

Evaluation Report

Up-skilling GPs in the Clinical Management

of

Children With Acute Health Problems

April, 2011
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EVALUATION REPORT

Upskilling GPs in the clinical management of children with acute health problems: meeting the needs of children in practice

1. Executive Summary

In October 2010, NE A PBC Cluster, Stoke, developed a business case on behalf of the Children, Young People's and Maternity commissioning programme group to invest in Up-skilling GPs and Nurses. The business case was extended to include GP consortia and commissioners from North Staffs.

The overall aims of the business case were that GPs and nurses are more competent and confident in the clinical management of children with acute health problems; and to reverse the year on year rise in inappropriate referrals to the Paediatric Assessment Unit (PAU) by primary care clinicians, and that GPs make fewer unnecessary referrals to outpatients

Needs assessment data collected in preparation for the business case identified that the numbers of children admitted to paediatric wards in the UHNS with acute health problems is about twice the admission rate of other hospitals in similar communities. It also identified the top ten conditions where children referred into hospital by a GP were discharged within four hours without active clinical intervention.

Partners in Paediatrics (PIP), a partnership of organisations concerned to improve the quality and accessibility of services for children, was commissioned to project manage the delivery process for the Up-skilling GPs business case.

Initially GPs and Nurses were invited to self rate their competence in relation to the care of children's and young people's health & wellbeing versus core competences; identify learning and service needs.

A paediatric pre-referral trial guidelines document was produced from a range of authoritative national and local sources, including paediatric consultants and GPs across Stoke and North Staffordshire. Paediatric urgent care referral guidelines have also been developed and both sets of guidelines have been made available to clinicians in primary care.

Six Master-classes run by paediatric consultants were held over a four week period in February and March 2011, to increase GPs and Nurses competence and confidence in managing acute paediatric conditions. Within the GP target group a total of 114 (40%) GPs, 13 Nurse Practitioners and 9 Community Nurses took part in the Master-classes.

1.1. Evaluation

The Up-skilling initiative in Stoke and North Staffordshire to support GPs and Nurses in the clinical management of children with acute health problems has been assessed as highly successful, more worthwhile than initially anticipated and has resulted in a wide range of spin offs. A high percentage of participants found the different elements of the initiative either extremely useful or very useful.

The Business Case was well developed and had the support of primary care, secondary care and commissioners. There was strong leadership from the GP and nurse lead, commissioners and supporting senior managers, which ensured that the project aims were addressed in a timely and thorough way. There was widespread input from individual senior GPs, nurse leads and from the paediatric consultants at University Hospital North Staffordshire. Clinical involvement throughout, brought a high degree of clinical rigour to all parts of the initiative.

There was a good level of audit, preparation and pre-work undertaken in the planning and development of the initiative over many months, which ensured that all involved were receptive to the up-skilling process. Consultants were willing to become engaged in the broader programme, providing advice and support for all elements from the outset. This ensured consistency, and knowledge of what would be required from trainers in delivering the Master-classes. Participants were also primed about management of children with acute health problems through pre-reading and preparation work prior to the Master-classes.

Participants reported that the Master-classes, were very informative and covered a relevant selection of important everyday topics. The speakers were excellent; the content and delivery was very relevant to day-to-day GP practice. It was good for primary care clinicians to meet local consultants and have the opportunity to see each other face to face.

This report does not evaluate the impact on referrals to secondary care. This will be a separate piece of work to be conducted 6 months on in October 2011. It will take a retrospective appraisal of referral behaviours at a GP practice level, to see if there is a reduction in admissions by condition.

1.2. Recommendations

1. Tangible outcomes of the strategic effectiveness of the up-skilling GPs initiative are assessed against the objectives set out in the business case e.g. the evaluation of the effectiveness of the master-classes against the number of inappropriate referrals into hospital
2. The pre-referral trial guidelines and the urgent care guidelines are jointly reviewed and updated on an ongoing basis between primary-care and secondary-care clinicians.
3. The urgent care guidelines are extended to cover the key conditions set out in the Business Case, i.e. viral infections, minor neonatal diagnoses.
4. There should be an ongoing up-skilling programme for GPs and nurses in the clinical management of children with acute health problems, including master-classes.
5. The funding model needs to be kept under review in order to optimize the sustainability of the GP and nurse up-skilling programme.

6. Literature and handouts provided at Master-classes could be designed in such a way that they enable participants to cascade the learning points to members of their own practice/team.
7. Consideration is given to jointly producing a Paediatric Bulletin between secondary and primary care which provides regular up-dates on service developments, current best practice, top tips and issues of the moment.
8. Localities should be encouraged to consider opportunities to improve parent and carer education, including regular review of all information given to parents to ensure consistency across the Localities and ensure current best practice is being followed.
9. Consideration is given to having further copies of the Common Childhood Illness Guide produced and made available to all doctors and pharmacists across Stoke-on-Trent and North Staffordshire, for distribution to anxious parents when they present at the practice or come to the pharmacy for advice.
10. Community providers should be encouraged to up-skill their staff in the management of children with acute health problems, e.g. health visitors and school nurses.
11. There should be effective dissemination of the GP pre-referral trial guidelines and urgent care guidelines - with proactive reminders to GPs to use them; and monitoring to check on GPs' adherence.
12. Share our learning and development approach in the upskilling of GPs and primary care nurses with others across the NHS. Make the materials available to anyone working in or for the NHS on the PIP website and GPCC portfolio with a hyperlink from the PCT website.

2. BUSINESS CASE

2.1. Introduction

In October 2010, NE A PBC Cluster, Stoke, developed a business case on behalf of the Children, Young People's and Maternity commissioning programme group to invest in upskilling GPs; this was widened to include North Staffordshire PCT.

The overall aims were that GPs are more competent and confident in the clinical management of children with acute health problems; and to reverse the year on year rise in inappropriate referrals to the Paediatric Assessment Unit (PAU) by primary care clinicians.

2.2. Business Case Objectives

- Retain delivery of acute clinical care of children and young people within general practice/primary care settings by competent clinicians avoiding unnecessary admission to hospital and practitioners in tier 4 health settings.
- delivery of a range of clinical care of children and young people within the general practice setting by competent clinicians, avoiding unnecessary referral to practitioners in tiers 3 and 4 healthcare settings; i.e. GPs make fewer unnecessary referrals to outpatients (both first and follow up)
- Reduce costs, improve the utilisation of practice budgets and develop practice expertise in management of expenditure on secondary care.
- Improve the patient experience and in particular provide services closer to patient homes

The sequence of the initiative was to:

- Establish a clinical oversight steering group
- Work with the PCU and Partners in Paediatrics (PIP) to adopt the classifications of core and enhanced competence of general practitioners in relation to provision of paediatric care;
- Agree protocols of best practice for clinical management for GP pre-referral, work up guidelines in relation to children & young people – as outpatients, and for acute unplanned admissions to hospital;
- Organise process by which GPs (and practice nurses if they wish) and doctors working in GP OOH services, self rate their competence in relation to the care of children's and young people's health & wellbeing versus core competences; identify learning & service needs;
- Review access and capacity for providing consultations for children/young people with acute illness, at short notice – in general practice/GP OOH settings;
- Agree training & development strategy based on learning needs and any planned service changes; upskill GPs accordingly –
 - (i) all GPs participating to match core competence and,
 - (ii) volunteer GPs to match enhanced competence; applying the quality standards described in the protocols adhering to an agreed clinical governance framework that describes professional accountability;
- Comparing referral data and hospital admissions from a previous period for these specific interventions with a prospective six month period after upskilling completed.

The Business Case was approved by key representatives of the Children, Young People and Maternity commissioning Programme Group and NE A PBC cluster steering group that leads on the commissioning of children's /young people's services. It was discussed and supported at the Clinician to Clinician Specialty Group convened by UHNS, NHS Stoke on Trent and NHS North Staffordshire (October 2010).

2.3. Needs Assessment

Assessment data collected by both Stoke and North Staffordshire PCTs in preparation for the joint Business Case identified that the numbers of children admitted to paediatric wards in the UHNS with acute health problems is about twice the admission rate of other hospitals in similar communities; of those admitted about 50% are discharged within a day without further interventions that could not have been carried out in their own homes. The GP OOH service admits about 10% of children seen, which compares well with OOH services in other areas where paediatric hospital admission rates are higher.

The NHS Institute for Innovation and Improvement has identified 19 conditions that are amenable to provision in primary and community care settings as opposed to secondary care, and where productivity gains are possible from service redesign; of these, four conditions are relevant to paediatric admissions: ENT infections, Gastroenteritis, Asthma/Wheezing and Convulsions.

The Business Case identified the need to reverse the year on year rise in referrals to the Paediatric Assessment Unit (PAU) by primary care clinicians. In 2009/10 there were

approximately 5,500 paediatric admissions (average 25 per day). 62% of these were children referred by a GP in or out of hours and of these, 60-70% were discharged within 4 hours after assessment or short stay observation – without active clinical intervention. LOS at 2 days or less is common. Many of these children are given open access for 24-48 hours as a safety net for parental anxiety and for professional security. (See Figure 1).

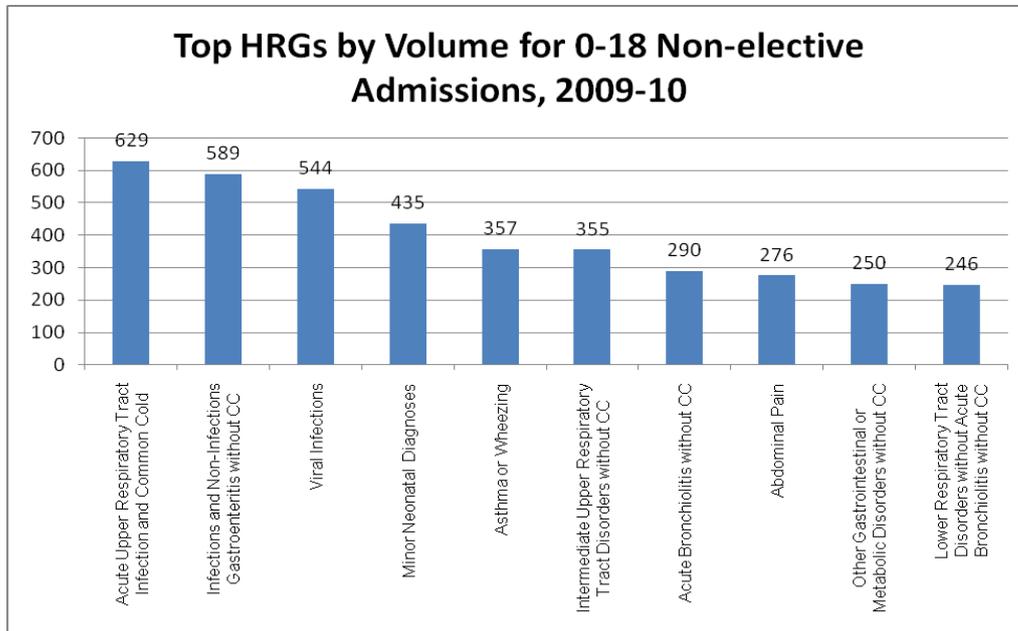


Figure 1: Causes for non-elective admissions in 0-18 year olds registered with NHS Stoke on Trent and North Staffordshire.

The most common age range constituting these admissions is children aged 1-3 years with numbers reducing by age thereafter. The rate of admissions over the week remain constant Monday to Friday with significantly fewer being referred on a Saturday but increased numbers from Sunday. Slight seasonal variation exists with the winter months having higher numbers of referrals. Thus there seems great potential for managing more ill but stable child patients in general practice or GP OOH services.

Up-skilling GPs and confirming good access for parents/carers and children should help to retain care of ill but stable children in general practice; and should retain the care of children/young people with acute illness in primary care & their own homes so long as it is safe to do so and where children are only cared for in hospital if the care they require cannot be delivered in their home.

2.4. Hospital at Home

A parallel Business Case was also approved in October 2010 across Stoke and North Staffordshire for extending the Hospital at Home nursing service to accept direct referrals of ill but stable children from GPs in surgeries or OOHs between 8am - 10pm seven days per week, rather than admit them to hospital when first assessed in general practice, if appropriate. It was expected that usual GP care would provide continuity for the acutely ill child with

subsequent admission to hospital if the patient's condition worsened with or without telephone advice from a paediatrician linked to the urgent care pathway for paediatrics.

2.5. Partners in Paediatrics

Partners in Paediatrics (PiP) was initiated in 1998, in response to paediatricians' shared sense of concern about current and future provision of children's services. PiP is a partnership of organisations concerned to improve the quality and accessibility of services for children across the area served by the participating organisations. It aims to encourage and develop collaborative approaches to the delivery, commissioning and improvement of children's services. To this end, PiP works with children's organisations and professionals, and with children, young people and their families to:

- Develop high quality clinical guidelines and pathways of care
- Facilitate the development of clinical networks
- Work with, and inform commissioners on the improvement of services
- Provide educational fora and undertake training & research
- Promote and share good practice.

PiP was commissioned to project manage the delivery process for the Upskilling GPs business case, by working with the Steering Group, commissioning leads and others in NE A PBC cluster to:

1. Establish a clinical oversight group
2. Develop referral and acute referral guidelines (revising established guidelines – pre-referral and acute substantively)
3. Identify expert authors and peer review group
4. Create competence self rating assessment questionnaire to identify learning and service needs of GPs and practice nurses.
5. Evolve clinical audit or structured reflection template to evidence/ measure application of learning
6. Develop and run master-classes for GPs and Nurses January - March 2011
7. Create alternative educational and reference resources eg online primary care paediatric guidelines
8. Collate secondary care usage data with Health Intelligence Unit to measure impact of learning/upskilling in terms of change in referral behaviour
9. Development of Primary Care paediatric competency framework

3 DELIVERY OF THE BUSINESS CASE

2.6. Paediatric Pre- Referral Guidelines

In February 2011 the paediatric referral guidelines document was produced from an amalgamation of the PBC GP referral guidelines, information available from the Map of Medicine, occasional other sources such as NICE and the Fit for the Future paediatric pathways. Where there was conflicting advice, Map of Medicine and NICE have been given precedence. The Guidelines have been developed by Drs Alistair Pullan and Ruth Chambers; then further revised and finalised in line with comments and suggestions from a range of paediatric consultants and GPs across Stoke and North Staffordshire. The Guidelines are to assist GPs in their decisions as whether or not to refer to outpatients, and in their pre referral work up of children and young people.

The document can only ever be viewed as guidelines and never as a definitive statement of absolutes. Local clinicians' experience as GPs and paediatricians have informed decisions as what to include, what to exclude, how to adapt and occasionally supplement the text. By definition there is a degree of subjectivity involved. Continuing feedback will be required in order to update, modify and validate the guidelines. Trying to cover paediatric practice in one set of guidelines is a vast undertaking, not only do almost all areas of adult clinical practice need to be covered, but there are also several paediatric specific areas that require attention. In addition to this, the correct guideline for a condition may vary depending on whether the patient is a neonate, a young child, an older child or a teenager or child with special needs/complex medical history.

Exclusions from the Guidelines relate to conditions that obviously would require involvement of Tier 3 and 4 services at the onset or where initial management has clear, well recognised protocols e.g. jaundice. Similarly 'adult' problems, for example gynaecological matters, are well covered in the general PCT/GPCC adult referral guidelines and would not benefit from re-iteration in the paediatric referral guidelines. Also excluded are conditions where it would be exceptionally rare in the paediatric age group to present to a GP, such as angina. The Guidelines were disseminated to all GPs in Stoke on Trent and North Staffordshire in April 2011 by the lead GPs, and will be updated on an annual basis.

See Appendix 3 for Paediatric Pre-Referral Trial Guidelines (April 2011).

2.7. Paediatric Urgent Care Referral Guidelines

The Paediatric Urgent Care Referral Guidelines have been developed by a number of local GPs and paediatric consultants using NICE guidelines, Map of Medicine, Fit for the Future paediatric pathways and urgent care referral guidelines from other areas; they have been further revised and finalised in line with comments and suggestions from a range of paediatric consultants and GPs across Stoke and North Staffordshire.

At the time of writing this report not all the guidelines have been completed and work is underway to finalise the guidelines for key conditions identified in the business case.

Completed guidelines to April 2011 include clinical assessment tools for:

- Babies/children under 2 years with suspected bronchiolitis
- Febrile child 0-5 years
- Suspected gastro-enteritis 0-12 years
- Acute abdominal pain under 12 years

See Appendix 2 for Paediatric Urgent Care Referral Guidelines to April 2011

2.8. Pre-course Competence Assessment

GPs, nurses, and doctors working in GP OOH services, were invited to self rate their competence and confidence in relation to the care of children's and young people's health & wellbeing versus core competences, and identify learning and service needs.

In the case of GPs, this took the form of a reflective challenge. The reflective challenge exercise, including relevant scenarios, had been developed by the lead GP and business manager, and then shared with consultant paediatricians for comment. GPs were asked to consider ten scenarios relating to different babies and children; then asked to self rate themselves in relation to how confident they were to manage each child, and to know whether the child should be referred to outpatients or admitted to hospital. The only person who was asked to judge the responses was the GP himself or herself.

Then they were asked to complete one reflective review of a recent case where a child registered in their practice was referred to outpatients or admitted to hospital. GPs were asked to assess, in retrospect, whether there was anything they, or others in the practice (or Out of Hours) could have done for the child at a previous consultation, that could have prevented their deterioration or have meant that the practice team managed the health problem without the need for referral.

The purpose of the exercise was to ask GPs to reflect whether they were as competent and confident as they should be when managing children's acute and every day health problems; especially when the diagnosis is not certain and/or it is not clear whether the child needs admission to hospital or outpatient referral.

They were also asked to summarise their learning needs for each of the ten scenarios and complete at least one review of an outpatient referral or hospital admission and send in the completed documents for analysis. In doing so, GPs were able to claim one hour of funded time.

2.9. Findings from GPs competence self assessment

The self assessment reflection was widely publicised through GP networks, meetings etc. and hard copies of the self reflection documents were handed out at events throughout January 2011. Electronic copies of the documents were also sent to all practices. As GPs in North

Staffordshire joined the initiative later, the uptake of the self assessment documentation was not as great.

It is difficult to identify how many GPs undertook the both stages of the self assessment, *i.e.* a) the competence rating via scenarios, and b) the review of a child patient recently referred to secondary care. From discussions with GPs who attended the Master-classes, some said that they had completed the entire self assessment but had not wanted to return the documentation for analysis. It appeared that a small number of GPs only completed the scenario stage of self assessment. Many of the GPs who attended the Master-classes said that they had not undertaken any stages of the competence self assessment. 14 GPs completed all stages of the self assessment and returned their responses for analysis.

GP evaluation of the pre-course assessment:

Module	<i>Extremely useful</i>	<i>Very useful</i>	<i>Useful</i>	<i>A bit useful</i>	<i>Not Useful</i>
Pre-course assessment	15	21	12	3	2

Some comments from the self assessment

- I believe that the planned workshops are valuable. I note that I cannot remember when I was last offered one locally, aside from attending the GP Update Course, BMA Masterclasses and specific learning sessions organised through NSUC.
- Whilst I feel relatively confident and competent in relation to managing children with acute ill health, I recognise areas of need in learning in relation to everyday health problems. This is probably reflective of my current working practice in out of hours. I am aware that it is important to update myself in this area and this pre-course assessment has highlighted this for me
- Any suggestions as to how we can help GPs upskill in relation to paediatrics other than planned workshops?
- I think that local guidelines, especially in relation to prescribing and referrals are helpful.
- I understand the implications of the baby's weight dropping below the third percentile. However, this exercise has highlighted that this scenario is not one that I am routinely presented with, working out of hours. I feel out of touch date in relation to assessing failure to thrive and criteria for referral. I feel the need to update my knowledge in this area.

Some of the identified learning needs from completing the pre-course assessment

- Familiarise myself with current NICE guidance and local policies.
- Child Protection needs updating.
- The subject of non-febrile fits is clearly an area of poor understanding.
- I feel confident in assessing ear pain in a febrile child. I am frequently presented with a "demand" for antibiotics in the out of hours setting in children with ear ache. I am clear

about not issuing antibiotics inappropriately although I often experience resistance. I am aware that parents often come with an expectation of antibiotics and if they have been prescribed on a previous consultation, this reinforces this expectation. Although conversations around this issue are often challenging, I am clear about when to prescribe. I recognise a need for consistency in practice. I recognise a need to update my knowledge in relation to referral for a hearing test in a child with recurrent ear infections. I am clear about explaining in an acute setting where a child has earache and the parent is reporting hearing loss, that time is needed to await natural restoration of hearing. However, I am unclear of specific local guidelines, I am not sure when it is appropriate to arrange a hearing test in a child with recurrent ear infections. I am not sure where to refer them for this.

- Go over general assessment of a baby's nutritional status and refresh clinical pointers suggesting that the baby is failing to thrive. Learn about Edinburgh Depression Scale and refresh diagnosis of Post Natal Depression and /or Baby Blues. Refresh when social services need to be alerted if one thinks the baby is at risk due to mental health of mother. Refresh what other agencies aside from HV and Social services need to be involved.

2.10. Nurse Participation

The pre-course assessment of competence and confidence of nurse practitioners and practice nurses in the clinical management of children with acute health problems was assessed through two focus groups, rather than the completion of self assessment questionnaires.

Nurse Focus Group 1

Up skilling in Paediatrics – Everyday Illness Tuesday 25th January 2011 3-5 pm

Kellie Johnson, Primary Care Nurse Lead, Dr Alistair Pullan, GP Furlong Medical Centre and seven nurses were present, including two nurse prescribers and one nurse practitioner.

All nurses present work in general practice with varying levels of experience. They mainly came into contact with children through:

- Immunisation
- Travel arrangements
- Asthma
- General walk in patients – “anything”

Possible presentations included:

- Flu like symptoms
- Pyrexia
- Cuts, grazes, stings, minor burns
- Minor illness, viral illness
- ENT
- Rashes
- Hay fever
- Constipation
- Feeding issues
- Weight management
- Dressings
- Suture removal
- Head injury
- Smoking cessation
- Alcohol intervention (age dependent)

What the nurses would like to see in the master classes included:

- Red flags
- Acute illness – top tips approach and when to refer
- Gastroenteritis
- Minor ailments
- Skin
- ENT
- Referral – who to contact?
- Weight management
- Pyrexia and information post immunisations
- Paediatric life support
- Distraction therapy
- Child consent and children’s rights
- CAMHS team input

It was noted that nurses are sometimes in surgery when there is no GP cover. Not all nurses have any formalised paediatric training post qualifying. Nurses reported that they work within their level of competency based on their background experience.

Question raised were whether:

- (i) there needs to be standardisation of the practice nurse and nurse practitioner role in relation to paediatric assessment?
- (ii) all practice nurses looking after children should have access to paediatric training courses?

Nurse Focus Group 2

Up skilling in Paediatrics – Urgent Care Thursday 27 January 7 p.m. – 9 p.m.

A second focus group was held with Nurse Practitioners and OOHs nurses to discuss the Up-skilling of GPs and Nurses project currently taking place in Stoke and North Staffordshire. Dr Pullan, Kellie Johnson, and Jenny Hawkes were also in attendance. The various elements of the project were described and the Master-classes discussed.

Nurse practitioners and OOHs nurses identified training, which they felt could enhance their competence and confidence in managing children’s acute health problems as follows:

- Fever management/febrile child
- Wheezy child
- Rashes and skin problems
- Abdominal pain
- Constipation
- Distraction techniques
- Communication
- Parent Education
- APLS

A consistent approach to clinical assessment, training methods and materials/equipment re managing children’s acute health problems should be adopted across all practices, walk in centres, OOHs, minor injuries units, and with all groups of nurses who see a large percentages of children, this should include health visitors and school nurses. There should also be consistency with acute nursing paediatric care in hospital - both in-patient and out-patient. There should also be clear governance in practice across Stoke and North Staffs in relation to children’s care.

Whilst all nurses have regular training and updating in safeguarding matters some nurses have had little experience or training relating to managing children's health problems. Many practice nurses see very few children in the course of their work and the Up-skilling approach might be more relevant to those nurses who see higher numbers of children. It was suggested that the Up-skilling training could be cascaded from the nurses who have received the training to those nurses who have little involvement with child health.

All present felt that Health Visitors should have a greater input into clinical assessment, and that their knowledge of the family and locality is very important. GPs would prefer to have HVs attached to GP practices as they can help GPs with diagnosis. It was reported that Moorlands/Cheadle Practice now have GP attached HVs again. It was also reported that Melissa Hubbard is already undertaking Master-classes for some practices.

Parent support and education is hugely important and there should be a greater degree of consistency in the verbal and written information given to parents. The nurses felt that is important to liaise with pharmacists who are managing minor illnesses in children and giving out condition specific information. The group described a range of information leaflets that they give to parents, some GPs have paper leaflets on various conditions from various sources, some have electronic information leaflets that they download and give to parents when needed. The OOHs service has a range of their own information leaflets to give to parents. Wolstanton Medical Centre has produced a general leaflet on childhood illness. UHNS also have a range of leaflets that they give out. Some of the leaflets need updating and proof reading. The group felt that it would be good to get some consistency about the content so that the same messages are being given to parents. There was also some discussion about the use of technology, such as mobile phones, to give out information.

The group were asked if there was anything more they thought nurses could do in managing children's acute and everyday health problems. This is their list:

- Asthma from 8+ (Recognise symptoms, develop standardised personal asthma plans)
- Audiometry - hearing tests
- Spirometry training
- More minor stuff
- Education of parents and carers
- New parents classes on managing minor illness
- Removal of sutures
- Burns and dressings

OOHs nurses use a triage assessment phone system when undertaking telephone triage. However, nurses perceived that there appears to be limited complementary training, assessment and recording systems for OOHs call handlers who take calls directly from the public.

Additional comments on nurse input to clinical management of children with acute health problems and involvement of parents/carers were made by a consultant paediatrician.

"I think we should consider a model where the practice nurses form the core of the skill set for managing basic paediatric asthma care with input from general practitioners and hospital

specialists as the care level steps up. I would therefore weight the Up-skilling process with this in mind.

I also think that we should consider education and involvement of parents and families and perhaps school nurses and health visitors in the process. We need them to understand how proactive management (reducing exposure to environmental tobacco smoke etc) could reduce the likelihood of repeated acute deterioration. I know this is a tall order but we need to figure out how to get the families and children to take an active part in managing their condition"

See Section 5 paragraph 3 for acknowledgements in relation to the development of the pre-course assessments, guidelines and the Master-classes.

3. MASTER-CLASSES

3.1.Aims of Master-classes

Six Master-classes run by paediatric consultants were held over a four week period to:

- Increase GPs' ability in managing acute (primary care) paediatric conditions
- Increase GPs' confidence that they have managed the condition in such a way as to provide robust defence against any future mishap or unpredicted deterioration in child's condition (avoiding 'defensive medicine' admissions to hospital)
- Increase the ability of the GP to inspire confidence in patient/carer that the child's condition is being safely and effectively managed, minimising inappropriate seeking of second opinion at A&E
- to re-establish clinical dialogue between primary and secondary care which appears to have disappeared over the past few years
- to introduce participants to the Hospital at Home scheme via a short presentation

Initially the Master-classes were intended for GPs as Nurse Master-classes were to be run later in the year, but because of the interest expressed, a number of primary care nurses also attended the GP Master-classes. Topics included the top ten conditions identified in the needs assessment, usually three or four main topics were presented concurrently over a two and a half hour period.

Within the GP target group a total of 114 (40%) GPs, 13 Nurse Practitioners and 9 Community Nurses took part in the Master-classes as follows:

Attendance at Master-Classes

Date	GPs	Nurse Practitioners	Community Nurses
24/02/2011	21		
02/03/2011	17	1	4
15/03/2011	15	3	1
22/03/2011	33	2	3
29/03/2011	17	5	
31/03/2011	6	2	1

The Master-classes were facilitated by a lead GP and the PiP consultant, with topic areas presented by paediatric consultants from University Hospital North Staffordshire.

Topics included:

- Respiratory problems in children
- Failure to thrive
- Gastroenteritis
- Abdominal pain/constipation
- Febrile fits/seizure
- Fits, faints and funny turns
- Mixture of acute admissions

Each Master-class included two brief plenary sessions setting out the purpose of the Upskilling initiative, an update on the Hospital at Home pilot at the beginning, with an evaluation session at the end which included the distribution of CPD certificates. Participants were split into groups for the individual Master-classes and the topic specific presentations were run concurrently with groups moving around accordingly, group sizes varied from 7 to 12. Some participants returned to subsequent Master-classes to pick up on additional topic areas that they had missed.

The format of each Master-class was informal with participants encouraged to ask question throughout; within some topic areas they were asked what they wanted to know and which issues they wanted to cover. It was made clear that the consultants were not there to teach, rather to discuss jointly how to manage risk and everyone has differing views, including parents.

3.2. Evaluation of Master-classes

At the end of each Master-class, participants were asked to rate the individual sessions and overall organisation by means of tick boxes.

Rating Summary

	Participant's Responses					
	Number					
	<i>Extremely useful</i>	<i>Very useful</i>	<i>Useful</i>	<i>A bit useful</i>	<i>Not Useful</i>	<i>Blank</i>
Module						
Pre-course assessment	15	21	12	3	2	33
Paediatric guidelines	22	44	10	1	0	9
Hospital at home	25	41	16	0	0	4
Febrile fit/seizure	32	41	9	1	0	3
Respiratory (bronchiolitis, asthma)	38	29	3	0	0	16
Chronic cough	32	28	5	1	0	20
Epilepsy/faint	32	34	8	1	0	11
Overall content	29	45	2	1	0	9
Learning new skills	26	33	9	1	1	16
Knowledge of subject	58	25	2	0	0	1
Presentation skills	47	35	3	0	0	1
Giving feedback/answering questions	54	29	2	0	0	1
Overall performance	53	31	1	0	0	1
Standard of venue	31	36	15	1	0	3
Access to venue	31	38	10	5	0	2
Catering	21	25	21	12	3	4
Pre-course administration	26	27	22	1	0	10

Participants were also asked write down what they found useful, what other upskilling they would like, and give evidence of how any learning from the sessions would be applied.

In total, 34 % of participants found the overall contents of the Master-classes extremely useful, with 52 % finding them very useful. A detailed analysis of the evaluation responses can be found at Appendix 1.

3.3. Evaluation Responses Summary

Participants reported that the entire series of Master-classes were very informative. The speakers were excellent; and the content and delivery was very relevant to day-to-day GP practice. Some GPs and nurses who attended the earlier Master-classes came to subsequent classes to pick up on sessions that they had missed or simply to listen again to the discussions.

The sessions were delivered in small informal groups which encouraged discussion and questions. Participants found the relaxed atmosphere and interactive format helpful to learning. It was good for primary care clinicians to meet local consultants and have the opportunity to see each other face to face.

The Master-classes covered a relevant selection of important everyday topics, which included the most common conditions. A wide range of learning points was identified by both GP and Nurse participants. A more detailed summary of topics covered and the learning points can be found in Appendix 1.

Key learning points included:

- Management and treatment of specific conditions
- How to recognize signs and symptoms
- When and when not to use medication/doses e.g. antibiotics, steroids, movicol, salbutamol
- Application of NICE and local guidelines
- Protocols e.g. rehydration protocol (use of flat "Coke" no longer in vogue)
- When to admit, when to avoid, when to refer for further investigations
- Risk Assessment
- Red flags
- Management and treatment in the community - what further action would be needed
- How to educate and reassure parents
- Practical tips such as use of nasal aspiration, use of pulse oximeter monitors for babies and children in practices
- New services available such as hospital at home, murmur clinic

Participants identified other topics which would be helpful in future Up-skilling events as follows:

- Child protection - NAI
- Common paediatric orthopaedic problems
- Diabetes
- Dermatology – eczema, rashes
- ENT, e.g. otitis media
- Neonatal baby checks
- Adolescent mental health, Psychiatry
- Regular up-dating and refresher courses regular including updates on new guidelines and new services
- Children's allergies
- Paediatric life support
- Ophthalmology
- Examination skills workshop
- Neck lumps
- Umbilical hernias

Participants identified what could be done in the future to improve the Master-classes as follows:

- Nothing x 4
- Need longer Masterclasses and individual sessions more time x 22
- Better time - in the evening after 7 p.m.
- Can the start time be earlier e.g. 2 p.m. ?
- More time for questions
- Allow more time for different questions regarding topics not necessarily included here
- Larger sessions
- Run more sessions in future
- Repeat this format at least once a year
- Hold regular meetings

3.4. Consultant Feedback

The consultants leading the Master-classes reported that there was an excellent level of engagement, with participants showing interest and asking appropriate questions. The attitude was positive and there was a willingness to exchange ideas. They found that it was very helpful to meet GPs and Nurses face to face, to know who they were, where they were from and to share their concerns. It was useful to have an open discussion, this was better than didactic lectures. Consultants felt that this process will be more effective if it is repeated at regular intervals, and that GPs could bring difficult cases they came across to discuss with the consultants.

There may be a need to address the different learning needs of GPs and Nurses, with GPs needing more confidence in diagnostic and management planning, whilst Nurses (unless trained in assessment) need to be able to implement management plans.

Some common themes in group discussions related to:

- How to retain the clinical management of a sick child in the community who is seen in practice in the early evening, at OOHs, or on a Friday? The imminent start-up of the Hospital at Home Service was seen as an opportunity for nurses to provide short term assessment, treatment, and give reassurance to parents and GPs.

- How to address parental anxiety. There were a number of questions in several sessions that related to working with parents to convince them that observation at home was the best choice. Some GPs feel pressurised by the family to refer to secondary care
- Advice sought and given on drugs and their administration.
- Advice on up-dates in treatments, techniques and latest guidelines

There was a strong feeling that the Master-classes had been well received and should make a difference by increasing GPs and Nurses confidence. They will make a difference by allowing dialogue and relationships to build between primary and secondary clinicians, this has to be the foundation on which integrated care can be built. It was felt that there will be more use of the Hospital at Home service. In some specialties, however, more training will be required and a longer time may be needed to build up and maintain GPs confidence.

In particular reference to OOH doctors, some needed to understand what happens when a child is referred into hospital. It was suggested that arrangements could be made for interested OOHs doctors to spend some time on the paediatric ward.

Whilst some of the consultants liked the way the Master-class sessions were run concurrently with each session lasting approximately half an hour covering several topics, others felt that it would have been better to run one topic for the entire Master-class for a longer time period and a larger class *e.g.* 45 minutes for 15 people.

Service developments following on from the Master-classes could include a joint project between primary and secondary care to work out specific pathways which could be more effective than a generic programme.

A side effect of the Master-classes has already resulted in an increase in the number of telephone calls from GPs who attended the Master-classes to consultants to ask for advice.

As for the future, this series of Master-classes was viewed as just the beginning and that there is a willingness on both sides to get involved.

4. CONCLUSION and RECOMMENDATIONS

4.1. Conclusion

The initiative in Stoke and North Staffordshire to Up-skill GPs and Nurses in the clinical management of children with acute health problems has been assessed as highly successful, more worthwhile than initially anticipated and has resulted in a wide range of spin offs. A high percentage of participants found the different elements of the initiative either extremely useful or very useful.

The Business Case was well developed and had the support of primary care, secondary care and commissioners. There was strong drive and commitment from the GP and nurse lead, the PCT programme manager for Acute Children's services and supporting senior managers, which ensured that the project aims were addressed in a timely and thorough way. There was widespread input from individual senior GPs, nurse leads and from the paediatric consultants at University Hospital North Staffordshire.

There was a high level of audit, preparation and work undertaken in the planning and development of the initiative over a six month period, which ensured that all involved were receptive to the up-skilling process. Consultants were willing to become engaged in the broader programme, providing advice and support for elements from the outset, e.g. preparation of the scenarios and guidelines. This ensured consistency, and knowledge of what would be required from trainers in delivering the Master-classes.

Participants were also primed about management of children with acute health problems through pre-reading and preparation work prior to the Master-classes e.g. self assessment questionnaires, Nurse focus group meetings.

The project was managed by Partners in Paediatrics through a small steering group, meeting monthly over six months. Clinical matters were addressed by a separate clinical oversight group which met twice over the period of the project. Both sets of meetings were well attended and clinical involvement brought a high degree of clinical rigour to the development of the overall initiative, the Master-classes, guidelines, course handouts and literature.

The entire project was ably supported by the PBC manager, who ensured that the organization of the Master-classes ran efficiently and that participants had appropriate handouts, literature and necessary attendance certificates.

5.2 Recommendations

1. Tangible outcomes of the strategic effectiveness of the up-skilling GPs initiative are assessed against the objectives set out in the business case e.g. the evaluation of the effectiveness of the master-classes against the number of inappropriate referrals into hospital.
2. The pre-referral trial guidelines and the urgent care guidelines are jointly reviewed and updated on an ongoing basis between primary-care and secondary-care clinicians.
3. The urgent care guidelines are extended to cover the key conditions set out in the Business Case, i.e. viral infections, minor neonatal diagnoses.

4. There should be an ongoing up-skilling programme for GPs and nurses in the clinical management of children with acute health problems, including master-classes.
5. The funding model needs to be kept under review in order to optimize the sustainability of the GP and nurse up-skilling programme.
6. Literature and handouts provided at Master-classes could be designed in such a way that they enable participants to cascade the learning points to members of their own practice/team.
7. Consideration is given to jointly producing a Paediatric Bulletin between secondary and primary care which provides regular up-dates on service developments, current best practice, top tips and issues of the moment.
8. Localities should be encouraged to consider opportunities to improve parent and carer education, including regular review of all information given to parents to ensure consistency across the Localities and ensure current best practice is being followed.
9. Consideration is given to having further copies of the Common Childhood Illness Guide produced and made available to all doctors and pharmacists across Stoke-on-Trent and North Staffordshire, for distribution to anxious parents when they present at the practice or come to the pharmacy for advice.
10. Community providers should be encouraged to up-skill their staff in the management of children with acute health problems, e.g. Health visitors and school nurses.
11. There should be effective dissemination of the GP pre-referral trial guidelines and urgent care guidelines - with proactive reminders to GPs to use them; and monitoring to check on GPs' adherence.
12. Share our learning and development approach in the upskilling of GPs and primary care nurses with others across the NHS. Make the materials available to anyone working in or for the NHS on the PIP website and GPCC portfolio with a hyperlink from the PCT website.

5.3 Acknowledgements to:

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Jenny Hawkes, PiP Consultant/Project Manager,
Julia Greensall, Network Development Manager.

The PCT commissioners wish to thank PIP and in particular Jenny Hawkes for their unwavering support which led to a really successful project and meaningful clinical interaction between primary & secondary care.

Appendix 1

Responses from Participants Attending on 24th February, 2011

<i>Module</i>	Number					
	<i>Extremely useful</i>	<i>Very useful</i>	<i>Useful</i>	<i>A bit useful</i>	<i>Not Useful</i>	<i>Blank</i>
Pre-course assessment	6	7	1	1	1	4
Paediatric guidelines	4	12	3	0	0	1
Hospital at home	4	9	7	0	0	0
Febrile fit/seizure	7	10	2	1	0	0
Respiratory (bronchiolitis, asthma)	13	7	0	0	0	0
Chronic cough	10	10	0	0	0	0
Epilepsy/faint	7	11	0	1	0	1
Overall content	6	13	0	1	0	0
Learning new skills	5	10	1	0	1	3
Knowledge of subject	12	8	0	0	0	0
Presentation skills	10	10	0	0	0	0
Giving feedback/answering questions	10	10	0	0	0	0
Overall performance	9	11	0	0	0	0
Standard of venue	5	13	1	0	0	1
Access to venue	5	14	0	0	0	1
Catering	5	8	3	4	0	0
Pre-course administration	7	6	6	0	0	1

Responses from Participants Attending on 15th March, 2011

<i>Module</i>	Number					
	<i>Extremely useful</i>	<i>Very useful</i>	<i>Useful</i>	<i>A bit useful</i>	<i>Not Useful</i>	<i>Blank</i>
Pre-course assessment	3	3	5	0	0	5
Paediatric guidelines	6	6	2	1	0	1
Hospital at home	8	4	3	0	0	1
Febrile fit/seizure	7	5	3	0	0	1
Respiratory (bronchiolitis, asthma)	8	7	0	0	0	1
Chronic cough	7	6	1	0	0	2
Epilepsy/faint	6	2	3	0	0	5
Overall content	6	7	1	0	0	2
Learning new skills	5	6	1	1	0	3
Knowledge of subject	9	5	2	0	0	0
Presentation skills	6	8	2	0	0	0
Giving feedback/answering questions	10	5	1	0	0	0
Overall performance	9	7	0	0	0	0
Standard of venue	6	7	2	1	0	0
Access to venue	6	7	2	1	0	0
Catering	5	4	5	0	2	0
Pre-course administration	5	4	4	0	0	3

Appendix 1 Contd.

Responses from Participants Attending on 22nd March, 2011

<i>Module</i>	Number					
	<i>Extremely useful</i>	<i>Very useful</i>	<i>Useful</i>	<i>A bit useful</i>	<i>Not Useful</i>	<i>Blank</i>
Pre-course assessment	5	5	4	0	1	11
Paediatric guidelines	7	13	3	0	0	3
Hospital at home	6	15	2	0	0	3
Febrile fit/seizure	8	15	2	0	0	1
Respiratory (bronchiolitis, asthma)	13	12	1	0	0	0
Chronic cough	13	9	3	1	0	0
Epilepsy/faint	10	11	3	0	0	2
Overall content	9	13	0	0	0	4
Learning new skills	10	8	5	0	0	3
Knowledge of subject	17	9	0	0	0	0
Presentation skills	15	10	1	0	0	0
Giving feedback/answering questions	15	10	1	0	0	0
Overall performance	16	9	1	0	0	0
Standard of venue	7	10	8	0	0	1
Access to venue	8	11	4	3	0	0
Catering	4	9	7	2	1	3
Pre-course administration	5	11	7	1	0	2

Responses from Participants Attending on 29th March, 2011

<i>Module</i>	Number					
	<i>Extremely useful</i>	<i>Very useful</i>	<i>Useful</i>	<i>A bit useful</i>	<i>Not Useful</i>	<i>Blank</i>
Pre-course assessment	1	3	1	2	0	10
Paediatric guidelines	3	10	1	0	0	3
Hospital at home	4	11	2	0	0	0
Febrile fit/seizure	7	7	2	0	0	1
Respiratory (bronchiolitis, asthma)	4	3	2	0	0	8
Chronic cough	2	3	1	0	0	11
Epilepsy/faint	6	7	2	0	0	2
Overall content	5	8	1	0	0	3
Learning new skills	4	7	1	0	0	5
Knowledge of subject	13	3	0	0	0	1
Presentation skills	11	5	0	0	0	1
Giving feedback/answering questions	12	4	0	0	0	1
Overall performance	12	4	0	0	0	1
Standard of venue	6	6	4	0	0	1
Access to venue	6	6	4	0	0	1
Catering	1	4	6	5	0	1
Pre-course administration	4	5	5	0	0	3

Appendix 1 Contd.

Responses from Participants Attending on 31st March, 2011

<i>Module</i>	Number					
	<i>Extremely useful</i>	<i>Very useful</i>	<i>Useful</i>	<i>A bit useful</i>	<i>Not Useful</i>	<i>Blank</i>
Pre-course assessment	0	3	1	0	0	3
Paediatric guidelines	2	3	1	0	0	1
Hospital at home	3	2	2	0	0	0
Febrile fit/seizure	3	4	0	0	0	0
Respiratory (bronchiolitis, asthma)	0	0	0	0	0	7
Chronic cough	0	0	0	0	0	7
Epilepsy/faint	3	3	0	0	0	1
Overall content	3	4	0	0	0	0
Learning new skills	2	2	1	0	0	2
Knowledge of subject	7	0	0	0	0	0
Presentation skills	5	2	0	0	0	0
Giving feedback/answering questions	7	0	0	0	0	0
Overall performance	7	0	0	0	0	0
Standard of venue	7	0	0	0	0	0
Access to venue	6	0	0	1	0	0
Catering	6	0	0	1	0	0
Pre-course administration	5	1	0	0	0	1

No questionnaire forms were distributed following the Masterclass on the 2nd March.

Appendix 1

Contd.

Free text responses from participants attending Master-classes

A) What was useful/best aspects of the training?

Everything, all of it, all very relevant, all aspects have been useful x 10

Excellent sessions, content and delivery - very useful x 4

Excellent speakers, really enjoyed this up-date

Up-to-date information

Entire course very informative

Lots, especially parental aspects

Gained knowledge in all areas discussed. Excellent

Very relevant to, and useful for day-to-day GP practice x 5

Good choice of clinical scenarios relevant to GPs

So pertinent in our daily practice - thanks

Very inclusive GP-based training

Refreshing the knowledge

Very informative

Recognising signs and symptoms and what further actions will be needed

Knowing where and when to refer x 2

Discussing the sort of cases that require admission

To have time to look at what one does

To get one's knowledge questioned

Gained confidence in managing patients at home

Q & A sessions - easy to ask questions x 4

Relaxed informal atmosphere x 2

Small groups and group discussions was very helpful – better interactions x 8

Small groups - open forum - not fixed agenda x 4

Interactive format for sessions x 2

Excellent discussion of commonly-presenting conditions in general practice

Having a consultant on hand and be able to meet local consultants x 5

Case discussions by consultants x 2

To be able to speak directly to consultants with individual questions

To have the local consultants and put a face to a name x 2

Opportunity for primary and secondary care interfacing

Presentations and ease of discussion x 5

Presentations were excellent x 6

No Powerpoint!

The slides - excellent

Practical points and Top tips by consultants x 3

Excellent tips for managing acute illness

Useful advice on management in the community

Practical, down to earth, real-life teaching

Good selection of important everyday topics x 5

Round table discussion on lots of common topics x2

Recognising signs and symptoms and what further actions will be needed

Knowing where and when to refer children x 3

Appendix 1

Contd.

New services, clinics and new ways of managing the commonest paediatric problems encountered in primary care
Better management of common conditions
Try to manage in the community if no red flag symptoms x 3
How to recognise more common conditions in the community
Referral protocols and limitations from GPs
Reinforcement of early knowledge
Can act with confidence
Lots - Referral pathways for certain conditions and some initial treatments
Have learnt a few new things about management of problems encountered in practice
Up-date for all conditions
Up to date NICE guidelines x 3
Referrals to hospital, when and when not to refer a child x 2
New heart murmur clinic (paeds) x 6

In relation to Guidelines and Handouts

Brilliant referral guidelines, protocols x 3
Good guidelines x 5
Good points relevant to guidelines
Up to date best practice guidance
Useful information re. map of medicine
Good handouts x 3

In relation to Hospital at Home

Awareness of Hospital at Home and how to refer appropriately x 24
Hospital at home service about to start
Useful information on access and referral criteria to hospital at home x 8
Where to access hospital at Home
Role of Hospital at Home
Use of Hospital at Home x 6
Try to reduce referrals and substitute Hospital at Home
Hospital at home referral guidelines
Availability of hospital at home service

B) What main learning points will you take from the course?

Respiratory

Respiratory session very interesting and thought-provoking x 7
Respiratory, good up-date, almost every aspect was discussed with lots of up-to-date practice x 5
Management, explanation and risk assessment of acute respiratory conditions x 11
Recognise and learning more about bronchiolitis and assess risk x 3
Learning more about wheeze in infants x2
Use of O₂ monitors in children for bronchiolitis
O₂ sat 92% threshold for referral
Nasal aspiration

Appendix 1

Contd.

Use of steroids in bronchiolitis
Update in treatment of croup x 2
Use of Dexamethasone in croup x 3
Management of croup/bronchiolitis x 4
About treatment of croup, bronchiolitis, asthma
Stridor screening question
Assess O2 concentration in stridor case
Treatment of stridor
Use steroids in stridor
Practice protocol for asthma and croup exacerbation
Asthma and chronic cough management
Upgrades on the subjects
What to do re. chronic cough x 2
Asthma versus viral induced cough
Steroid responses to asthma/viral wheeze
Steroids in croup/asthma x 4
Use of dexamethasone in croup x 4
Use of steroids or dexamethasone
Help with medical conditions like asthma
Re-assess every 15-30 minutes in asthma
Respiratory conditions - when to admit/refer for further investigations
Red flag signs in respiratory conditions x 5

Practical tips x 4

- Use of Nasal aspirator in surgery for blocked nose x 5
- Use of O2 saturation monitors for babies and children x 8
- Consider oxymeter/pulse monitor in children for practice x 3

Fits faints and funny turns

Management of fits/faints/epilepsy x 5
Distinguishing faints and seizures
Febrile guidelines
Management of epilepsy, febrile convulsions x 2
Paediatric guidelines on febrile convulsions
When to refer febrile convulsions
Seizures - useful to learn about
Take extensive history in seizures
Refer syncopal episodes in young children
Learnt new things and up-dated in neurology
Supporting families with fits and seizures
Explanation of common conditions e.g. febrile convulsion
Diagnostics and when to refer faints & convulsions
Management of seizures, syncope x 3
Syncope - ECG for long QTC x 2
How to differentiate between parasomnias and seizures x 2
How to differentiate between seizure, syncope, fits x 5

Appendix 1

Contd.

Safety of sleepwalking

Take detailed history, history is most important x 2

Several new up-grades on child seizures

Differentiation between seizure/breath holding/syncope

Features differentiating epilepsy from syncope, whether to refer first fit x 5

Febrile convulsion and seizure, epilepsy - when to admit/refer for further investigations

Referral for fits and febrile seizure, when to admit, when to avoid x 3

Epilepsy, what should and should not trigger a referral

EEG only done when sure of epilepsy diagnosis

Confidence in Febrile fits

Medication for Febrile seizures

Red Flags

Investigations can be useful

Use of nurse investigation team - better than paediatricians

Practical tips for faints and funny turns x 4

- Ask parents to bring videos of funny turns

- Febrile convulsion - no sponging x 3

- No evidence that keeping temperature down stops febrile convulsion

Failure to thrive

Management of failure to thrive x 2

Failure to thrive and when to worry x 4

Lots of failure to thrive have no specific diagnosis

Failure to thrive include parental heights in referral form

Identify patients with failure to thrive, noting the role of sleep apnoea as a cause of failure to

Gastro

Managing of gastroenteritis and acute gastro-enterology conditions in children x 4

Referral criteria for acutely ill child – vomiting in primary care x 2

Think DKA in some cases of vomiting

Prevention of inappropriate admissions

How to refer appropriately

Much more confidence on management of reflux and constipation

Management and treatment of constipation x 2

Starting laxatives early in constipation x 2

Treatment of chronic constipation/milk intolerance/GDR

Milk intolerance

Consider hydrolysed formula in GOR if no response to thickener/antacids

Use of PPI in GOR

Use of specific medication and doses for D&V/constipation

Learning more about constipation x2

Use of Movicol, Movicol first line in constipation, Use Movicol instead of Lactulose x 4

Recognise red flags

D&V - warning flags are clearer

Refer if any red flags in D&V x 2

Appendix 1

Contd.

Red flag- bilious vomiting in young children
Red flags and NICE guidelines for diarrhoea
When to refer gastroenteritis case, refer to hospital at home unless red flag x 2
Diarrhoea in children and how to treat x 3
Care of children, diarrhoea and vomiting, GOR
Oral rehydration doses for children
Flat coke no longer in vogue x 4
Flat coke - no more for diarrhoea
FEVI more important than PEF
Treatment/signs and symptoms of dehydration
Hydration
Rehydration protocols x 3
New Nice Guidelines available for D&V x 6

C) What could be done to improve the course?

Nothing x 4

Need longer sessions/more time x 22

Better time - in the evening after 7 p.m.

Can the start time be e.g. 2 p.m. ?

More time for questions

Allow more time for questions re. topics not necessarily included here

Larger sessions

Run more sessions in future

To repeat this at least once a year

Regular meetings

Breathing and growths were not covered but there was no time!

More on respiratory and diarrhoea as they are so common

Helpful to have copies of guidelines on D & V, constipation, etc., as too small to read in handout

GP taking discussion off the subject to discuss specific cases very unhelpful as presentations relatively short

Appendix 1
Contd.

D) Would you recommend this course to a colleague?

Yes: 69
Blank: 13
Other: 1 - respiratory section yes

E) Common Childhood Illness booklet

- (a) Do you use the Common Childhood Illness booklet at your surgery?**
- (b) Do you use the Common Childhood Illness booklet in your consultations with parents?**
- (c) Do you think you are more likely to use the booklets in your future consultations?**

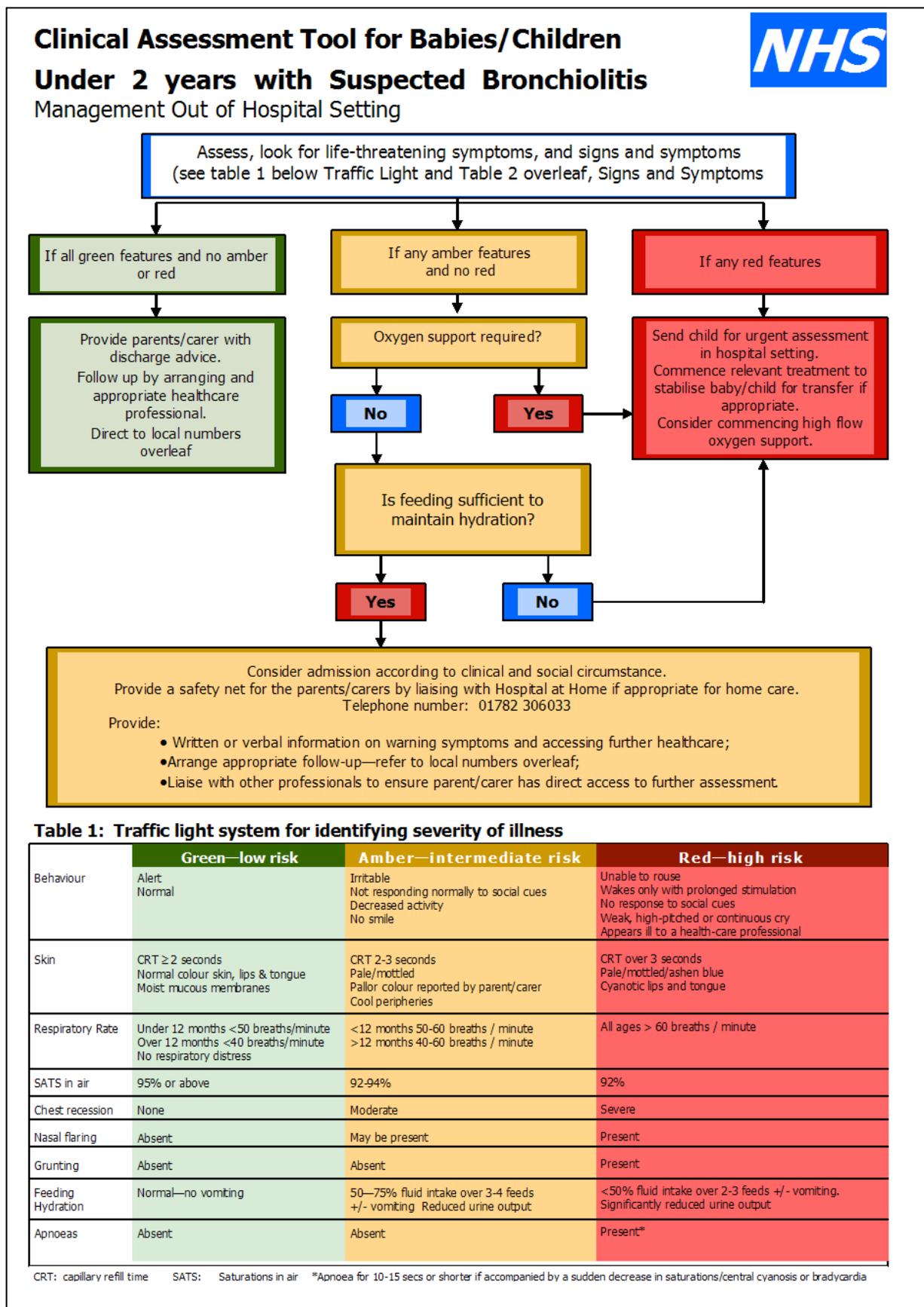
	(a)	(b)	(c)
No	28	35	1
Yes	27	15	48
Blank	4	9	10

What do you think are the benefits of the booklet?

- Better understanding for parents, it will be useful, especially young parents x 7
- Hopefully will enable parents to manage childhood illnesses more confidently
- Alleviates parental anxiety, patient educated to reduce anxiety x 2
- Don't know, no chance to look at it x 2
- Looks excellent x 2
- Practical, basic information and advice to parents
- Very useful and informative guidance x 5
- Written information always good for parents
- Reinforces GPs' message and advice x 2
- Standardised advice
- Confidence for parent
- Easy to understand, concise language, clear advice x 5
- More understanding and will reduce anxiety in minor symptoms in child
- Reiterates your advice and they are agreed by specialists
- Take home advice to try before GP appointment
- Helpful if parents read and return booklet and prior to calling/visits
- Very user friendly - enables self-empowerment
- Self-help and enables parents - BUT WE NEED MORE OF THEM!

Appendix 2

Final Draft - Urgent Care Guidelines



Appendix 2

Contd.

Clinical Assessment Tool for Babies/Children Under 2 years with Suspected Bronchilitis



Management Out of Hospital Setting

Healthcare professionals should be aware of the increased need for hospital admission in infants with the following:

- Pre-existing lung disease, congenital heart disease, neuro-muscular weakness, immune-incompetence.
- Age < 6 weeks (corrected)
- Prematurity
- Family anxiety
- Re-attendance
- Duration of illness is less than 3 days and Amber—may need to admit.

Table 2: Signs and Symptoms can include:

- Rhinorrhoea (runny nose)
- Cough
- Poor feeding
- Vomiting
- Pyrexia
- Respiratory distress
- Apnoea
- Inspiratory crackles +/- wheeze

Useful Telephone Numbers

GP (family to complete)	.....
HV (family to complete)	.....
North Staffs Urgent Care (Out of hours G.P.)	.....	01782 719100
Walk-in Centres:		
	Haywood	01782 581112
	Midway	01782 663757
	Leek Minor Injuries Unit	01538 487100
	Hanley Health Centre	03001236759
NHS Direct: Open 24 hrs.—7 days	.....	0845 454647
	Or www.nhsdirect.nhs.uk	

This guidance is written in the following context:

This assessment tool was arrived at after careful consideration of the evidence available, including, but not exclusively, NICE guidance and NHS evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Appendix 2 Contd.

Clinical Assessment Tool for the Febrile Child 0–5 Years



Management by a non-paediatric practitioner

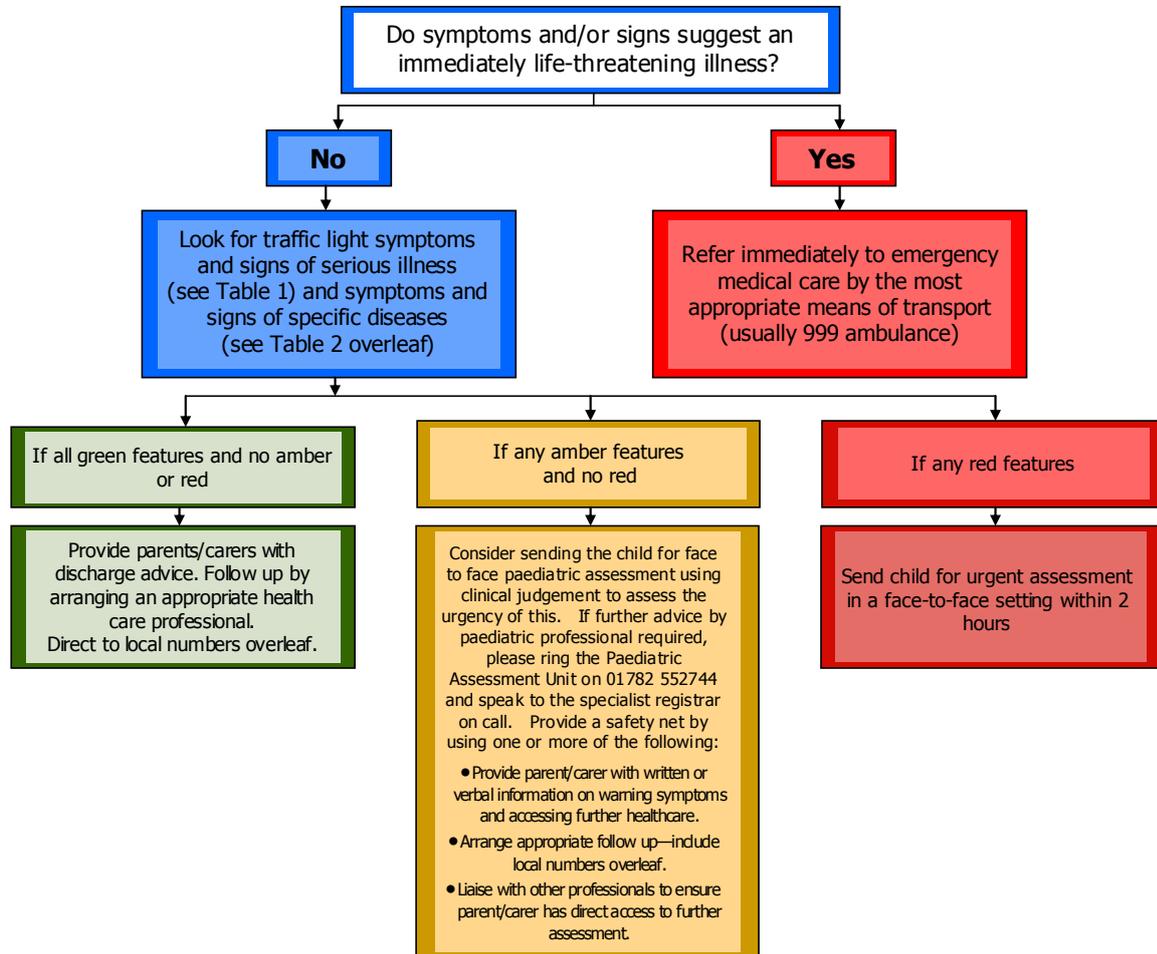


Table 1: Traffic light system for identifying signs and symptoms of clinical dehydration and shock

	Green—low risk	Amber—intermediate risk	Red—high risk
Colour	• Normal colour of skin, lips and tongue	• Pallor reported by parent/carer	• Pale/mottled/ashen/blue
Activity	• Responds normally to social cues • Content/smiles • Stays awake or awakens quickly • Strong normal cry/hot crying	• Not responding normally to social cues • Wakes only with probing stimulation • Decreased activity • No smile	• No response to social cues • Appears ill to healthcare professional • Unable to rouse or if roused does not stay awake • Weak, high-pitched or continuous cry
Respiratory		• Nasal flaring • Tachypnoea: -RR>50 breaths/minute age 6-12 months -RR>40 breaths/minute age >12 month • Oxygen saturation≥95% in air • Crackles	• Grunting • Tachypnoea: RR> 60 breaths/minute • Moderate or severe chest indrawing
Hydration	• Normal skin and eyes • Moist mucous membranes	• Dry mucus membrane • Poor feeding in infants • CRT ≥ 3 seconds • Reduced urine output	• Reduced skin turgor
Other	• None of the amber or red symptoms or signs	• Fever for ≥ 5 days • Swelling of a limb or joint • Non-weight bearing/not using an extremity • A new lump >2 cm	• Age 0-3 months, temperature ≥ 38°C • Age 3-6 months, temperature ≥ 39°C • Non-blanching rash • Bulging fontanelle • Neck stiffness • Status epilepticus • Focal neurological signs • Focal seizures • Bile stained vomiting
CRT: capillary refill time		RR: respiration rate	FebrileChildInfo.pub Issue 1 March 2011 Review June, 2011

Appendix 2 Contd.

Clinical Assessment Tool for the Child with Suspected Gastro-enteritis 0-12 Years



Management Out of Hospital Setting

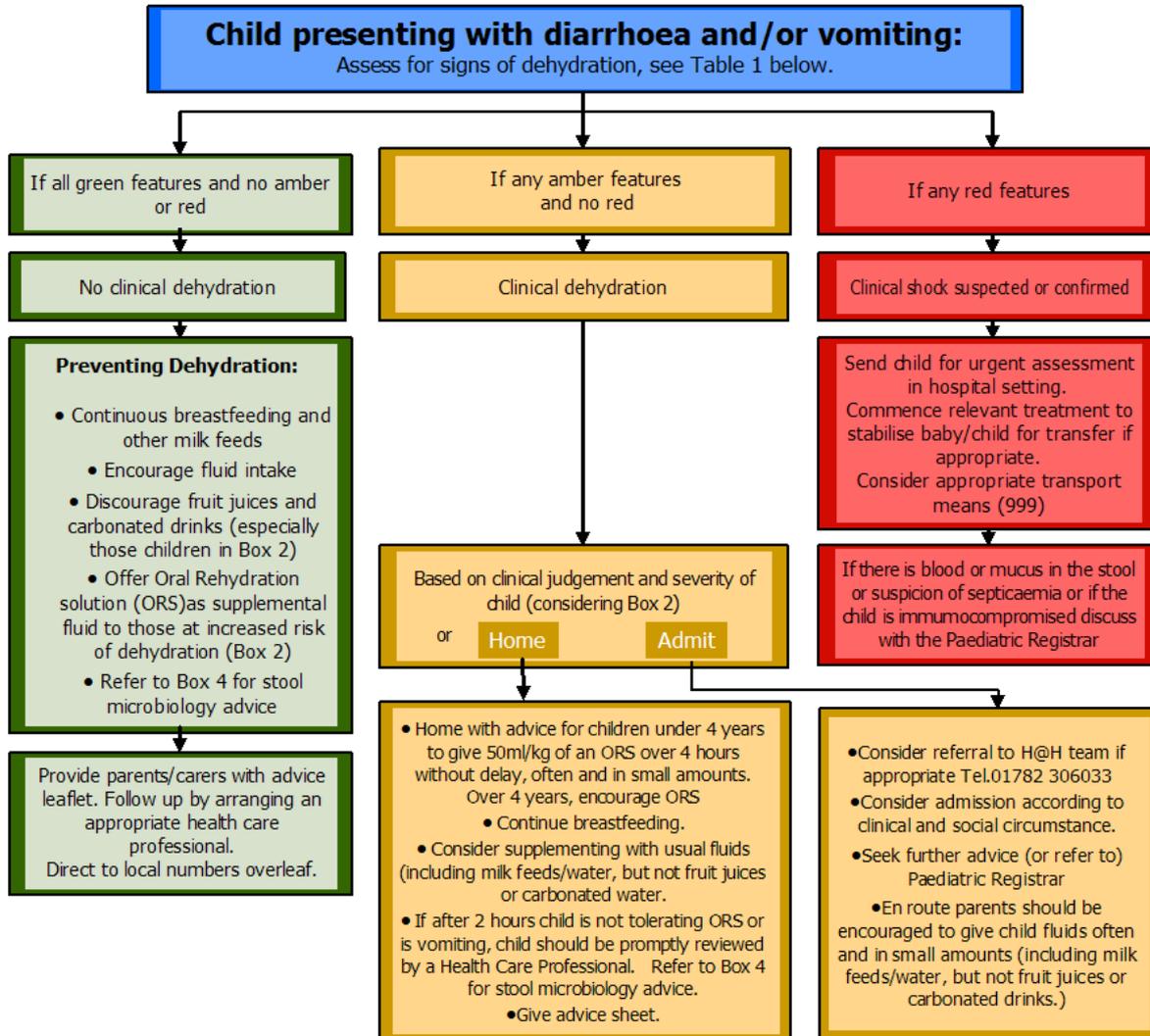


Table 1: Traffic light system for identifying signs and symptoms of clinical dehydration and shock

	Green—low risk	Amber—intermediate risk	Red—high risk
Activity	<ul style="list-style-type: none"> Responds normally to social cues Content/Smiles Stays awake/awakens quickly Strong normal cry/not cry 	<ul style="list-style-type: none"> Altered response to social cues Decreased activity No smile 	<ul style="list-style-type: none"> Not responding normally to or no response to social cues Appears ill to a healthcare professional Unable to rouse or froused does not stay awake Weak, high-pitched or continuous cry
Skin	<ul style="list-style-type: none"> Normal skin colour Normal turgor 	<ul style="list-style-type: none"> Normal skin colour Warm extremities 	<ul style="list-style-type: none"> Pale/Mottled/Ashen blue Cold extremities
Respiratory	<ul style="list-style-type: none"> Normal breathing 	<ul style="list-style-type: none"> Normal breathing (ref. To normal values Table 3) 	<ul style="list-style-type: none"> Abnormal breathing/tachypnoea (ref. to normal values Table 3)
Hydration	<ul style="list-style-type: none"> CRT < seconds Moist mucus membranes (except after drink) Normal urine 	<ul style="list-style-type: none"> CRT 2–3 seconds Dry mucus membranes (except for mouth breather). Reduced urine output 	<ul style="list-style-type: none"> CRT >3 seconds
Pulses/Heart Rate	<ul style="list-style-type: none"> Heart rate normal Peripheral pulses normal 	<ul style="list-style-type: none"> Mild/Tachycardia (ref. To normal values Table 3) Peripheral pulses normal 	<ul style="list-style-type: none"> Severe tachycardia (ref. to normal values Table 3) Peripheral pulses weak
Blood pressure	<ul style="list-style-type: none"> Normal (ref. To normal values Table 3) 	<ul style="list-style-type: none"> Normal (ref. To normal values Table 3) 	<ul style="list-style-type: none"> Hypotensive (ref. to normal values Table 3)
Eyes	<ul style="list-style-type: none"> Normal eyes 	<ul style="list-style-type: none"> Sunken eyes 	

CRT: capillary refill time

RR: respiration rate

Gastro0-12-Info.pub Issue 1 March 2011 Review June, 2011

Appendix 2 Contd.

Clinical Assessment Tool for the Child with Suspected Gastro-enteritis 0-12 Years



Management Out of Hospital Setting

Box 1 Consider other diagnosis if any of the following are present:

- Temperature of 38°C or higher (younger than 3 months)
- Temperature of 39°C or higher (3 months old or older)
- Shortness of breath or tachynopea
- Altered conscious state
- Neck stiffness
- Abdominal distension or rebound tenderness
- History/Suspicion of poisoning
- Bulging fontanelle (in infants)
- Non-blanching rash
- Blood and/or mucus in stool
- Bilious (green) vomit
- Severe or localised abdominal pain
- History of head injury

Box 2 These children are at increased risk of dehydration:

- Children younger than 1 year, especially those younger than 6 months.
- Infants who were of a low birth weight.
- Children who have passed six or more diarrhoeal stools in the past 24 hours
- Children who have vomited three times or more in the last 24 hours
- Children who have not been offered or have not been able to tolerate supplementary fluids before presentation
- Infants who have stopped breastfeeding during the illness
- Children with signs of malnutrition

Box 3 Normal Paediatric Values

Respiratory Rate at rest:	Heart rate:	Systolic blood pressure
<1yr 30-40 p/min	<1yr 110-160bpm	<1yr 70-90 mmhg
<1-2yrs 25-35 p/min	<1-2yrs 100-150bpm	1-2yrs 80-95mmhg
<2-5yrs 25-30 p/min	<2-5yrs 95-140bpm	<2-5yrs 80-100mmhg

(APLS 2005)

Box 4 Stool Microbiology Advice

Consider performing stool microbiological investigations if:

- The child has recently been abroad or
- The diarrhoea has not improved by day 7

Useful Telephone Numbers

GP (family to complete)	.....
HV (family to complete)	.....
North Staffs Urgent Care (Out of hours G.P.)	.....	01782 719100
Walk-in Centres:		
	Haywood	01782 581112
	Midway	01782 663757
	Leek Minor Injuries Unit	01538 487100
	Hanley Health Centre	03001236759
NHS Direct: Open 24 hrs.—7 days	.....	0845 454647
	Or www.nhsdirect.nhs.uk	

This guidance is written in the following context:

This assessment tool was arrived at after careful consideration of the evidence available, including, but not exclusively, NICE guidance and NHS evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Appendix 2 Contd.

Clinical Assessment Tool for the Child 0-12 years with Acute Abdominal Pain



Management Out of Hospital Setting

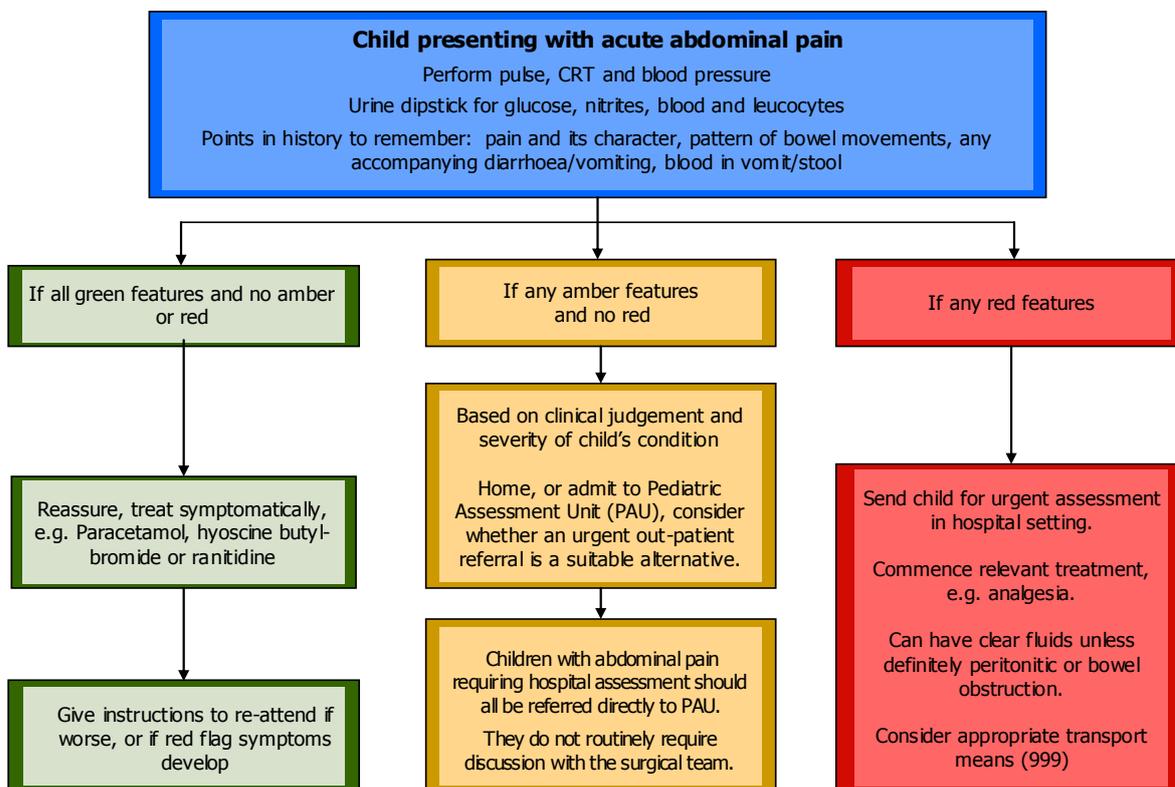


Table 1: Traffic light system for identifying higher risk children

Green—low risk	Amber—intermediate risk	Red—high risk
<ul style="list-style-type: none"> Easily distracted from pain History of contact with gastro-enteritis Diarrhoea present (consider using gastro-enteritis pathway) Normal observations (see values below) 	<ul style="list-style-type: none"> Sexually active female Vomiting Onset <48 hours Under 12 years Pyrexial Reduced urine output Focally tender 	<ul style="list-style-type: none"> Bilious (green) vomit Melaena or blood in soft stool or blood alone with mucus PR Absent bowel sounds Guarding and/or rebound tenderness Haematemesis (old or fresh) Under 4 years Tachycardic or hypotensive Appears ill to healthcare professionals Abdominal distension Pelvic mass (not faeces, which is generally indentable clears with laxatives if history of constipation) Offensive or bloodstained vaginal discharge Unscheduled vaginal bleeding
Normal Paediatric Values		
Age	Pulse	Respiratory rate
<1	110-160	30-40
1-2	100-150	25-35
2-5	95-140	25-30
5-12	80-120	20-25
These guidelines are to aid diagnosis and management, and are not a substitute for clinical judgement.		

Appendix 2 Contd.

Clinical Assessment Tool for the Child 0-12 years with Acute Abdominal Pain



Management Out of Hospital Setting

Box 1 Consider other diagnoses

Diagnoses not to miss	Possible medical/gynaecological diagnoses
<ul style="list-style-type: none"> • <input type="checkbox"/> Appendicitis • <input type="checkbox"/> Torsion of ovarian cyst • <input type="checkbox"/> Intussusception • <input type="checkbox"/> Volvulus secondary to malrotation Testicular torsion (n.b. Some boys c/o rather than testicular pain) <p><i>Less worrying diagnoses:</i></p> <ul style="list-style-type: none"> • <input type="checkbox"/> Gastroenteritis • <input type="checkbox"/> Constipation • <input type="checkbox"/> Urinary tract infection (N.B. =ve dipstick does not exclude appendicitis) • <input type="checkbox"/> Irritable bowel syndrome • <input type="checkbox"/> Non-specific abdominal pain 	<ul style="list-style-type: none"> • <input type="checkbox"/> Mesenteric adenitis • <input type="checkbox"/> Right lower lobe pneumonia • <input type="checkbox"/> Gastritis/peptic ulcer disease • <input type="checkbox"/> Henoch-Schonlein purpura • <input type="checkbox"/> Pyelonephritis • <input type="checkbox"/> Renal stones • <input type="checkbox"/> Gallstones • <input type="checkbox"/> Pancreatitis • <input type="checkbox"/> Haematocolpus • <input type="checkbox"/> Ovarian cysts (benign and malignant) • <input type="checkbox"/> Rarely Crohn's disease

Box 2: Admission or Referral

Admission/referral is via Paediatric Assessment Unit (PAU), Ward 112/113. Telephone: 01782 552744.

Children with abdominal pain do not need to be referred to the surgical team. They are seen and assessed by the paediatric team who will arrange senior surgical review or transfer after initiating treatment.

Useful Telephone Numbers

GP (family to complete)		
HV (family to complete)		
North Staffs Urgent Care (Out of hours G.P.)		01782 719100
Walk-in Centres:	Haywood	01782 581112
	Midway	01782 663757
	Leek Minor Injuries Unit	01538 487100
	Hanley Health Centre	03001236759
NHS Direct: Open 24 hrs.—7 days		0845 454647
	Or www.nhsdirect.nhs.uk	

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This assessment tool was arrived at after careful consideration of the evidence available, including, but not exclusively, NICE guidance and NHS evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Appendix 2 Contd.

Information for Parent/Carer of a Child 0-12 years with Acute Abdominal Pain



Dear Parent/Carer,

You should seek further medical advice if:

- The pain becomes worse
- There is blood in the stool (poo)
- The child is unable to keep fluids down
- The child vomits up yellow-green fluid or green fluid
- The child vomits up fresh blood or old blood (which can look like dark brown bits in the vomit)
- They become drowsy
- The child looks very pale

Useful Telephone Numbers

GP (family to complete)	.....
HV (family to complete)	.....
North Staffs Urgent Care (Out of hours G.P.)	.....	01782 719100
Walk-in Centres:		
	Haywood	01782 581112
	Midway	01782 663757
	Leek Minor Injuries Unit	01538 487100
	Hanley Health Centre	03001236759
NHS Direct: Open 24 hrs.—7 days	.....	0845 454647
	Or www.nhsdirect.nhs.uk	

Appendix 3

Pre-referral Trial Guidelines

Paediatric Referral Guidelines

The following Trial Guidelines have been produced from an amalgamation of the PBC GP referral guidelines, information available from the Map of Medicine, occasional other sources such as NICE and the Fit for the Future paediatric pathways. Where there has been conflicting advice, Map of Medicine and NICE have been given precedence. The guidelines have been developed by Drs Alistair Pullan and Ruth Chambers; then further revised and finalised in line with comments and suggestions from a range of paediatric consultants and GPs across North Staffordshire: Drs Ian Leese, John Alexander, Melissa Hubbard, Alex Tabor, Caroline Groves, Prasad Rao, Raj Venugopal, Dave Hughes, Anna Pigott, Mona Abdel-Hady, Warren Lenney, Furqan Basharat.

These Guidelines will assist GPs in their decisions as whether or not to refer to outpatients and in their pre-referral work up of children and young people.

This document can only ever be viewed as a guideline and never as a definitive statement of absolutes. Local clinicians' experiences as GPs and paediatricians have informed decisions as what to include, what to exclude, how to adapt and occasionally supplement the text. By definition there is a degree of subjectivity involved. Please feel free to give us continuing feedback in order that we can modify and validate these guidelines and thus transform them to a useable working document.

To try and cover paediatric practice in one guideline is a vast undertaking. Not only do almost all areas of adult clinical practice need to be covered, but there are also several paediatric specific areas that require attention. In addition to this the correct guideline for a condition may vary depending on whether the patient is a neonate, a young child, an older child or a teenager or child with special needs/complex medical history.

We have omitted conditions that obviously would require involvement of Tiers 3 and 4 services at onset or where initial management is obvious with well recognised protocols e.g. jaundice. Similarly 'adult' problems for example gynaecological matters, are well covered in the general PCT/GPCC adult referral guidelines and would not benefit from re-iteration here. We have also excluded conditions where it would be exceptionally rare in the paediatric age group to present to a GP, such as angina.

Dr Alistair Pullan, Prof Ruth Chambers, Dr Vasudevan Asuri, Dr Venugopal Yuvaraj: Trial guidelines April 2011
Final Version 08.04.11 Review Date: June 2012

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(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
CARDIOLOGY			
Heart murmur	Examination to establish: 1 whether wellbeing acutely threatened by heart murmur 2 any contributory factors e.g. fever or anaemia Investigations if indicated from physical exam for e.g. FBC, TFTs	You might chose to review a well but febrile child with a murmur detected as an incidental finding in a GP consultation; and not necessarily refer if murmur is no longer apparent at review	Refer for consultant access to echo and consultant review (Dave Roden/Dr Shivashankar undertake one stop shop echo and review)
Palpitations & regular tachyarrhythmia	ECG (while symptomatic if possible – if you have the skills to interpret the reading) Possibly TFTs and FBC –depending on clinical judgement	Avoid caffeine If 'trivial' symptoms that have completely resolved, follow up in general practice and do not refer.	Paediatric cardiology clinic Urgent if: Palpitations causing syncope Patient with structural heart disease Patient with a family history of cardiomyopathy Patient with a family history of sudden, early or unexpected death likely to have been of cardiac origin Otherwise routine referral
"Feeling faint"	Careful history: loss of consciousness (LOC), fit, faint? Examine heart, general assessment Check FBC, ferritin and TFTs if clinical indication	Many patients feeling faint have become accustomed to taking sugar and are experiencing peaks and troughs in glucose level. Advocate higher fibre, lower sugar diet.	Paediatric cardiology referral only if LOC Paediatric neurology referral only if focal neurology If true diagnostic uncertainty paediatric referral

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
ALLERGY & RESPIRATORY			
Allergies & urticaria	Careful history; exclude drug reactions eg antibiotics, NSAIDs (Not blood tests eg FBC and ESR; organised in severe unremitting cases when need specialist review first) (Specific IgE is hardly ever used as screen; low grade responses ie < 3 do not confirm allergy).	Antihistamines as part of plan to manage allergic reactions – check age specific dose in BNF Regular antihistamines and nasal steroids for rhinitis, starting early for seasonal rhinitis If food intolerance suspected without any signs of type 1 food allergy, GP can exclude specific foodstuffs; then if symptoms resolve and then recur on reintroduction of foods, intolerance likely (Epipen –only prescribe if had full training on pen action/practice; only for children where carer has fully staged plan for management of mild & moderate reactions + anaphylactic and appropriate plans agreed with school)	History of anaphylaxis or laryngeal oedema or angioedema Refer if type 1 food allergy suspected; for skin prick testing Refer dietitian if food intolerances suspected in young/weaning child; food avoidance is difficult and potentially affects nutrition; only to be recommended long term where doubt re diagnosis
Wheeze/Asthma Excluding management of acute exacerbations	Spirometry (for children > 6 years) including reversibility preferably, esp useful for diagnostic uncertainty [if not available, PEF showing reversibility by bronchodilator or daily chart in children able to perform PEF test reliably (usually school age and above)]. Diagnosis made by history in the young. Check how well asthma symptoms are controlled. Asthma control assessed by: -no day or night symptoms -no need for beta ₂ -agonist medication (less than 2-3 times/week) -no exacerbations -physical activity not limited -minimal side effects. Oxygen saturation measurements useful for assessment esp children < 5 years.	Check you have educated parents/child about use of inhalers for prevention/relief symptoms Check you have prescribed suitable inhaler, spacer etc; and that they have good inhaler technique Step up treatment if poor control despite satisfactory inhaler technique and concordance Optimise treatment as per BTS guidelines up to Step 4 (Step 3 in children under 5 years)* * British Guideline on the Management of Asthma, British Thoracic Society May 2008 revised June 2009	Diagnostic uncertainty Refer if not well controlled at Step 4 for children > 5 years Refer if not well controlled at Step 3 for children < 5 years of age

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
DERMATOLOGY			
Low Priority Procedures – excluded from NHS referral risk of malignancy	Skin procedures: A. Treatment for lipomata, sebaceous cysts, skin tags or other minor skin lesions, including: 1) milia 2) asymptomatic seborrhoeic keratoses 3) asymptomatic warts of hands and feet (except if interfering with mobility or if immunosuppressed) 4) unchanging or asymptomatic benign melanocytic naevi 5) skin tags 6) asymptomatic fungal infections of toe nails 7) telangiectasiae and spider naevi (except if occurring on the face of a child who is being teased or bullied) 8) comedones 9) asymptomatic epidermal cysts (sebaceous cysts) 10) molluscum contagiosum 11) mild or moderate non scarring acne vulgaris which has not been treated with 6 months of systemic therapy B. Congenital vascular abnormalities C. Lasers and other cosmetic skin procedures in plastic surgery		
Acne (Excluding infantile acne)	History & examination to grade severity Before referral in older children order LFT & fasting lipids as work-up to Roaccutane	North Staffs formulary suggests tetracycline – see <ul style="list-style-type: none"> www.medicinesmanagementstoke.nhs.uk/north_staffs.html but GPwSI dermatology recommends - 12 weeks treatment with combination of: <ul style="list-style-type: none"> lymecycline 408mg daily as long as age > 12 years adapeline and initial week of benzoyl peroxide 2.5% Dianette is an alternative in female teenage patients Issue patient with information leaflet re roaccutane so can consider risks/benefits before consultation at hospital	Failed treatment Scarring Psychological distress Patient accepts side effects of Roaccutane

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
Eczema Chronic management	History Examination Rarely skin swabs for superadded infection (usually Staph)	Information about condition and treatments. Avoid triggers Emollients in sufficient quantities Soap substitutes Topical corticosteroids. Usually mild to moderately potent depends on site and severity Dry bandages in the form of stockinette or cotton garments. Sedative (e.g. piriton) antihistamines during flares in severe atopic eczema where irritation and sleep disturbance is problematic. Prescribe systemic antibiotics for widespread infected eczema or prescribe topical antibiotic and corticosteroid combinations if localised infection.	<u>Refer immediately (same day) if eczema herpeticum is suspected).</u> Refer urgently if eczema is severe / infected and not responding to appropriate treatments or if associated with severe and recurrent infections. Uncertain diagnosis. Suspected contact dermatitis. Severe psychological or social or schooling problems. Continuing uncertainty that treatment being correctly applied. Reasonable suspicion of dietary triggers. Poor growth <i>Referrals should include reason for referral, what is hoped will be gained from referral and what treatments have been tried so far.</i>
Skin Lesion	History Examination Dermoscopic examination (if trained)	Reassurance if certain benign	Diagnostic uncertainty Suspected malignancy (rare in paediatric practice) Rapidly growing or changing lesion Painful lesion Bleeding or non healing Lesion causing a physical problem e.g. catching on clothes, interfering with vision.
Molluscum contagiosum	History Examination	Information leaflet. Troublesome lesions can be squeezed or frozen. Patience!	Immuno-compromised children
Nail disease	Fungal nail clippings Check LFTs at initiation of oral Rx and 6-8 weekly	Treat proven fungal nail disease with topical Troslol or systemic antifungals such as terbinafine (Check age against BNF) Non-fungal nail disease.	Failure of 6 months of systemic terbinafine for fungal
Non-specific rashes	Take drug history. Consider if recent infection Possibly skin scrapings for mycology. Consider alternative diagnosis of rashes e.g. eczema, psoriasis etc	Watchful waiting Emollients Possibly topical corticosteroids (if no infection) Possibly anti-histamine for itching.	A rash that persists beyond 4-6 weeks &/or is resistant to topical Rx

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
Psoriasis	History including psychological and functional effects of psoriasis Examination	As per BNF Emollients Keratolytics Vitamin D analogues Topical Steroids Tar	Failure of medical Rx in primary care. Pustular or erythrodermic psoriasis- same day admission Persistent severe guttate psoriasis. Severe psychological distress. Widespread area affected. Associated arthropathy. Acrodermatitis of halipeau Diagnosis uncertain
Urticaria	See Allergies & urticaria section, page 4		
Warts, skin tags	Viral warts may be treated with topical (usually salicylate based) ointments Check BNF for contra-indications etc An alternative is occlusion with Duct tape	All suitable for cautery or cryo-cautery by GP	Referral not indicated (unless consider there might be possibility of squamous cell carcinoma hidden under a cutaneous horn: very unusual in paediatric practice)

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
DEVELOPMENTAL DISORDERS			
Autistic Spectrum Disorder	Identify 'red flags': <ul style="list-style-type: none"> • no babbling by age 1 year • no words by age 16 months • no two word meaningful phrases by age 2 years • loss of previously acquired speech, babbling or social skills at any age • speech and language problems range from no speech to advanced skills • no interactive gestures, e.g. pointing, reaching, or waving by age 1 year • deficits in joint attention (enjoyment in sharing an object or event with another person by looking back and forth between the two) 		If suspected refer to community paediatrics for medical assessment +/- diagnosis – who will refer on those in whom still diagnostic doubt to preschool/school aged ASD team
Delayed speech under age 5 years	Hearing test (unless hearing already known to be satisfactory) Assess if: <ul style="list-style-type: none"> • fewer than six single words by 18 months • no two word phrases by 2 years old • no sentences by 3.5 years Delay can be: receptive, expressive or both	Engage health visitor and children's centre to support parent with appropriate stimulation Encourage attendance at local play and stay/ mums and tots groups (Reference: Stoke Speaks Out staged pathway toolkit)	If normal hearing test and signs of other developmental concerns refer to community paediatrician If marked speech delay refer to speech therapy/community paediatrician
Dyslexia	Determine if: <ul style="list-style-type: none"> • teachers perceive any unusual/noticeable difficulties with reading, writing, spelling, or speech • self perceived reading, writing, spelling, or speech difficulties in daily or academic life (e.g. following verbal instructions, using written information or timetables) 	Engage initial educational support (through school) Assess for hearing and vision impairment (and address any impairments found)	Visual impairment - optometry Hearing impairment - audiology Otherwise educational psychologist

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
Failure to thrive	<p>Consider child's growth for age & sex; and extent to which child follows centile curves of growth chart over time</p> <p>Possible tests: Urinalysis and MSU for evidence of UTI FBC if appropriate for effects of malnutrition [anaemia] or raised white cell count [chronic infection] U&E and LFTs – looking for markers of reduced metabolic function or primary renal or hepatic disease TFTs Coeliac screening and stool studies – for malabsorption Possibly immunoglobulins</p>	Treat if UTI	<p>Refer if suspect serious parent/child interaction/dysfunction Refer if suspect child abuse Refer if child 'drops' down across 2 centiles</p>

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
EAR, NOSE & THROAT			
<p>Low Priority Procedures – restricted, so pre-authorisation required</p> <p>Tonsillectomy Note: only considered for children between the ages of 4-16 years</p>	<p>Tonsillectomy</p> <p>1. In children and adults with sore throats that are due to tonsillitis and are severely affected by recurrent attacks of acute tonsillitis (RAAT), defined as –</p> <p>More than 6 documented episodes of RAAT in the preceding year, or More than 3 documented episodes of RAAT in each of the preceding two years</p> <p>Each of the episodes must be documented in the patient's notes and characterised by at least one of the following:</p> <ol style="list-style-type: none"> Oral temperature of at least 38.3 C Tender anterior cervical lymph nodes Tonsillar exudates Positive culture of group A beta haemolytic streptococci The episodes are disabling and prevent normal functioning (school / work) Tonsillar enlargement giving rise to symptoms of obstruction <p>(Recurrent attacks are a succession of definite episodes, as opposed to chronic tonsillitis)</p>		

	<p>2. In teenagers and adults with –</p> <p>a. Severe halitosis which has been demonstrated to be due to tonsil crypt debris (diagnosed by the ENT surgeons)</p> <p>3. Unequivocal indications for tonsillectomy –</p> <p>a. Peri-tonsillar abscess (Quinsy)</p> <p>b. Acute upper airways obstruction</p> <p>c. Tonsillar swelling is interfering with swallowing and is causing dehydration and marked systemic upset</p> <p>d. Suspected tonsillar malignancy – refer under 2 week wait</p> <p>e. Upper airways obstruction causing sleep apnoea, daytime somnolence and failure to thrive</p> <p>f. Chronic tonsillitis, characterised by constant sore throat, cervical lymphadenopathy, intermittent fever and peri-tonsillar erythema. This is more common in adults than children (Immediate referral (same day) is recommended for 3a, 3b and 3c)</p>
Restricted, so pre-authorisation required	<p>Grommets</p> <p>1. Had frequent episodes of acute otitis media (6 over the previous 12 months)</p> <p>Or</p> <p>2. Had a period of at least six months watchful waiting from onset of symptoms</p> <p>And</p> <p>3. One or more of the following criteria for referral and surgery have been applied -</p> <p>The child has persistent hearing loss detected on two occasions separated by 3 months or more*</p> <p>The child has proven hearing loss, plus difficulties with speech and language (expressive language delay), cognition, behaviour and education attributable to persistent hearing loss; which have lasted for 6 months from the beginning of the problem</p> <p>The child has proven hearing loss, plus a second disability such as Down’s Syndrome or cleft palate.</p>
Restricted	<p>Cochlear implants in children</p> <p>Bilateral severe to profound sensorineural hearing loss (i.e. >90dBHL at 2000Hz and above for better ear) also ski slope or reverse losses</p> <p>Average PTA > 90dBHL (progressive hearing loss to be referred before reaching this level)</p> <p>Limited or no useful benefit from hearing aids:</p> <ul style="list-style-type: none"> • birth – 2 years: limited access to speech sounds with hearing aids • 2-5 years: failure to develop acceptable level of auditory skills (e.g. S&L delay) • > 5 years: 50% or less open-set sentence discrimination

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
Ear infections	Only swab if failed initial course of topical medication and discharge present	Aminoglycoside plus steroid drops are first-line treatment . Oral antibiotics if otitis media or cellulitis of pinna	Recurrent infections & non-healing drum perforation or significant drum retraction. Persistent hearing loss after ear infection.
Epistaxis (recurrent)	Check FBC if concerns	Topical naseptin if infection suspected Cauterise large vessels seen on Little's area with silver nitrate in older child/young person – if GP has skills and facilities	Failed GP cautery or clinical suspicion of lesion deeper in the nose
Glue ear & adenoids	Audiogram (after watchful waiting)	Watchful waiting 6-8 weeks Be mindful of speech delay or educational problems	Abnormal audiogram if available. Reasonable to refer on clinical presentation and clinical findings of glue ear
Hearing loss	Partial hearing loss - examine for wax, foreign body, otitis media Audiogram first unless sudden severe unilateral hearing loss Important to perform tuning fork tests as all conductive hearing losses need to be referred	Treat wax & infection.	Refer all deafness.
Nasal discharge & obstruction	Examine for foreign bodies Ask about epistaxis	Trial of second-line nasal steroid such as mometasone or fluticasone (as Avamys, not Flixonase)- minimum of 1 month consistent use – see BNF	Failed second-line medical management
Persistent throat soreness & tightness Irritating cough	Examine of oral candidiasis , esp. if patient on inhaled steroids	Advise large volume spacer for inhaled steroids. Smoking advice Trial of anti-reflux Rx	Failed trial of anti-reflux treatment after 6 weeks trial.
Tonsillitis	Consider throat swab	For acute episodes Paracetamol consider antibiotic treatment if bacterial infection suspected, or if condition is not self-limiting within a few days consider and adapt according to swab results: penicillin; or erythromycin or clarithromycin. Antibiotics are not routinely recommended for sore throat in the absence of tonsillitis	Consider referral if patient meets the following four criteria: <ul style="list-style-type: none"> • five or more episodes of sore throat during 1 year • sore throat due to confirmed tonsillitis • symptoms persisting for at least 1 year • symptoms of sore throat are disabling and interfere with normal functioning Also consider if there is associated exacerbation of: Asthma Guttate psoriasis

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
GASTROENTEROLOGY			
Constipation & soiling	History Examination Assess for impaction	<u>Acute constipation</u> High fibre diet and sufficient fluid intake alongside laxatives such as: <ul style="list-style-type: none"> • osmotic laxatives (eg lactulose, macrogol) • stimulant oral laxative (eg senna, sodium picosulfate, bisacodyl tablets) if response is insufficient Stop laxatives once stools become soft and can be easily passed <u>Maintenance therapy:</u> Start as soon as the child's bowel is disimpacted and reassess child frequently to ensure they do not become reimpacted. Continue medication as maintenance dose for several weeks after regular bowel habit is established Reduce dose over a period of months according to response in stool consistency and frequency Continue for a minimum of 3 months may be required for several years - up to 2 years in some cases	Failure to respond to treatment. For children > 2 years refer to children's community nursing team – they will seek support from school and offer behavioural management
Dyspepsia (new onset) in > 2 year olds	History Examination Test for H pylori (stool antigen)	Diet, weight loss (if overweight) avoid alcohol and smoking, raise head of bed, lying prone or with left side down (in child < 2 years). Possibly PPI x 4 weeks if no alarm symptoms (see BNF)	Refer if fails to resolve or if 'alarm' symptoms
Gastro-oesophageal reflux in baby	Give gaviscon and thickened feeds If no better try ranitidine or omeprazole; if still no better try domperidone. If growing normally, consider early introduction of solids eg > 17 weeks, elevate head end of cot	If atopic family history, parent/carer could try cows milk free milk – hydrolysed formula in babies < 6 months	Refer if blood in vomit, melaena, anaemia, choking during feeds with respiratory symptoms
Iron deficiency anaemia (unexplained by menorrhagia if female who's menstruating)	History (dietary intake? Any suggestion of malabsorption?) Examination FBC & ferritin Consider ESR & CRP		Refer for further investigations

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
Symptoms suggestive of inflammatory bowel disease or coeliac disease	FBC ESR & CRP Coeliac antibody screen		Refer all new suspected inflammatory bowel disease if weight loss or bloody diarrhoea to (paediatric) gastroenterology using Choose & Book urgent route
Unexplained weight loss (also see Failure to thrive- above)	Full history, especially dietary intake and gastrointestinal symptoms, clinical examination, test urine for glucose, bloods & CXR (as appropriate)	Plot height and weight on a centile chart; and look at trend	Consider urgent referral

NEUROLOGY			
Low Priority Procedure	Botulinum Toxin A (BTA) Treatment for children with cerebral palsy		
Restricted, so pre authorisation required	BTA injections are used in the treatment of pathological conditions by appropriate specialists, for example in blepharospasm or cerebral palsy but are not suitable for all children with cerebral palsy and patient selection is very important.		
Excluded	Cranial Banding for positional plagiocephaly		
Headaches	Exclude acute severe conditions Advise parent to arrange check with optometrist Examine fundi Take FH eg migraine Explore possible stress provoking factors eg from home life, school Consider sinusitis in older children	Stop analgesics if possible but especially opiates (codeine is probably the commonest culprit). Stop COC pill if implicated. Triptans for acute migraine and ladder of preventative measures. Simple analgesia and review at 48 hours	Diagnostic uncertainty Failure of treatment
Febrile seizure	Consult map of medicine Map of Medicine http://eng.mapofmedicine.com/evidence/map/febrile_seizures1.html		
Afebrile seizure	Consult map of medicine – if epilepsy suspected refer to consultant with special expertise		
Squint & amblyopia	Paediatric shared care pathway under Ophthalmology via C+B and be triaged accordingly in shared care pathway.		

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
GENERAL SURGERY			
Chronic abdominal pain in children (excludes conditions requiring acute admission)	<p>Full assessment of bowel habits- determine if constipation</p> <p>Full exploration of social/school factors and consider if might be psychosomatic pain</p> <p>Full assessment of growth – weight/height gain on centile chart over time</p> <p>Stools for culture& sensitivity & microscopy</p> <p>Careful Hx & FH migraine</p> <p>Consider abdominal migraine, (Consider if UTI (do clean catch urine dipstick or MSU) – follow NICE guidelines; if proven UTI do abdo USS)</p> <p>FBC, U&E, ESR, CRP, LFT, coeliac serology (TTG + IgA) and amylase - if no improvement [if bloods are normal in child with no alert gut symptoms (eg bleeding/vomiting) who is growing well with no constipation, then reassure</p>		<p>(Refer UTI as per NICE guidelines with:</p> <ul style="list-style-type: none"> • Proven culture >10⁵ in clean catch MSU in absence of balanitis or vulvovaginitis before antibiotics given • Abnormal USS abdo) <p>Refer if positive coeliac screen.</p> <p>Otherwise refer for diagnostic doubt or Rx failure</p>
Recurrent balanitis, phimosis, paraphimosis	Examination	Topical or systemic antibiotics for balanitis.	<p>Refer to urology if</p> <ul style="list-style-type: none"> • recurrent balanitis (e.g. 3 x), • phimosis • paraphimosis <p>(Religious circumcisions are done privately)</p>
Hernia	Assess size and nature of hernia	In neonate small easily reduced umbilical hernia - watch and wait.	<p>Inguinal hernia</p> <p>Femoral hernia</p>
Ingrowing toenail		Antibiotic Rx to cover Staph aureus if cellulitic – i.e. a complicated IGTN	Refer to appropriate community service (podiatry as preference)
Skin and Soft tissue lumps	History Examination		<p>If malignancy suspected -14 day referral.</p> <p>Refer symptomatic lesions to an accredited GPwSI</p> <p>If lesions on face and neck refer to plastic surgery</p> <p><u>Derma</u>l (but not subcutaneous) lesions should be referred to dermatology.</p>

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
TRAUMA & ORTHOPAEDICS, MUSCULOSKELETAL			
Gait problems in children	<p>Flat feet: can be normal in children < 7 years. In-toeing: tends to improve by about 5 yrs age. Bow legs: usually normal under 2 years (but consider might be rickets – and if doubt-refer) Knock-knee: usually normal age 3-4 years (but consider might be rickets – and if doubt-refer)</p> <p>Tip: ask child to stand on tip toes and if there is an arch this is likely to be a 'flat foot' that should correct itself in time- then give advice on sensible footwear and insoles –no need to refer; review in a year</p>		<p>Refer neurological gait problems to paediatrics; bony gait problems to orthopaedics. painful foot deformities to orthopaedics, So: pain free high arches, tight TAs, increased tone unilateral or bi-lateral to paediatrics On the whole pain = orthopaedic referral, pain free+ delay in milestones= paediatric referral</p> <p>The children's physio referral form to specialist MSK physio, contains guidance on when to refer:bow legs, knock-knee, in-toeing</p> <ol style="list-style-type: none"> 1. Flat feet :refer for podiatry if pain, rigidity, deformity, cavus, foot with high stiff arch, tight tendo-achilles (unless significant pain refer all of these to orthopaedics) or hard skin on foot. 2. Intoeing: refer podiatry or T&O if persistent. 3. Bow legs: refer T&O only after 2 years of age or if asymmetrical. 4. Knock knee: refer T&O if under 2 years; or if over 5 years, Ricketts suspected or inter-malleolar distance > 8cm. 5. Non-specific gait problems: refer physio rather than T&O as need for operation is unusual

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
Hip pain in children & teenagers	Plain X-ray of hips (if clinically appropriate + Xray report is speedy) Check for restricted abduction and internal rotation; pain on examination Eliminate red flags (see below)		Refer urgently to paed. orthopaedic team to exclude Perthe's disease & slipped upper femoral epiphysis Refer/admit as emergency if you suspect septic arthritis or osteomyelitis, neoplasia or non-accidental injury might be possible
Knee trauma or dislocation	In less severe cases: Need to assess stability of joint and enquire about locking	Trauma: In less severe cases: rest, physio, analgesia / NSAID. See immediate referral criteria for more severe cases. Dislocation: Analgesia, core physio then (if needed) specialist physio in a community clinic. Orthotics.	Violent trauma. History of popping, or locking of knee. Joint unstable (immediate referral). Or (later) positive MRI findings . If large effusion/haemarthrosis then consider referral fracture clinic Recurrent dislocation. Failure of specialist community treatment.

RHEUMATOLOGY			
Back pain or Multiple joint pains	Inflammatory markers RA & SLE screen X-ray if red flags suspected: ie fever, systemically unwell, weight loss, sweats, bruising/bleeding, bone pain, non weight bearing /loss of limb function	NSAID & analgesia while awaiting results. Rx as below if inflammatory markers negative (ie do not give steroids) Consider referral to physiotherapy	Refer to paediatric rheumatology/ orthopaedics if: raised inflammatory markers and/or clinical evidence of synovitis non-joint manifestations diagnostic uncertainty Sciatica /back pain < 20 years old is 'red flag' and should be referred regardless of blood results

UROLOGY			
Enuresis (15% of those age 5 years 5% of those age 10 years 2% of those age 15 years 1% of children continue to wet the bed into adulthood)	Determine if primary or secondary enuresis Urinalysis Possible renal tract USS(only in daytime wetters)	Advice for parents Enuresis alarm(the school nurse enuresis service has access)	If indicated as organic aetiology identified If indicated by psychological stress (patient or family) Refer to school nurse enuresis service after 7 th birthday or earlier if indicated by psychological stress (patient or family) Refer to paed's if daytime symptoms after doing u/sound

(SUSPECTED) CONDITION	ASSESSMENT/DIAGNOSTICS	GENERAL PRACTICE TREATMENT	REFERRAL THRESHOLD
Foreskin problems	Swab if indicated	Treatment for balanitis - topical or systemic	(All religious associated circumcisions are private referrals) Balanitis after third episode. Phimosis & paraphimosis
Haematuria	MSU	Treat UTI & re-test after treatment	Non-UTI macroscopic haematuria
Urinary tract infection For fuller details see MAP of Medicine http://eng.mapofmedicine.com/evidence/map/urinary_tract_infections_utis_in_children1.html	History Examination Collect urine sample for analysis – parent must collect by child urinating straight into sample bottle Age 3 months to 3 years - urgent microscopy 3 years and older check with dipstick	Simple first UTI in older child treat with antibiotics as per local antibiotic prescribing guidelines.	Immediate referral if child < 6 months or if clinical condition dictates. Refer > 6 months if abnormality or recurrent UTI. Imaging organised by consultant for child < 6 months with proven UTI and child > 6 months with atypical UTI or recurrent UTI or failure to improve with appropriate antibiotics ? obstruction
Incontinence other than classical enuresis in older children	MSU		Refer
Testicular and scrotal problems	Establish whether emergency e.g. torsion and manage appropriately Ultrasound scan to diagnose non-testicular scrotal masses	Reassurance based on scan results for small non-testicular masses	Acute onset pain -admit ? torsion. All testicular masses are two-week wait referrals. Non-testicular masses should be symptomatic to warrant surgery.

PLASTIC SURGERY			
Low Priority Procedure Restricted, so pre authorisation required	Cosmetic operations on external ear: Pinnaplasty (Bat Ears) Split earlobes Excision of lesion of external ear Others For children under the age of 16 years at the time of referral: with evidence of congenital earlobe deformity and substantial psychological distress, severe bullying at school		