyngitis? [Click to view answer](#)

**NEW AND UPDATED COCHRANE SYSTEMATIC REVIEWS**

(Click on titles to view)

- **Systemic corticosteroids for acute otitis media in children**
  Respatri W Ranakusuma, Yupitri Pitoyo, Eka DSafitri, Sarah Thorning, Elaine M Beller, Sudigdo Sastroasmoro and Chris B Dandel
  Online Publication Date: March 2018

- **Preconception risk assessment for thalassaemia, sickle cell disease, cystic fibrosis and Tay-Sachs disease**
  Norita Hussein, Stephen F Weng, Joe Kai, Jos Kleijnen and Nadeem Qureshi.
  Online Publication Date: March 2018

- **Orthodontic treatment for prominent upper front teeth (Class II malocclusion) in children and adolescents**
  Klaus BSL Batista, Badri Thiruvenkatachari, Jayne E Harrison and Kevin D O'Brien.
  Online Publication Date: March 2018

- **Adjustable versus non-adjustable sutures for strabismus**
  Shoaib Hassan, Anjana Haridas and Venki Sundaram.
  Online Publication Date: March 2018

- **Standard (head-down tilt) versus modified (without head-down tilt) postural drainage in infants and young children with cystic fibrosis**
  Diana A Freitas, Gabriela SS Chaves, Thayla ASantino, Cibele TD Ribeiro, Fernando AL Dias, Ricardo O Guerra and Karla MPP Mendonça.
  Online Publication Date: March 2018

- **Interventions for autumn exacerbations of asthma in children**
  Katharine C Pike, Melika Akhbari, Dylan Kneale and Katherine M Harris.
  Online Publication Date: March 2018

- **Physical activity, diet and other behavioural interventions for improving cognition and school achievement in children and adolescents with obesity or overweight**
  Anne Martin, Josephine N Booth, Yvonne Laird, John Sproule, John J Reilly and David H Saunders
  Online Publication Date: March 2018

- **Effects of total fat intake on bodyweight in children**
  Celeste ENaude, Marianne E Visser, Kim A Nguyen, Solange Durao and Anel Schoonees
  Online Publication Date: March 2018
Online Publication Date: February 2018

**Self-management for bronchiectasis**
Carol Kelly, Seamus Grundy, Dave Lynes, David JW Evans, Sharada Gudur, Stephen J Milan and Sally Spencer
Online Publication Date: February 2018

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**SYSTEMATIC REVIEWS FROM OTHER SOURCES**

**Title:** The association between child maltreatment and adult poverty - A systematic review of longitudinal research.  
**Source:** Child Abuse & Neglect January 018  
**Summary:** This paper presents findings from a systematic review of longitudinal research examining experiences of child maltreatment and economic outcomes in adulthood.  
[Click to view](#)

**Title:** Medical Cannabinoids in Children and Adolescents: A Systematic Review  
**Source:** Pediatrics  
**Summary:** Evidence from 22 studies (n=795), mostly of low methodological quality, noted benefit was strongest for chemotherapy-induced nausea/vomiting, with increasing evidence of benefit for epilepsy, but insufficient evidence for spasticity, neuropathic pain, PTDS, and Tourette’s.  
[Click to view](#)

**Title:** Accuracy of intravenous and enteral preparations involving small volumes for paediatric use: a review  
**Source:** European Journal of Hospital Pharmacy  
Review found measurement of volumes (<0.1mL) for enteral/IV dosing accounts for 25% of medicine manipulations in paediatric hospitals. Inaccuracies are described in literature with dose administration errors attributed to technique/calculation/dilution/problems with equipment.  
[Click to view](#)

**Title:** An Integrative Review of Social Determinants of Health Assessment and Screening Tools Used in Pediatrics.  
**Source:** Journal of Pediatric Nursing; Nov 2017; vol. 37 ; p. 22-28  
**Implications:** This review emphasizes the need for the continued development of effective, comprehensive and practical tools for assessing pediatric SDOH risk factors. Pediatric nursing care includes the assessment of the youth and family context to effectively evaluate resource needs. Pediatric nurses are well poised to address this knowledge and resource gap.  
[Click to view](#)

**Title:** The validity of dietary assessment methods to accurately measure energy intake in children and adolescents who are overweight or obese: a systematic review.  
**Source:** European journal of clinical nutrition; Dec 2017  
Conclusions: Findings from this review suggest that a 24-h dietary recall and diet history interview were the most accurate methods at the group level for children aged 4-14 years, where the parent or combined child and parent were the reporters.  
[Click to view](#)

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**PRIMARY RESEARCH**

**Title:** Association of Broad- vs Narrow-Spectrum Antibiotics With Treatment Failure, Adverse Events, and Quality of Life in Children With Acute Respiratory Tract Infections  
**Conclusions and Relevance:** Among children with acute respiratory tract infections, broad-spectrum antibiotics were not associated with better clinical or patient-centered outcomes compared with narrow-spectrum antibiotics, and were associated with higher rates of adverse events. These data support the use of narrow-spectrum antibiotics for most children with acute respiratory tract infections.  
[Click to view](#)

**Title:** Association between inhaled corticosteroid use and bone fracture in children with asthma.  
**Citation:** JAMA Pediatr. 2018;172:57-64  
**Conclusions:** Systemic corticosteroids, but not inhaled corticosteroids, were significantly associated with increased odds of fracture in the pediatric asthma population.  
[Click to view](#)

**Title:** Quintupling Inhaled Glucocorticoids to Prevent Childhood Asthma Exacerbations
**Conclusions:** In children with mild-to-moderate persistent asthma treated with daily inhaled glucocorticoids, quintupling the dose at the early signs of loss of asthma control did not reduce the rate of severe asthma exacerbations or improve other asthma outcomes and may be associated with diminished linear growth. Click to view

**Title:** International comparison of emergency hospital use for infants: data linkage cohort study in Canada and England

**Citation:** BMJ Qual Saf 2018;27:31-39

**Conclusions:** Children attending ED in England were much more likely to be admitted than those in Ontario. The tendency towards more frequent, shorter admissions in England could be due to more pressure to admit within waiting time targets, or less availability of paediatric expertise in ED. Click to view

**Title:** Adverse effects of amphotericin B in children: a retrospective comparison of conventional and liposomal formulations

**Source:** British Journal of Clinical Pharmacology

**Summary:** Australian study (n=76) found that when appropriately administered, liposomal amphotericin (AMP) was linked to more hepatotoxicity (most low grade) vs. conventional AMP (83% [24/29] vs. 56% [20/36]; p= 0.032), with no difference in infusion-related reactions or nephrotoxicity. Click to view

**Title:** Respiratory syncytial virus prevention and asthma in healthy preterm infants: a randomised controlled trial

**Source:** The Lancet Respiratory Medicine

**Summary:** RCT (n=395) found that respiratory syncytial virus prevention with palivizumab did not have a major effect on current asthma or lung function at age 6 years follow-up versus placebo. Absolute risk reduction was −0·4 (95% CI −6·5 to 5·8). Click to view

**Title:** Abdominal migraine

**Source:** British Medical Journal

**Summary:** This article highlights the diagnosis and management of abdominal migraine, a common, and under-recognised cause of recurrent abdominal pain in children. Other than for pizotifen, evidence for pharmacological treatment is limited. Click to view

**Title:** Nusinersen versus Sham Control in Later-Onset Spinal Muscular Atrophy

**Source:** New England Journal of Medicine

**Summary:** This Phase III trial (n=126) found intrathecal nusinersen was associated with an improvement in Hammersmith Functional Motor Scale–Expanded score at 15 months (least-squares mean difference in change from baseline of 5.9 points v sham; 95% CI 3.7 to 8.1; P<0.001). Click to view

**Title:** Phase II, Open-Label, Randomized, Multicenter Trial (HERBY) of Bevacizumab in Pediatric Patients With Newly Diagnosed High-Grade Glioma

**Source:** Journal of Clinical Oncology

**Summary:** In paediatric patients with newly diagnosed high-grade glioma (n=121), the addition of bevacizumab to radiotherapy plus temozolomide did not improve event-free survival (8.2 months [95% CI 7.8 to 12.7 months] versus 11.8 months [7.9 to 16.4 months]; HR 1.44; P=0.13). Click to view

**Title:** A genetic approach to evaluation of short stature of undetermined cause

**Source:** The Lancet Diabetes & Endocrinology

Authors review application of genetic studies in children with idiopathic short stature and suggest a molecular diagnosis is important for patients and their families and might inform treatment decisions surrounding use of growth hormone or insulin-like growth factor 1 therapy. Click to view

**Title:** Standardizing nursing education for ambulatory paediatric oncology patients

**Citation:** Santacroce E. Pediatric blood and cancer. Conference: 48th congress of the international society of paediatric oncology, SIOP 2016. Ireland. Conference start: 20161019. Conference end: 20161022, 2016, 63, S218

Online Publication Date: 2017 Click to view
Risk of invasive bacterial illness in febrile young infants testing positive for respiratory viral infection (February 2018)

In a retrospective study of almost 3000 febrile young infants 29 to 90 days of age who underwent respiratory panel polymerase chain reaction (PCR) testing, the risk of invasive bacterial illness was 4.0 percent for infants who tested negative for respiratory viruses and 1.0 to 1.4 percent for those who tested positive [2]. Human rhinovirus was most commonly detected. This study supports limiting diagnostic testing for bacterial illness in well-appearing febrile infants 29 to 90 days of age when highly accurate rapid viral testing is positive. However, a full sepsis evaluation is still indicated in neonates, regardless of the results of respiratory virus testing. Highly accurate testing for bronchiolitis and influenza is widely available, while panels for other viral pathogens (eg, human rhinovirus, adenovirus, coronavirus, parainfluenza, and/or human metapneumovirus) are not always readily available and may be cost-prohibitive. (See "Febrile infant (younger than 90 days of age): Outpatient evaluation", section on 'Patients with recognizable viral infections'.)

Urinalysis for detection of urinary tract infection in febrile young infants (February 2018)

In a secondary analysis of a prospective observational study of over 4000 febrile infants 60 days of age or younger who were evaluated for urinary tract infection (UTI), a positive urinalysis (positive leukocyte esterase or nitrites on dipstick or >5 white blood cells [WBC]/high-power field on microscopy) had a sensitivity of 94 percent and a specificity of 91 percent [3]. When UTI is defined as >50,000 colony-forming units on urine culture, this study found that urinalysis has high diagnostic accuracy in febrile young infants. Regardless of findings on urinalysis, a urine culture should be sent for all patients because a negative urine dipstick or urinalysis alone does not exclude a UTI. (See "Febrile infant (younger than 90 days of age): Outpatient evaluation", section on 'Urine examination'.)
Topic: **Rehydration therapy in children**  
Polymer-based oral rehydration solutions may decrease stool output and duration of diarrhea compared to glucose-based oral rehydration solutions with osmolarity ≥ 310 mOsm/L in children with acute watery diarrhea (Cochrane Database Syst Rev 2016 Dec 13)

Topic: **Micronutrient supplementation in children in low- and middle-income countries, Prevention of acute diarrhea**  
Vitamin A supplementation may reduce all-cause and diarrhea-related mortality in healthy infants and children aged 6 months to 5 years (Cochrane Database Syst Rev 2017 Mar 11)

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**CHILDREN’S HEALTH IN THE NEWS – MEDIA STORIES EXPLAINED**

**Families should feel supported when their child is born preterm, says NICE**  
Children born preterm should be offered developmental check-ups to help identify any problems or disorders early on, NICE has said in its latest draft quality standard.

**Statins ‘safe’ for children with genetic heart condition, 2018**  
"Statins have been found to be safe for children as young as seven-years-old," the Mail Online reports.

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**New Books**

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**ONLINE RESOURCES**

**BestBets:** [www.bestbets.org](http://www.bestbets.org)  
**British National Formulary (BNF):** [https://bnf.nice.org.uk/](https://bnf.nice.org.uk/)  
**British National Formulary (BNFC):** [https://bnfc.nice.org.uk/](https://bnfc.nice.org.uk/)  
**British Association of General Paediatrics:** [www.bagp.org.uk](http://www.bagp.org.uk)  
**Independent Nurse:** [http://www.independentnurse.co.uk/register/](http://www.independentnurse.co.uk/register/) (free copies)  
**Royal College of Paediatrics and Child Health:** [www.rcpch.ac.uk](http://www.rcpch.ac.uk)  
**The Royal Marsden Manual of Clinical Procedures:** [Click for access (NHS Athens Required)](#)  
**Zika Virus Health Information Resources:** [https://disasterinfo.nlm.nih.gov/dimrc/zikavirus.html](https://disasterinfo.nlm.nih.gov/dimrc/zikavirus.html)  
**http://www.cdc.gov/zika**  
**BMJ Evidence Updates:** [https://plus.mcmaster.ca/EvidenceAlerts/](https://plus.mcmaster.ca/EvidenceAlerts/)  
**Children and Young People:** [https://www.gov.uk/government/topics/children-and-young-people](https://www.gov.uk/government/topics/children-and-young-people)  
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**National Child and Maternal Health Intelligence Network:** [http://www.chimat.org.uk/default.aspx](http://www.chimat.org.uk/default.aspx)

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