# PRIMARY CARE MANAGEMENT OF ACUTE ILLNESS IN CHILDREN

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Acute illness in children is common and most children will consult an NHS GP 3 to 6 times a year[1] The vast majority of acute illness in children will be managed in community settings, avoiding the need for unnecessary hospital contacts and emergency admissions to hospital. [2] Most acute illness consultations in children are for minor self limiting illnesses, and the likelihood of serious illness is less than 1%. In the post Meningitis C and Prevenar era the risk of serious infection is decreasing, with reported rates of acute meningococcal and pneumococcal bacteraemia falling markedly.

Yet hospital admission rates have been rising for several years in many developed countries[2], particularly in children,[2] many of whom are admitted through emergency departments. [3,4] The majority of admissions are due to short stay, isolated acute illness episodes and recent trends suggest there has been a 41% expansion in short stay admissions lasting less than 2 days, with one in three infants now being admitted to hospital. In addition to inefficient and inappropriate use of health resources, lack of access to high quality primary care may impact on the future health of a child by 'overmedicalising' simple problems and reinforcing health seeking behaviour that results in multiple health contacts.[5] .

In the UK, access to general practitioners has diminished since 2004 due to changes in general practitioners' contract enabling 'opt out' of responsibility for out-of-hours and emergency care. In addition, changes in the general medical services-(GMS) contract mean that GPs are paid for focusing on chronic disease management in adults, shifting priorities away from provision of acute care for children. [6] This has had a major impact on paediatric services in hospital accident and emergency departments AEDs [7] that are already stretched and under pressure to achieve stringent waiting time targets, often resulting in inappropriate hospital admission.[8]

However, children's pathways are set to change dramatically with the introduction of GP led polyclinics across London and nationally. A major review of NHS services[9] has led to the opening of 50 new polyclinics offering extended access to GPs for unscheduled care and away from hospital AEDs, with the eventual aim that every primary care trust will have a polyclinic. Healthcare for London has estimated this could reduce children's AED attendance by up to 15%. [5] These centres vary in their staffing and organisational structures but a fundamental principle is that they offer access to GPs, have extended opening hours and aim to avoid over investigation.

In addition to changes in the organisation of primary care, are there other factors that land acutely ill children in hospital? Parents often find it difficult to distinguish between trivial self limiting illnesses and more serious conditions such as meningitis, and fear the worst when their child is unwell, especially when their child has a fever. [10] They may require access to support, information and primary medical services to cope.

Where this process fails, parents will seek alternative opinions, duplicating health contacts and increasing costs.

Can simple clinical assessment help GP rule out serious illness? There is good evidence that cyanosis, rapid breathing, poor peripheral perfusion, and petechial rash are all useful 'red flag' warning signs of serious illness. [11] Temperature greater than 40 degree centigrade is a good indicator of infection but its absence does not rule out serious illness. Although raised C reactive protein levels have been identified as a valuable test for occult bacteraemia, this is unlikely to be of much use to busy GPs who need to make quick decisions about whether to refer for specialist assessment or bring children back to the surgery for review. Vital signs are useful in distinguishing between serious and self limiting illness[12] but there is evidence that GPs rarely monitor vital signs, preferring observation or a watchful waiting approach. [13] The NICE clinical guideline on feverish illness in children under 5 years [14] offers a traffic light approach based on vital signs that are simple to follow in GP surgeries.

In this edition of LJPC, Nicky Coote's article: 'Managing the unwell child' is a timely guide for all GPs, but perhaps particularly for those working in polyclinics or out of hours centres who will increasingly be faced with acutely unwell children. The article offers practical advice about preparing the team to deal with acutely unwell children, key equipment for assessment and basic medicines to have available on site for emergencies. The clinical assessment tools are useful in assessing children and persuading parents of our objectivity. These go hand in hand with our clinical skills acquired over time and key principles of GP care that are as important: providing access for parents to consult us when their child is unwell, offering continuity and safety netting. If we value our own contribution to keeping children out of hospital, we will serve families better and reduce the strain on hospital colleagues by managing acute illness in children in primary care.

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