A Whole System Approach to Improving Emergency and Urgent Care for Children and Young People

A Practical Step by Step Guide and Resource Pack

Chapters

Key:

(R) = See the resource pack at the end of this guide

Chapter One: How to use this guide

This guide has been designed and developed with the help of a number of test sites across England. We are grateful to all the executive sponsors, team members, patients, families and colleagues at the ten participating sites who have walked this journey with us and allowed us the privilege of working with them to improve local emergency and urgent care for children and young people.

These teams and networks chose to take a whole system approach to improving emergency and urgent care for children and young people.

The guide offers a practical step-by-step walk through:

• how to understand your system

• setting up your project team

• establishing the scope of your project

• using service improvement tools to optimise the quality and efficiency of care provided

• measuring your impact and holding the gains

• involving patients and families.

It is designed, primarily, for teams and team leaders who are seeking a whole system approach to improvement which requires working across or outside our traditional organisational and professional boundaries. The practical tools and examples can be modified to suit your local circumstances.

The guide is based on the experience of the variety of whole system networks and teams who have worked with the NHS Institute for Innovation and Improvement to implement quality improvement in children's and young people's emergency and urgent care services. These teams have provided quick tips and practical examples of the good practice they have developed.

Whilst the guide is based on the experience of improving children's and young people's emergency and urgent care services, the principles and the tools and techniques applied are equally applicable to working across a whole system to improve other pathways of care including for adult services.

# Chapter Two: Overview of the whole system approach

> **TOP TIP:** Putting yourself in other's shoes
>
> Throughout this whole system collaboration, imagine yourself as a grandmother, a mother, a father or a sibling – what kind of care would you want for your child from across the system?
>
> Keeping the child and family in mind helps us to think outside our organisational and professional boundaries and plan the best possible pathway for our patients and their families. The whole system approach allows us to design and implement an ideal clinical model that will maximise outcomes.

Background

This guide aims to inspire and encourage all health systems to improve the quality of their children and young people's emergency and urgent care pathways. It supplements previous work on emergency and urgent care, including: **Focus on** Ⓡ
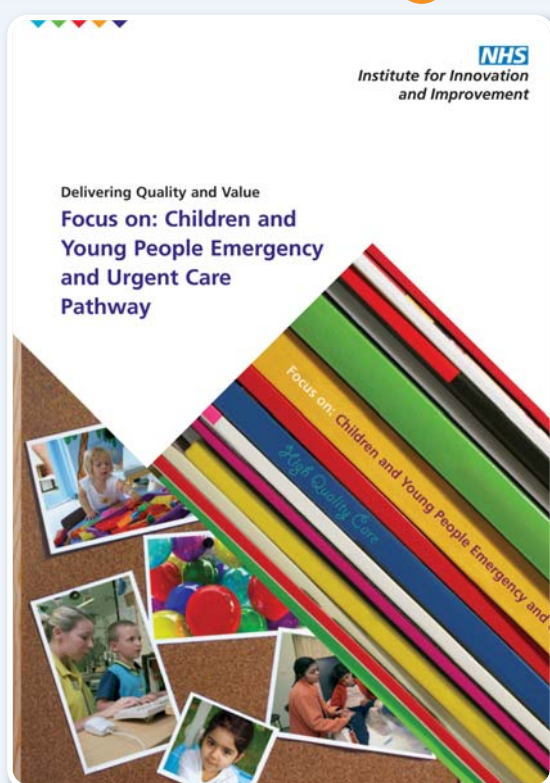
The NHS Institute published 'Focus On: Children and Young People Emergency and Urgent Care' (1) in June 2008 (updated in 2010)

Lesson Plan Ⓡ
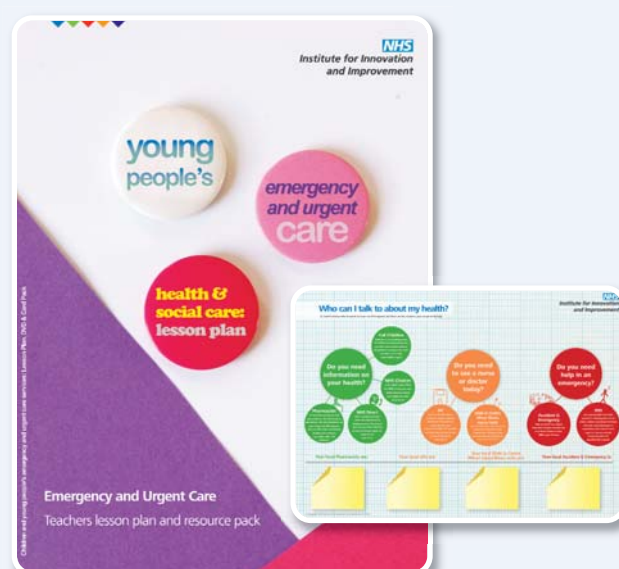
The NHS Institute also designed a lesson plan for schools (2). It was developed to promote the engagement and involvement of children and young people to raise their level of awareness and knowledge about the variety of emergency and urgent care options and to encourage their involvement in the planning, design and delivery of NHS services. The lesson plan also helps staff to engage with their patients, which is a legal requirement.

Following publication of the 'Focus On...' document, a rapid improvement programme was launched to help ten healthcare systems, one from each strategic health authority (SHA) in England, to spread and adopt the recommendations. It sought to transform local emergency and urgent care processes and test the implementation of the lesson plan within ten health systems across England.

Why take a whole system approach?

The key to delivering effective emergency and urgent care is ensuring that the whole system is designed to support self-care and community care at home, thereby reducing avoidable hospital admissions and facilitating timely early discharges. The aim is to shift care 'closer to home', when safe and appropriate to do so.

Based on our observations in children's services across England, we have found:

- there is huge variation between hospital trusts in the proportion of children admitted to hospital from emergency departments (EDs) (1)

- generally, a low priority is given to children's services by both commissioners and providers

- there is a lack of trained staff competent to meet the needs of children and young people

- there remains a lack of dedicated facilities within the emergency and urgent care pathway – especially in GP centres, walk in centres and EDs for children and young people

- there is a lack of co-ordinated commissioning that specifically addresses the needs of children and young people

- there is a lack of children's clinical networks.

- there is a lack of effective community children's nursing teams or, in some cases, they are not sufficiently resourced

- there is a lack of system-wide information and data collection/coding systems. This does not allow a patient's progress to be tracked through the system or followed up easily

- safeguarding systems (which depend on good data and information) are patchy, especially outside of hospital.

Outcomes to date

To date, working together, the ten local health systems have:

1. created whole system children and young people networks (emergency and urgent care)

2. created evidence-based, whole system, high volume clinical care pathways

3. begun to review the whole of children and young people's emergency and urgent care services across the whole system

4. engaged with children and young people and families/carers regarding the design and delivery of services and their appropriate use

5. reported early results that indicate a trend towards reduction in A&E attendances and hospital admissions in some of the systems.

A whole system pathway

Whole system children and young people emergency and urgent care pathway

GP Practice Out of Hours Service MIMI Unit* Walk in Centre

Ambulance

A&E Children's A&E Urgent Care Centre

Referral from the community

Children's Assessment Unit

Ward

Children's Critical Care

Self Referral

Open Access Self Referral

Parents/Carers Self Help Internet Digital TV NHS Direct

Professionals Health Visitors Community Children's Nurses Social Services Pharmacist

Community Care

Home

CAMHS**

Dedicated children's environment and play facilities
Children and young people's trained workforce
Child protection systems
System wide information
CYP and Family Involvement

* Minor illness, Minor Injury Unit
** Child and Adolescent Mental Health Service

Chapter Three: The national picture: children's and young people's care

Key facts

- Children and young people account for 20% of the population (3) in England and Wales and yet more than 28% of all patients (2008/9) seen in emergency departments annually in the NHS are children (1).

- Forty per cent of activity at GP practices concerns children (5).

- The majority (80%) of episodes of illness in children are managed by their families without coming into contact with any health professionals (1).

It is important to understand the national picture of children's and young people's care to enable you to ask the right questions within your own system and to be able to compare your activity across services with the national statistics.

"It seems so obvious it hardly needs to be said: just as children differ from adults in terms of their physiological, psychological, intellectual and emotional development, so they differ in their healthcare needs. They experience and see the world differently. Children are in a constant state of growth and development, which creates particular needs and demands which are of a different order from those affecting adult patients. Their relative physical and emotional immaturity, in comparison with adults, has implications both for the treatment that they receive and the physical environment in which they are cared for." Professor Sir Ian Kennedy (4)

National data overview

There are some common conditions/symptoms that can cause children and young people to present for emergency and urgent care. The six most common conditions are:

1. abdominal pain
2. asthma/wheezy child
3. bronchiolitis
4. feverish illness
5. gastroenteritis (diarrhoea and vomiting, (D&V))
6. head injury (accidental).

Our analysis of national data shows that these six high volume conditions account for half (50% in 2008/09) of all emergency and urgent care admissions. In many cases, emergency and urgent care admissions are avoidable if intervention happens at an earlier stage. There is significant potential to manage these conditions in an ambulatory manner if there are the right distribution of services and a co-ordinated, systematic approach to the care pathway.

Of these common presentations, fevers make up the highest volume of admissions activity, accounting for 28% nationally, followed by asthma and wheeze which account for 23%.

Proportion of under 19 years admissions in 2008/9 for each of the high volume pathways

- Abdominal Pain
- Bronchiolitis
- Head Injury
- D&V
- Asthma & Wheeze
- Fever & Minor Infections
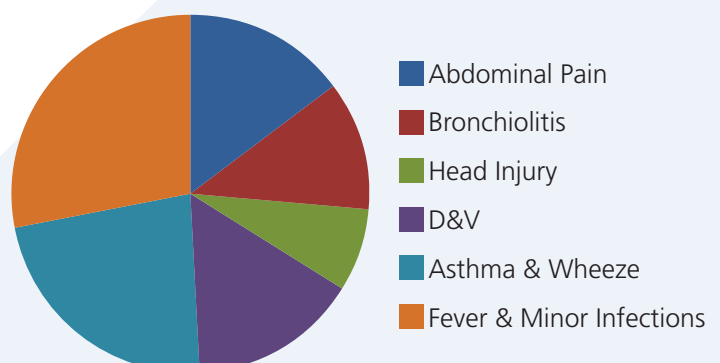
Of the six presentations, asthma/wheeze, gastroenteritis (diarrhoea and vomiting), fever and bronchiolitis, admissions are most common in children aged 0, 1 and 2 years. These conditions show large seasonal variations, with admissions peaking in November to March. Abdominal pain and head injury show fairly even spreads of ages and relatively little seasonal variation.

Children and young people's emergency services have reduced lengths of stay considerably in recent years, with the majority (national average 85%) of admissions having a length of stay of less than two days. However there is still significant variation in length of stay within children and young people's services. In organisations across the country, length of stay ranges from 0.1 to 4.4 days (1).

National admissions data (3)

Each of the high volume pathways has elements that influence their management, these include their seasonality, length of stay, and age profile. These are outlined in table 1.

Table 1 High volume pathways elements

Pathway	Seasonality (potential reason)	Length of stay*	In-patient age profile
Abdominal pain	Low	Short	Across all CYP age groups
Asthma & wheeze – Wheeze (which will comprise mainly 'under 5's viral wheeze') represents 79% of the activity and asthma 21%.	High (September peak for winter)	Very short	0, 1, 2 yrs dominate
Bronchiolitis (mainly affects under 2 yrs)	High (viral - winter months)	Long	0, 1, 2 yrs dominate
Fever & minor infections NICE guidance focuses on under 5yrs	Low	Short	0, 1, 2 yrs dominate
Gastroenteritis (diarrhoea & vomiting) NICE guidance focuses on under 5yrs	High (in March- June)	Very short	0, 1, 2 yrs dominate
Head injury (accidental) NICE guidance focuses on all ages	Low (slight drop during winter)	Very short	Across all CYP age groups

*Length of stay for majority of patients - Very short: under 1 day; Short: under 2 days; Long: up to 5 days

The dominance of children aged 0, 1, 2 years in in-patient stays is common to many children and young people's pathways. This may be accounted for by a greater number of attendances for 0, 1, and 2-year olds in general (3). However, it should also be noted there is a higher chance of 0 and 1-year olds being admitted. The national data shows that a 0-year old is 70% more likely to be admitted than a 2-year old and a 1-year old is 18% more likely to be admitted than a 2-year old (3).

Physiological and immunological immaturities of children under the age of 2 years make them particularly prone to infectious diseases and wheeze. They are more difficult for non-specialists to assess and can deteriorate quickly. Understandably, this results in higher consultation rates, referral to secondary care and admissions. There are also factors that are not intrinsic to the child that contribute to this pattern. We have observed variations in clinical practice (e.g. walk in centres not seeing children under a certain age and emergency departments automatically referring children under a certain age to the paediatricians), as well as variations in the competence and confidence of pre-hospital clinical staff that is likely to contribute to high rates of admissions in children under the age of 2 years.

Activity and tariff expenditure, size of pathways

The tariff cost of the pathways has been estimated by applying the 2008-09 tariffs and excess bed day costs to the emergency activity. The data used relates to children and young people below the age of 19 years and the International Classification of Diseases, ICD10s, used to describe the pathways [See pathway definitions in the resource pack]. Ⓡ

Table 2 Activity and tariff expenditure

Pathway	Estimated spend on emergency admissions for under 19s in 2008-09 (England)	Number of admissions
Abdominal pain	£48M	61,700
Asthma & wheeze	£62M	96,200
Bronchiolitis	£54M	47,100
Fever & minor infections	£89M	118,100
Gastroenteritis (diarrhoea & vomiting)	£44M	64,500
Head injury	£30M	32,600
Total	£327M	420,200

Based on these figures, the average unit spell cost on the high volume pathways is £780. (NB: Excess bed day spend is included within the total estimated spend on admissions in table 2.)

Costs of care across the system

Health services should be delivered where clinically appropriate. The figures in table 3, provided for illustrative purposes, show the relative unit costs per visits to different services across the system.
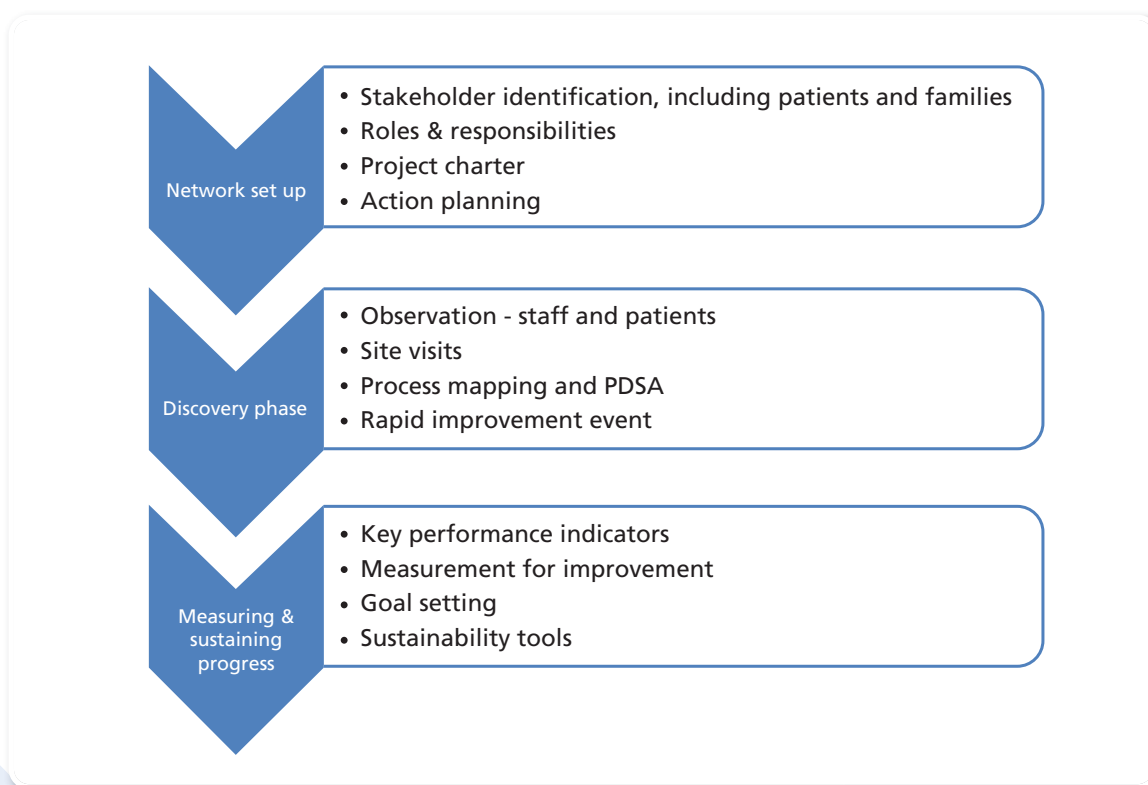
Table 3 Costs of care across the system

• NHS Direct cost per online contact	12 pence
• NHS Direct cost per contact per call	£13
• GP consultation	£25
• Practice nurse consultation	£9
• Walk in centre (local)	£25
• Community children's nurse	£70 home visit
• A&E attendance	£87
• 999 call	£170
• Admission to hospital	£520

Sources of data for Unit Costs of Care table: NHS Direct figures (personal communication from NHS Direct Children's Lead 2010); GP Consultation (Section 10.8b) /Practice nurse consultation (Section 10.6) /Community children's nurse (Section 10.1)- Personal Social Services Research Unit (PSSRU) - Unit costs of Health and Social Care, 2010 Lesley Curtis, PSSRU Link at: http://www.pssru.ac.uk/pdf/uc/uc2010/ uc2010.pdf; walk in centre – Figures from Nottinghamshire health system 2010; A&E standard attendance- 2010/11 Tariff V05; ambulance figure from East of England SHA - 2010; HRG figure – Payment by Results Tariff ; 2010/11 Tariffs, DH – Non elective tariff PA10B

Chapter Four: A step by step guide to whole system improvement

Phases of an improvement programme

The diagram below provides a high level overview of the typical phases of an improvement programme across a whole system network. The numbered steps below provide a detailed description of the work that needs to take place at each stage of the process. Along with the description we provide tools that the test sites found valuable.

Network set up
- Stakeholder identification, including patients and families
- Roles & responsibilities
- Project charter
- Action planning

Discovery phase
- Observation - staff and patients
- Site visits
- Process mapping and PDSA
- Rapid improvement event

Measuring & sustaining progress
- Key performance indicators
- Measurement for improvement
- Goal setting
- Sustainability tools

Step One: Setting up your project

Establishing the network

At the outset you will want to decide on who are key members of the network. You may want to refer to the pathway diagram to ensure all relevant stakeholders are included. You will also want to define some specific roles for individuals within the network, though some of these can be decided by consensus at the first meeting.

These roles are likely to include the network or project sponsor, clinical lead(s), commissioners, service improvement leads, key managers, front-line staff and users. Executive level support and governance from all participating organisations is important to ensure this group has the mandate and influence to design and implement changes to service design. A core project team will need to be tasked with ensuring that action takes place between project meetings. These people may need to be released for a period of time each week to ensure they are able to dedicate themselves to the improvement programme. You will want to consider carefully how you involve children, young people and their families. This may be on the network itself (this can be difficult for people as they are often a single representative) but should also include a variety of techniques to ensure that the patient and family voice is heard.

> **TOP TIP:** Ensure that your local information/data analysts are involved in your whole system CYP emergency and urgent care project group as soon as possible. This is because their expertise can ensure that the team has good measures in place to assess the impact of all the improvements being tested and implemented.

Our work across ten health systems indicated that there are four main stakeholder groups that need to play an active role in the work.

1) **Commissioning leaders** (including GP commissioning, given that forty per cent of GP activity concerns children).

2) **Executive sponsor** – fulfilling an influencing and support role.

3) **Clinical lead** – to help influence peers and 'test' the acceptability of any changes.

4) **User involvement** – to provide a patient/family perspective on the service and proposed changes.

1. Commissioning role

It is important for the commissioning lead to:

• own the vision for children and young people based on the bigger picture/context

• ensure following redesign that money follows the ideal model of care

• ensure all stakeholder organisations are engaged to make it work and sustain the change

• help facilitate negotiations in pursuit of the ideal model of care

• capitalise on the expertise of this clinical network to ensure that local commissioning plans meet statutory responsibility requirements and ensure governance into 'urgent care' and 'children's' programme boards is in place to ensure there is a mandate for this work.

• Help to ensure that planning for children and young people is robust, co-ordinated and part of the wider strategic agenda.

GP Commissioning – The Health and Social Care Bill published in January 2011 (7), sets out to strengthen the commissioning of services by recommending that primary care should lead commissioning in the form of commissioning consortia. The majority of activity for children and young people's emergency and urgent care happens in primary care and, therefore, engaging and involving GPs in the planning and design of commissioned services has been found to be critical in effecting change.

> **TOP TIP:** It's helpful if commissioners can ensure that there is a small 'pot' of resources available (whether by contributions from all of the whole system organisations or 'spend to save' type monies) to fund such initiatives as common patient leaflets, common assessment tools and directory of service communication packs, which will be produced as a result of this whole system work.

2. Executive sponsor within each organisation

Executive sponsors will want to understand why the improvement programme is needed and what it is seeking to achieve. They will appreciate that children make up a significant proportion of emergency activity. Executive sponsors (normally executive directors) should be nominated for the project by their CEO. Their role includes:

• securing ongoing support from the organisation

• communicating progress of the project to the top of the organisation (this is the mandate that the network needs)

• ensuring alignment with organisational priorities and strategic direction

• helping overcome barriers that require senior leadership intervention.

3. Clinical leadership

The clinical champion should be passionate about collaborative working, willing to take the lead and to think beyond their own organisation. The clinical champion is responsible for ensuring that the new service is clinically robust and that clinical stakeholders are involved in decisions about the design and delivery of services. Delivery of the project (ensuring the cultural change in thinking and working practice) should, ideally, be a major part of their 'day job'. Ensuring that the clinical champion has the time to devote to the improvement programme and has access to the necessary administrative support to enable them to fulfil their responsibilities are important tasks at the outset of the programme of work.

4. User involvement

Having a parent or user either within the network team, or feeding into the network, provides a perspective that is different to those of the professionals delivering services. User involvement can be secured in a number of ways and this is discussed further in step four.

TOP TIP: The network team members must each ensure that they are feeding back to colleagues 'back at base' and that they are closely connected to relevant clinicians involved in delivering the services. The network team also needs to be able to access experts who can advise and lead elements of the project in their areas, such as estates, communications, work force and finance. (The commissioning lead should enable this support).

Terms of reference for the network help set out the aims of the work, key elements and roles and responsibilities. This leads to a shared understanding of the task.

Tool: Model Terms of Reference Ⓡ
Children and Young People: Urgent Care Network

Terms of Reference

Aims:

The network will be clinically-driven, with participation from all NHS organisations. The high level aim will be to introduce a change in the culture and way of planning these services to create a whole system shared vision.

The children and young people (CYP) urgent care network will:

1. Establish a children's network:
- to share best practice across the health community for CYP
- to seek solutions that prioritise quality and reduce variations in standards of care across an integrated system
- to understand the population needs in the medium to long-term (1-10 years).

2. Enhance efficiency of pathways and address the 'care closer to home' agenda by seeking:
- to map current service provision, including pathway, resources, quality measures
- to ensure that investigations are undertaken in the appropriate setting.

3. Create evidence-based, whole system, high volume pathways and oversee the implementation of action plans:
- to develop strategies that make the best use of existing tools, such as Map of Medicine
- to use existing guidelines, NICE guidance and other national guidance, and adapt to local use
- to agree on a training and education strategy across the health community.

4. Engage with CYP and families/carers regarding appropriate use of services:
- to ensure appropriate public, patient and carer involvement in developing and monitoring healthcare services for children and young people
- to encourage the appropriate use of services for children
- to contribute to the development of a social marketing strategy to direct the public to appropriate children and young people's unscheduled care services.

The network will need to decide how often it meets and dates for these meetings should be set in advance. A model project group agenda is reproduced below.

Tool: Model project group agenda ®

Tool: Example project group agenda

Part 1 – Stakeholder presentation for CYP E&UC group (e.g. minor injury units, MIU)
Part 2 – Linking and mapping of current processes of Interest group (e.g. MIUs) within the whole system
Part 3 – Other service developments:
  e.g. community childrens nurses (CCNs) being funded extended hours to cover paediatric assessment unit (PAU) admissions in the evenings and weekends.
  New Idea: CCNs – can they go into ED daily to facilitate referrals? – would be a no-cost service development.
Action: identify possible scenarios where this assists in enhancing quality and reducing length of stay in ED.
Part 4 – High volume pathway working – e.g. currently fever roll-out

Fever
- Governance approval on pathway documents – needed from the PCT perspective.
- Send copy of latest documents to the whole group.
- GP commissioning/PBC (practice-based commissioning) engagement - attend cluster meetings to raise awareness (also see need for primary care data for our performance monitoring below).
- Training on fever pathway - particularly with regard to the training needs of/opportunities for each of the different stakeholder groups.

Diarrhoea and vomiting (D&V)
- D&V pathway - The D&V patient information leaflet and staff traffic light have been circulated for comments – should be complete and ready for PPI (patient and public involvement) by end of month.

Head injuries
- Need to focus on the primary care end of the pathway.

Respiratory pathway
- On hold pending completion of first three.

Whole system data monitoring
- The report prepared includes data from across the system. It was re-presented. Report still needs primary care data but is an excellent model to take forward – it needs clinical sign-off before coming to our project meeting.

Lesson plan
- Engagement tool to be progressed with local education colleagues.

AOB
- Next meeting date.

It is important that all those on the network have access to information about the 'current state'. The core data sheet below provides a number of questions that will help ensure there is a complete picture of current activity. Try to ensure this information is available early on in the development of the network.

Tool: Collecting core data ®
Emergency and urgent care (< 19 years) – a prompt sheet of questions

Tool: Collecting core data
Children and young people (CYP)
Emergency and urgent care (< 19 years) – a prompt sheet of questions

Name of PCTs and acute trusts covered in your health system:

Population
- Children and young people (CYP) for local area, breakdown if possible 0-1, 1-5, 5-12, 12+ (approx.)
- Key issues for the population: e.g. is there a high level of deprivation/rural issues/immigration etc.
- GPs – numbers of children registered – are there high referring practices to secondary care?

Summarise current services in your local patch, you may wish to consider:
- Community services such as walk in centres/urgent care services - do they see children?
- Community children's nursing services - do they provide acute care at home?
- What hours does your children's A&E service operate, does it meet NSF standards?
- Do your services provide ambulatory care facilities?

Performance data (< 19 years) for emergency and urgent care for one full year

Total number of A&E attendances:

Total number of admissions (excluding elective):

Total number of in-patients who stayed less than 1 day:

Total number of in-patients who stayed between 1-2 days:

Total number of in-patients who stayed more than 2 days:

- Admission rates (CYP) and proportion of short stay admissions (figure derives from above i.e. number of short stay admissions (<2 days stay)/total admissions)

Other useful data:
- Walk in centres/urgent care centres – what are the attendances there? Do staff receive education and training in CYP issues?
- Ambulance service – how many children do they pick up? Do staff receive education and training in CYP issues?
- A&E attendance (CYP) - volume, peak times of day and admission rates
- Management of GP referrals, numbers and pathway

What are the 6 high volume conditions that CYP present with at A&E?
1.
2.
3.
4.
5.
6.

What current level of whole system working exists e.g. is there a network that operates across the whole system, bringing together NHS Direct, GPs, ambulance services, walk in centres, community nursing services, A&E, paediatrics?

Do you have in place agreed common pathways that operate across the whole system?

How are children, young people, families and carers engaged in service design and delivery?

Describe your biggest challenges in improving the urgent and emergency care services for children and young people in your area, e.g. shared information systems, sustainability.

Some of the test sites also found it useful to undertake a 'self assessment' by comparing their performance against the list of 20 key characteristics in the 'Focus On…' document (1).

Undertaking this interactive 'self assessment' exercise across multiple organisations brings the partners together to adopt a whole system approach.

TOP TIP: Interactive activity suggestion: producing a high quality checklist for your local services.

Print off all of the 20 key characteristics onto landscape A4 sheets and display them on a wall – give everyone coloured sticky dots and ask them to 'rate' where they think they are in achieving these characteristics. Use a rating scale, for example "we're achieving this", "we're working on it", or "we still need to tackle this".

The value of this collaborative activity is that it allows you to reach a consensus about what needs to be focused on as a priority.

The local system and stakeholders can then 'share their vision' and work towards these goals jointly.

Managing risk

It is important to identify potential risks to any programme of work. This table provides some examples of the risks that were identified and experienced by teams throughout their work. Highlighting these kinds of risks should help the network find ways in which to mitigate them. The management of these risks should be reviewed on a regular basis.

Tool: Model risk management sheet ®

Tool: Model risk management sheet

Area affected	Risks	Mitigation
Overall Project	1. Lack of clear value to stakeholders.	Chief executives support from across organisation and executive sponsor is a key advocate; monthly monitoring report as part of the governance of the network ensures we have a mandate from all relevant 'balloons' along the pathway – the collaboration effort will be enhanced with high level support and buy-in.
	2. Unanticipated level of support required by trusts.	High volume work which should yield benefits in the longer term for all the stakeholder organisations.
Local Trust implementations	3. Lack of strong clinical championship.	Regular (weekly) contact by CYP clinical lead to their clinical lead/medical director.
	4. Availability of project management, data analysis and clinical resources.	Should be part of routine data monitoring and not too much more onerous
	5. Inadequate training/support for trust project leads and teams – invest to save monies – difficult to 'persuade'.	CEO mandate to work in this collaborative approach – Executive Sponsor to assist ensuring the work is supported to achieve objectives.
	6. Lack of co-ordination across primary and secondary care.	Multidisciplinary project team (which is clinically driven) in place.
	7. Lack of spread and ownership by local health professionals.	Multidisciplinary team to feed back to their own teams and to facilitate understanding and adoption of the new jointly agreed pathways across the system.

Step Two: Agreeing a shared vision across the system – developing your project charter

> **TOP TIP:** Ensure that the project charter (including terms of reference) is signed off by the executive sponsor. If challenges arise in achieving any elements, this executive can assist in addressing them, if they've been engaged from the outset of the work.

A project charter is an important tool to ensure there is a shared understanding across the network about the scope, aims and deliverables of the work. The charter is the product of collaborative discussion and will take time to develop and refine, but this provides the 'road map' for the work on improvement so needs to be given serious consideration.

Tool: Model children and young people emergency and urgent care project charter template Ⓡ

This is a real example of a project charter from one of the ten whole system sites.

PROJECT CHARTER: Children and young people emergency and urgent care rapid improvement programme

Objectives and Timeline
- Map selected clinical pathway (based on high volume HRGs (healthcare resource groups)) through the whole system (primary to secondary care).
- Develop and test the updated pathway, based on best practice and local need, using rapid improvement techniques/events.
- Engage key stakeholders/users (including one school).
- Establish project group/governance in line with rapid improvement.

Scope
- Urgent care activity for children and young people e.g. febrile illness focusing on high volume HRG admissions.
- Non-elective admissions for HRG Chapter P (childhood diseases) with short lengths of stay.
- Review arrangements for discharge/community team involvement and opportunities for improvements to length of stay.
- Links to development of Urgent Care Specification and Procurement Programme.

Key Deliverables	Measures/Targets	Timeframes
Review activity relating to specific pathway.	Baseline activity for management of fever HRGs/ICD10 Codes • S13: Pyrexia of unknown origin. • P06: Minor infections (including immune disorders). • P08: Febrile convulsions.	Baseline to be obtained HRG data then to be reviewed • 3 months after development of pathway • Project span Milestones: Show a reduction of : 5% of total by Month 4 10% by Month 6 Full 25% reduction by Month 9
Development system-wide care pathway. Including common assessment tool/patient information across whole system. Facilitation of early discharge from hospital, where appropriate.	Production of whole system wide tools. Review of data in 3 months, following development and test of new pathway. Reduction in number of attendances to secondary care facility by 25%. Reduction in emergency admissions for febrile management by 25%. (NB: Attendances to walk in centre and primary care will also have to be monitored as these may rise appropriately and commensurately with the pathway work being undertaken).	In first 3 months - Completion of revised system wide pathway • Data to support these targets for monitoring impact on HRG/attendance with UCCWIC, PAU and main A&E, will be provided monthly or as necessary – Data needs to be provided to the local project lead for circulation to the rest of the project team. Data for the past 24 months will be useful as a one off to provide the SPC trend figures) Review activity & HRGs to monitor impact
Trial of engagement tool.	Enhanced stakeholder and user involvement.	

Team structure, roles and weekly time commitment
- **Commissioning lead:** 2 hr/wk
- **Clinical leads:** 2 hr/wk
- **Project lead:** 3 days/wk
- **Nurse lead:** 2 hr/wk
- **Allied health professional lead:** health visitor/ 2hr/wk
- **Executive lead:** as required
- **Other support:** sponsored by CEO/As required

Action planning

An action plan is a key component of successful whole system working. It helps the network group to summarise its aims and actions and agree by when and how they are going to achieve them. Importantly, it indicates who is responsible for delivering what.

Keep it simple – include:

Action required/By whom?/By when? /Red/Amber/Green (RAG) status/Possible issues a full example of the tool can be found in the resource pack

Tool: Action planning Ⓡ

Enhancing quality and efficiency of emergency and urgent care services for children, young peoples and families across the health care system
Action Plan

Progress to date: RED = Not yet started/complete, AMBER= In progress/Working towards, GREEN = Achieved/Completed

Action Required	By Whom?	By when?	RAG rating	Possible issues
Priority 1: Stakeholder engagement and communication				
Agree communications plan for secondary, primary care, children's centre staff				
Facilitate a whole system stakeholder event				
Present at GP communication events				
Develop internal communication plan to support project members in disseminating information to their organisations.				
Priority 2: Data analysis and monitoring				
Analysis of all CYP activity and set up system to monitor monthly activity				
Agreement of thresholds for admissions activity, to aid interpretation for monitoring purposes				
Set up a system for collating activity from pathway use, telephone advice line, rapid access clinics, and GP referrals, including admissions prevented				
Identify GP practices who are not making best use of pathways, telephone advice line and rapid access clinics, so that some targeted awareness raising or peer-to-peer work can be done to encourage them to use it.				

TOP TIP: Consider rotating the venue for the project meetings. Meetings can be hosted by the different organisations involved – this helps to maintain a clinical focus and allows all organisations in the system, that would otherwise have been working in 'silos', to learn about the service that they refer to or that refer patients to them. It makes sense to understand each other's service challenges and opportunities better. This should facilitate more effective collaborative working.

The first part of the meeting could be the host organisation presenting their service. This presentation should cover such information as:

- **highlights** – What are we proud of in our part of the service? What do we do well? (e.g. patient engagement, outcomes, staff morale)

- **opportunities** – What are our challenges?

- **activity** – Numbers seen

- **wishlist** What would improve the quality of our staff and patients' lives?

- **next steps** – What is our strategy for the future and how could the other stakeholders across the whole system help our team?

This innovative approach helps to identify 'any tricks we are missing', in terms of collaboration to improve the patient journey/experience.

Step Three: Communications plan and activity

It is good practice for your network to establish a small team or sub group to develop a communications plan. The plan should include a stakeholder map (see the tool below). This will be an important tool for indentifying all those the programme needs to communicate and engage with. It will also help identify the right people to invite to events and workshops.

Tool stakeholder map ®

	Strength of interest	
	Low	High
Low	Inform	Consult
High	Involve	Partner

Influence on success
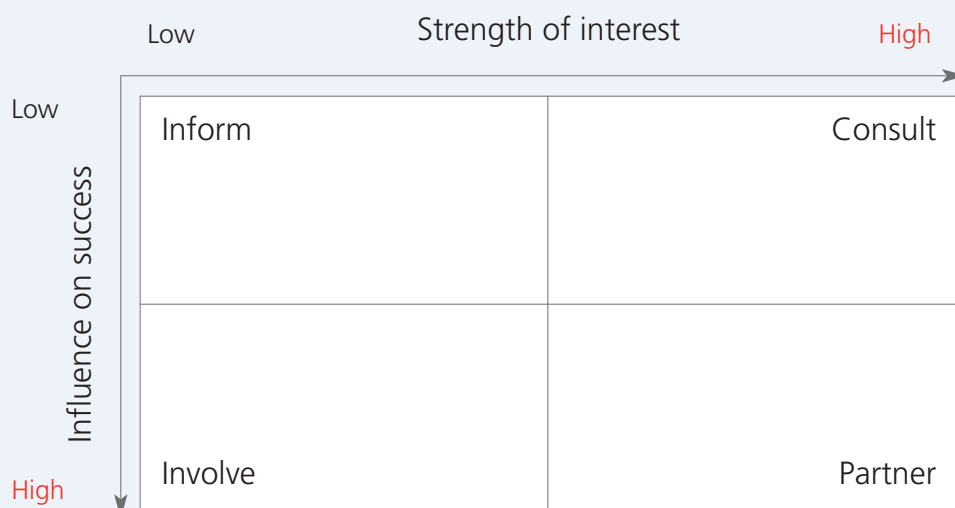
Good communications with staff and patients are vital to ensure that awareness of the project is high and that the right people are engaged. The test sites used a number of different media to transmit messages, including: GP newsletters; primary care events; GP education sessions; commissioning events; local medical council meetings; face-to-face discussions; mail shots; emails; working with practice managers; working with clinical teams: A&E, paediatrics; newsletters; television features.

Here is a GP newsletter from Luton

GPLink September 2009

Working Collaboratively Across the Healthcare System

In May 2007 NICE published guideline 47 "Feverish illness in children" to assist paediatric and non paediatric practitioners in consistent assessment/management of febrile children 0-5 years.

The whole local healthcare system including NHS Luton, NHS Bedfordshire, Luton and Dunstable Hospital, EoE Ambulance Trust and NHS Direct, facilitated by Atos Consulting and the NHS Institute for Innovation and Improvement have worked to develop a localised pathway using the simple traffic light system, this has been trialled in:

- GP Practice
- Community Paediatric Service
- A&E
- Paediatric Filter
- Paediatric Assessment Unit

A fever advice sheet and fridge magnet for parents have been developed and tested. Initial feedback from parents and professionals is very positive.

Parents require consistent advice/treatment therefore implementation of this guideline requires broader engagement of all local health professionals, especially within General Practice.

The next opportunity to enable this will be: Patient Experience Seminar held in COMET at the Luton and Dunstable Hospital on **18th September 2009 from 2pm-4pm.** You are all welcome to attend.

We believe that working across the healthcare system and developing pathways based on best evidence will ensure the delivery of high quality care to children, young people & their families, we look forward to ongoing collaboration and the benefits it will bring.

For more information please contact Jo McWhan on 01582 407961 or Rose Taylor on 07805 910401.

L&D Consultant Advice Line for GPs

From 3rd August 2009 the L&D is offering a new Acute Care Consultant Telephone Advice service.

The overall purpose of the new service is to help GPs have a clearer understanding of our available services and to offer immediate advice when you need it.

This means that when a patient is with you in surgery, a GP can telephone the on-call Consultant there and then to get advice on treatment or potential diagnostics thus potentially avoiding unnecessary admission and additional stress for the patient. In the autumn we hope to have emergency clinic slots to compliment this service.

The new service replaces the previous system of either contacting an old colleague for advice if they are available to put you in touch with the right person. GP Liaison will be contacted in the same way that GPs would currently contact them for an admission on telephone number 01582 492851 or bleep 456. They will take the patient details and then provide the GP with a direct mobile number for the ACU consultant. This should speed up the process, avoiding having to wait for the on call registrar to answer their bleep or waiting for a consultant to call the GP back after the patient has left the surgery.

We are simplifying and formalising the process. GPs should contact the GP Liaison in the normal way by calling **01582 492851**, we have then streamlined the process from thereon.

And as we develop the service further we plan to include:

- Telephone advice from specialist consultants
- Follow-up clinics where the patient can see the consultant for diagnostics without having to be admitted

We will closely monitor the service and welcome feedback so that we can make any improvements as required.

For more information please email ann.prime@ldh.nhs.uk

Online Library Services

On-line access to library services is now available from the main L&D website **www.ldh.nhs.uk/library_services.htm**

- Request journals, books and literature searches
- Easy access links to on-line journals and health care databases
- Weekly Mental Health and Social Care Bulletins
- New books
- Athens registration

TOP TIP: Consider visiting every GP practice as part of quality visits. Whole system working and pathways can then be discussed and commitment to whole system working secured.

Questions to practices could be:

1. are you aware of the local paediatric urgent care network which is reviewing and developing whole system pathways?
2. have you received copies of the pathways?
3. are the pathways used by your staff?
4. is reference made to the pathways when making ongoing referrals?

Step Four: User involvement

Involvement of children and young people and their families must be integral to the design and planning of services. Work undertaken by the NHS Institute on Experienced Based Design demonstrates how staff and patients/families working together can produce dramatic improvements. There is a direct correlation between the quality of services and environment and the level of engagement undertaken locally. Service users are often keen to participate in helping improve the service and will have many ideas for improving it.

There is also a legal requirement, set out in section 242(1B) of the NHS Act 2006, which states that the NHS should involve patients and the public in service development and planning (Department of Health (DH 2008)) (8). This is reinforced in the NHS Constitution, which emphasises the vital role played by user engagement (DH, 2009) (9). Children and young people, have the right to be involved in decisions that affect them, as set out in Article 12 of the UN Convention on the Rights of the Child (Office of the United Nations High Commissioner for Human Rights, 2007) (10). And, whilst in recent years the NHS has shown improvements in the level of user involvement in the planning, development and delivery of healthcare services, there is little evidence that such involvement has become routine (DH, 2008) (8).

Teams who have participated in the NHS Institute's programme have held discussions with parents at children's centres to obtain feedback on services. This is what they had to say …..

Feedback from families

"It's hard to get an appointment for that day at the GP's, you have to push really hard for it."

"I use the health visitor for advice."

Talking of her experience at Luton A&E: "There should be a special service for children when they need to go to A&E. He's a child & shouldn't need to see adults being treated. My son was next to an elderly lady when he was having his arm plastered - it wasn't right."

"The walk in centre won't see children under a certain age."

Experience of using local health services

"I rang my GP & couldn't get an appointment for that day, so I went to the walk in centre, they sent me back to my GP."

"I would go straight to the hospital out of hours."

"My GP encourages me not to take them too often."

Here are some examples of how test sites engaged with children and young people. They demonstrate how the sites responded to requests from families and carers for more information about local services and how to manage common childhood conditions.

- A 'Choose well for your child' local health information programme was published, signposting parents/carers to appropriate emergency and urgent care services.

- Teams published 'whole system', consistent information for parents/carers on common childhood illnesses. So, whether they attend the walk in centre or GP centre, they receive the same high quality information.

- Information about the management of common childhood conditions is being inserted into child health record books, commonly referred to as 'red books'.

- All new parents are given fridge magnets and 'credit' card sized information, guiding them on the use of urgent and emergency care services.

Comments from families include:

"I really like the fever advice sheet. It was clear and easy to follow."

"The advice sheet was good. It did not have too much information on it."

"Having had the fever advice sheet I will now ring NHS Direct if I have concerns."

• One service has held teaching sessions for parents at children's centres on the management of fever. These include when to seek medical advice and parents are offered free thermometers. They have used the session to promote the 'Birth to Five' book, given free to all new parents. Published by the Department of Health, the book includes a thorough explanation of the signs and symptoms of common high volume conditions
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107303

The NHS Institute designed a lesson plan for 11-14 year olds, the aim of which was to:

• promote the involvement of children and young people

• raise their level of awareness and knowledge about the variety of emergency and urgent care options and

• encourage their involvement in the planning, design and delivery of NHS services.

The lesson plan can be ordered at:
http://www.institute.nhs.uk/lessonplanorder

It was tested, evaluated and launched nationwide in 2010. Copies were sent to all secondary school head teachers in England. One team in Gloucestershire has adapted the lesson plan for use in primary schools. This is available at:
http://www.institute.nhs.uk/lessonplanprimary

As a result of the suggestions of young people in Gateshead during their emergency and urgent care lesson, school diaries now have an insert containing information on local health options. This has been positively evaluated in the first school, where 681 of the 1000 pupils completed an online questionnaire and confirmed it was used not only by them but also by their families. This is now being rolled out to all local schools.

Teams have also designed a 'teen quiz' to signpost young people to appropriate emergency and urgent care services and this has been well received by youth groups. Youth Parliaments, such as in Berkshire East, have provided opportunities for discussions between professionals and young people about how services can meet the specific needs of young people.

In one organisation, children and young people who have asthma participated in a competition using art to express what they felt about having this condition. A selection of competition entries are available at: http://www.institute.nhs.uk/cypcompetition

They then went on to assist in the development of an asthma log for children, young people and families. Here's what two youth forum members of Asthma UK said about the log:

"I think `My asthma log' is a great idea. It puts all asthma information into one, easily accessible place." Emma

"It will enable children and their parents /carers to become more confident in managing their asthma." Annie

Figure 19 Pictures drawn by children and young people

Step Five: Discovery phase
Observation tools - 'walking your patch'

Observational visits, literally 'walking your patch', are an invaluable diagnostic tool to understand how services fit together in practice. They help to identify opportunities for service development. Further details can be found at http://www.institute.nhs.uk/qualityandvalueimpro vementtools

Teams found they gained considerable value in visiting all parts of the healthcare system, including GP practices, local pharmacies, out-of-hours services, walk in centres, children's community nursing teams, minor injury/illness units, ambulance services, A&E, paediatric assessment units and paediatric wards. Talking to professionals in their own area puts them at ease and allows an informal dialogue to develop about current services and opportunities for enhancement. Staff within these areas often value the opportunity to share their knowledge about the service they work in.

It is particularly important to understand the interface issues between services and the impact that can have on the journey for the patient. Within organisations, services may be working well, however, the transfer of patients between services and variation in the consistency of approach are likely to be highlighted during these visits. Working collaboratively across the whole system can assist in addressing any bottlenecks and opportunities for improvement identified.

'Walking your patch' across the various organisations that make up your system should be an exercise that is repeated on a regular basis. This activity helps break down organisational barriers and helps measure how improvements are being sustained enabling your network to continue to pursue high quality care.

TOP TIP: Importantly, don't forget to ask children, young people and families what they think about the services they are using - service users provide valuable insights and suggestions that can really assist us to enhance the quality of our services.

Charlie, a 9-year old, said of the walk in centre in Sussex: ''you get seen quickly by nice staff, but a few books and things to look at and do while I'm here would be good. ''

Here are some questions that you may want to consider asking professionals at each part of the patch you visit:

- please tell us about the services you provide for children, young people and their families
- how many children and young people do you see on an average day?
- how do your patients arrive at the service? Do they self-present or are they referred from other professionals?
  How does this process work?
- where are patients discharged to? How does this process work?
- do you get feedback when you refer patients on to other services?
- how does your service ensure that you keep up-to-date and develop your skills/competencies to care for children, young people and their families? Is there a training programme for staff in place that focuses on children and young people's issues?
- do you have access to play specialists/facilities and equipment to support distraction?
- how do you engage/involve children, young people and families in the planning of your services?

- what information do you use? Does it link to any other parts of the system? (thinking about ways to join up patient records across the pathway of care)

- how is your service linked in to other parts of the local health system?

- what would you do/organise differently if you could to make the service better?

- do you have a 'vision'/plan for the way your service could expand which could be shared with other parts of the local health system?

A visit to an out-of-hours service, A&E and other services at peak times (often late afternoon/early evening) can be useful to assess patient-flow although it can be difficult for staff to talk to visitors at these times. Allowing a good period of time for the visit can help and using observation techniques is a valuable way of analysing the interaction between patients/families and staff.

TOP TIP: On completion of your walk about collate bullet points highlighting good practice and identifying opportunities for service enhancement and whole system collaboration. These can then be shared with the whole team and start to form your collaborative action plan.

Visits to sites – gaining inspiration

Across the country, children and young people's services are all facing the same challenges. High performing health systems that have been particularly helpful in supporting others on their journey include:

- Homerton University Hospital NHS Foundation Trust in East London

- East and North Hertfordshire NHS Trust in Welwyn Garden City and Stevenage

- Smithdown Children's walk in centre in Liverpool

- Wirral NHS Trust in the Wirral

These organisations would not say they have all the answers, but visiting them allows you to have discussions with like-minded professionals about what has and has not worked in developing their services.

TOP TIP: It is often the journey to and from site visits that allows some reflection time on how your local services can be developed! (It is of great benefit if a multi-disciplinary team can join up to attend the site visit together.) Be sure to capture these discussions and new ideas from the visit to feed ideas into your project/action plan.

Thinking differently tools

Working as a whole system requires professionals to think differently. Here we offer some examples of how teams have done this by establishing a vision of the future, undertaking pathway mapping and using Plan Do Study Act (PDSA) cycles to test out ideas prior to full implementation. There are a variety of service improvement tools designed to support teams to think and work differently. These are available in the resource pack at the end of this guide and on the NHS Institute's website.

## Process mapping to design the future pathway

The purpose of process mapping is to design a future pathway or service, based on an analysis of the strengths and weaknesses of the current situation. The actual process of building the map enables reflection on the patient journey, bottle necks and good practice and leads to innovative thinking about what needs to improve along the pathway.

It is important to involve staff (and patients) from across the system when developing process maps. Experience has shown that the pathway is rarely quite what any of the individuals involved in delivering it think it is!

The 'as is' current pathway should aim to illustrate:

• the entry points into and exit points from the pathway

• the flow of patients through the pathway

• the information and material requirements at each stage of the pathway

• the decision points within the pathway

• the timelines within the pathway

• the pathway may also differ depending on whether it is in-hours or out-of-hours and this is worth exploring too.

An example of an actual 'as is' pathway is shown below. The pathway clearly shows the complexity for staff and patients to navigate!
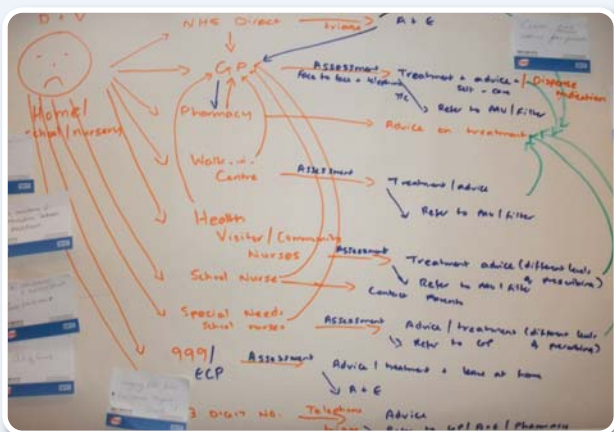
Pathway mapping at their rapid improvement events facilitates discussion between services and secured commitment to ongoing collaboration to achieve consistency in care management across services.

Pathway mapping in NHS Gloucester at their rapid improvement event facilitated discussion between services and secured commitment to ongoing collaboration to achieve consistency in care management across services.

Once agreement is reached on the current pathway, discussions can take place on how the pathway could be improved using plan do study act (PDSA) cycles to support small tests of change followed by an assessment of impact.

The four stages of the PDSA cycle

Plan – agree the change to be tested or implemented.

Do – carry out the test or change.

Study – examine the data before and after the change and reflect on what was learned.

Act – plan the next change cycle or full implementation.

PDSA cycles provide a framework for developing, testing and implementing changes leading to improvement. The model is rooted in a scientific method and moderates the impulse to take immediate action, with the wisdom of careful study. The framework includes three key questions and a process for testing change ideas (often called 'rapid tests of change').

Plan, Do, Study, Act Cycles

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

ACT | PLAN
STUDY | DO

It is advisable to keep testing out ideas on an ongoing basis to ensure that the health system is flexible and adapting to changing circumstances, such as staff skills mix, patient case mix and even moving premises. This will ensure continuous improvement and that processes and patient flow are optimal and most efficient.

One of the teams tested the feverish illness 'traffic light' pathway and developed their own testing form for their pathways. ®

Tool: Template for evaluation of a rapid test of change

CYP Emergency and Urgent Care - Evaluation on Rapid Tests of Change
Feverish Illness in Children (Based on NICE Clinical Guideline 47)
TESTING OUT Pathway and Patient Advice Sheet

Paediatric assessment unit/A&E/GP practice/school nurse/health visitor (circle as appropriate)

Date:

Age of child ……………………………………………………………………………………………………

In which department did the test take place?

Which traffic light group was the child in?

RED AMBER GREEN

What was the outcome of the assessment? (admission/seek further opinion/discharge)

Was this different from how you would usually manage this child?

What worked well? (communication, understanding, other issues?)
……

Views of parents/carers - what do they like or not about this advice sheet? (contact details if they are willing to participate in a follow up call)
……
……

What would you change/any other comments
……
……

Thank you!

Please return completed form to: Project Lead

Step Six: Rapid improvement event Planning and design of the event

Rapid improvement events (held in a day) aim to bring all the relevant representative stakeholders together to produce clear outputs that 'can be rolled out across the system'. The objective is to bring together all stakeholders from across the local healthcare system to address children and young people's emergency and urgent care collaboratively.

To view an example of film footage and interviews from a rapid improvement event, involving more than 60 professionals from across NHS Luton visit: http://www.institute.nhs.uk/videoluton

Outcomes you can expect by the end of the day include:

1. pathway mapping – what's good and what could be better locally for children and young people within high volume conditions

2. ongoing development of your network of committed professionals to take forward whole system working

3. sharing national examples of how teams have taken whole system working forward

4. a review against the NHS Institute's high performing characteristics that will inform ongoing work

5. the compilation of consistent pathway tools for primary and secondary care, supported by patient information

6. joint action planning for next steps.

An agenda for the day (which is primarily about networking and forging collaboration) may look something like this.

Tool: Model agenda for a rapid improvement event ®

Tool: Model agenda for a rapid improvement event

09.00	Registration and refreshments
09.30	Welcome and event opening by the chief executive/board level lead for CYP
09.40	Getting to know each other/warm up introductions (this will help set the tone of the day)
10.00	An overview of national achievements – inspiration for what can be achieved locally
10.20	The local picture, sharing the baseline – partners/high volume activity/opportunities
10.40	A way forward: Whole system pathway development: what does our pathway currently look like? Self assessment against 20 key characteristics/pathway mapping exercise in groups
11.30	Refreshment/comfort break
11.45	Tackling one high volume pathway
11.50	Clinical lead to provide an overview of best practice - what does this mean for primary care, secondary care and patient information?
12.20	Break-out groups: Developing tools for: Primary care Secondary care Discharge/patient information System-wide information
13.00	Working/networking lunch
13.30	Ongoing work on tools
14.30	Sharing of work and challenging
15.15	Refreshments/comfort break
15.30	Action planning and next steps
16.00	Evaluation sheets completed and close by the chief executive/board level lead for CYP
16.30	Close

It is helpful to ask the chief executives of the hospital and commissioning organisation, or lead directors for children and young people to open and close the event. This demonstrates high-level commitment to the project and shows that governance and accountability arrangements are in place. It also helps stakeholders to understand the impact of the work stream and to commit to playing their part as a member of the local whole system.

Don't forget to capture feedback from the day, to collate it and provide an overview to participants. It's important to share how their feedback is being used for the planning of future events and ongoing whole system work.

Step Seven: Delivering results and measuring impact

Measurement is essential to demonstrate whether quality improvements and efficiencies have been achieved as a result of collaborative way of working. The measures chosen should, ideally, provide quantitative and qualitative impacts of the improvement initiatives.

Measurement for improvement, rather than judgement is a way of understanding and demonstrating what difference the interventions have made. There needs to be agreement amongst all staff groups that the measurement data is meaningful and that it will be used to improve the care. It should be clear that the rationale is that the data collected will inform decisions and will, ultimately, be part of improving patient care. Without defining and collecting this data, it may be impossible to show the impact of the collaborative improvement work. It is vital to begin work on impact measures at the outset.

Key performance indicators

Local teams will want to decide which measures are relevant to their work. The experience of the test sites suggested useful measures include:

1. number of patients on the pathway(s) being seen at each **'balloon'** in the pathway (per week or month)

2. proportion of admissions from the ED attendances (i.e. the ratio of admissions/ED attendances per week/month)

3. proportion of short stay admissions of the total admissions (i.e. the ratio of short stay admissions is less than two days/total admissions per week). Short stay admissions represent the largest opportunity for improving processes for high volumes of patients. The aim is to avoid going through the process of admitting patients to hospital where this is avoidable.

Ideally, each local system-wide team should agree its own measures and allocate responsibility for the analytical work.

The most important part of measurement is deciding what is important and what the aim of the project actually is. Without clarity on the aims of a project at the outset and an idea about 'what success will look like', measurement cannot capture the outcomes in a way that justifies the costs and resources used by project. It is for local organisations to decide on their measurement strategy, based on their local aims. It is important that people understand their start point or baseline activity.

Defining the measures

The NHS Institute has done significant work defining its pathways in terms of the diagnostic codes that define admissions data (see the resource pack pathway definitions). These codes represent patients and pathways that have significant ambulatory potential, identifying where it is likely that the number of admissions could be significantly reduced. Clearly, not all of the patients covered by this definition are ambulatory as some will be more acute and, appropriately, need to be admitted to hospital for their care.

It is important to define clearly how any measure is going to be quantified and the data collected. The following measures checklists are recommended for completion and sign-off by the network. For each measure to be used, the lists detail the definition and process of data collection. Following a thorough review and discussion within the local team, these completed checklists should be kept with the project lead and reviewed frequently to ensure that the impact you wish to measure is being captured. Ⓡ

The NHS Institute recommends the use of run charts and statistical process control (SPC) charts.

There are resources covering SPC on the NHS Institute's website. It includes a tutorial on how to create and analyse statistical process control charts: **http://www.institute.nhs.uk/statisticalprocesscontrolcharts**

Step Eight: Sustaining improvement

The network should be considering the sustainability of improvement at the outset of its work. Quality improvement often takes longer than expected to put in place. Holding onto the gain made is a considerable challenge. The NHS Institute has developed a Sustainability Model and Guide that helps organisations and systems consider their strengths and weaknesses in terms of factors that relate to processes, staff and organisational issues. Networks should consider using the model and guide to assess the likelihood of improvements being sustained. A link to the guide is given in the resource pack.

Tool: Measures checklist
Measure name

Why is it important? *(provides justification and any links to organisation strategy)*

Who owns this measure? *(person responsible for making it happen)*

Measure definition
What is the definition? *(spell it out very clearly in words)*

What data items do you need?

What is the calculation?

Which patient groups are to be covered?

Goal setting
What is the numeric goal you are setting yourselves?

Who is responsible for setting this?

When will it be achieved by?

Chapter Five: Highlights: new ways of working from the test sites

Pathway development

All of the test sites that adopted a whole system approach created whole system clinical care pathways. They focused on the largest opportunities for change along the pathway and addressed high volume conditions that children and young people most commonly present with as an emergency or urgent care need. The pathways include all entry points, based on national best evidence for the five high volume conditions.

Pathways include:

- a primary care assessment/management tool
- a secondary care assessment/management tool
- patient information, including discharge/care management plan
- directory of service information, such as a Choose Well Children's focused leaflet.

'Traffic lights' have been a popular tool and have been used in both the staff and patient information.

"*We believe that working across the healthcare system and developing pathways based on best evidence will ensure the delivery of high quality to children, young people and their families. We look forward to ongoing collaborative and the benefits it will bring.*" Dr Tomasz Rajkowski, consultant paediatrician

TOP TIP: "The inclusion of health visitors on the working group has enabled the advice to be spread across the community. Health visitors in Luton took the initiative to run teaching sessions for parents in a variety of baby and toddler groups and clinics. Free thermometers are given out along with fever advice. The launch of the gastroenteritis pathway will mean the local schools and play groups will be encouraged and supported to issue prevention advice to parents at the point of an outbreak, thus targeting groups of parents at an appropriate time." Ben Small, A&E charge nurse

http://www.institute.nhs.uk/qualityandvaluecyp
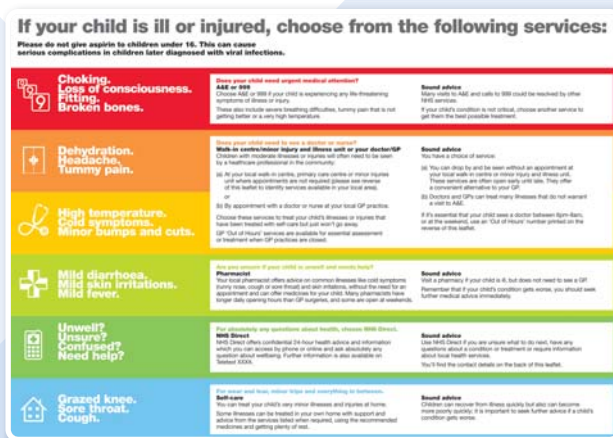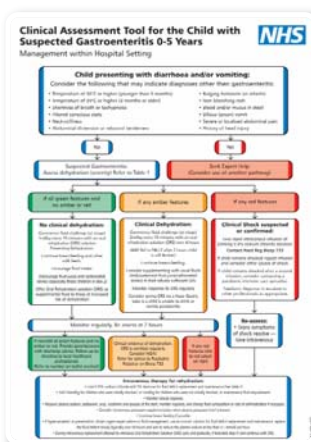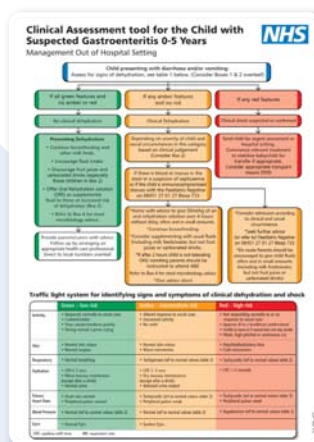
Commissioning for Quality and Innovation (CQUIN)

The Commissioning for Quality and Innovation (CQUIN) payment framework schemes allow local organisations to make a proportion of providers' income conditional on quality and innovation.

Case study example:

NHS South of Tyne and Wear and NHS Luton have also included collaborative working within their CQUIN programme. Here is how they have applied CQUIN to emergency and urgent care.

Innovation: 2009/10 CQUIN Scheme (20% of CQUIN scheme linked to reform)

Collaboration on pathway reform and implementation - children's acute services.

Collaboration on pathway reform through advice, attendance at work groups. Support for rapid process improvement workshops through contribution to planning meetings, facilitation of relevant data collection, release of staff to attend workshops and compact discussions.

Implementation of newly designed pathways linked to reform priorities.

Acutely ill/injured children - implementation of PSSAU (paediatric short-stay assessment unit) and enhanced children's community nursing team (CCNT) (subject to appropriate commissioning arrangements). 5% £138,875

Quarter 1. Development of implementation plan for PSSAU and early milestones met.

Quarter 3. PSSAU operational. Review of activity data.

Quarter 4. PSSAU operational. Review of activity data. Documented plan for CCNT.

Progressing business case for PSSAU and plans to have service operational by September.

Further details on CQUINs and examples can be found at: **http://www.institute.nhs.uk/cquin**

TOP TIP: Consider establishing service level agreements (SLAs) with teams outside hospital who see children and young people. Establishing SLAs between units, such as walk in centres and paediatricians, can ensure that there is the professional leadership and support for staff managing children and young people within community settings so that the care delivered is high quality.

System-wide information

The lack of information sharing between primary and secondary care is one of the most frequent challenges raised by teams participating in this work. See the case study below for details of how Bradford and Airedale have addressed this challenge.

Case study example:

NHS Bradford and Airedale have developed a system that allows the paediatric and A&E teams, with the patient's consent, to view records and prescribing habits. It enables them to view the entire patient record and pathway into and out of the system, in primary care from secondary care and vice versa. Based on TPP SystmOne, the new system enables letters to GPs to be produced electronically, thus avoiding delays for the patient. Primary care and secondary care are linked electronically; ensuring clinicians have access to all the facts of a patient's care and medication, which have not been available before.

The paediatric improvement programme seized the opportunity for its whole system wheezy child pathway to be an 'early adopter' within Bradford and Airedale. This system will ensure that records are available in real time, significantly improving staff effectiveness and the overall patient experience within this service.

GP Hotline

"We have lost the vital direct clinical dialogue between hospital paediatric consultants and general practitioners recently. There is huge benefit for consultants in talking directly to their GP colleagues to get an accurate picture of the clinical condition of the child or young person in question, which is more likely to result in that child or young person being seen in the right place at the right time. A few minutes spent answering the GP telephone hot line is likely to save a lot of time later and will result in better personal relationships." Venkat Reddy, national clinical lead, NHS Institute for Innovation and Improvement, children and young people's team.

The case study provides details of how the team in Nottingham developed a telephone hotline to provide access to consultant paediatricians for GPs.

Case study example:

Nottingham University Hospital Trust ran a trial of a paediatric telephone hotline to provide GPs with direct access to consultant paediatricians.

Previously, telephone referrals from GP's for paediatric admissions were made to trainee medical staff, essentially just a 'booking call'. The pilot was for all calls to be taken by a consultant for 1 week between 9am and 5pm. GPs were not forewarned to ensure continued usual patterns of referral. The pilot demonstrated significant potential for safe diversion of referrals.

The trial was subsequently extended. Of the 86 calls received over a three week period, four (5%) were escalated, 54 (63%) were advised to come to the children's assessment unit and 28 (32%) were 'diverted' to rapid access clinics, to routine out-patient appointments, or management at home by GP. If diverted cases had come directly to the paediatric assessment unit there would potentially have been an admission cost. Telephone advice therefore provides an opportunity for efficiencies.

Concerns that there was a risk of children really needing to be seen being diverted was minimised by experienced paediatricians taking the call and eliciting clinical details in a systematic fashion. There was no evidence of adverse clinical outcomes. Infact there were two examples of safety having been improved with two children who would otherwise have used family transport were escalated, being advised to call 999, with one child being directly admitted to PICU.

This hotline system is now being implemented in Nottingham. These results demonstrate increased safety with escalation as well as efficiencies from diverting cases and keeping them closer to home.

Education and training

Education and training of staff is also recognised as key in enhancing quality and there are a variety of training materials available to support local work. Teams have found 'Spotting the Sick Child' produced by the Department of Health **(http://www.spottingthesickchild.com/about)** to be a valuable resource for updating competencies on assessing children.

Case study example:

The team in Luton ran three GP education sessions, one based in the hospital and two in GP surgeries. These sessions discussed the pathways they have developed, whilst using the Spotting the Sick child online resource. The feedback from GPs has been really positive they highlighted how beneficial it was to have face to face education sessions with the consultant paediatricians in secondary care. As a result of Luton's experience the team in West Sussex are also planning a series of GP education programmes utilising this DoH online tool.

Care closer to home agenda

The nature of childhood illness has changed. Fewer children require an in-patient stay and those that do need to be admitted have a shorter length of stay than in the past. Consequently, families require a children's health service delivery model that is much more community-based and multidisciplinary.

Systems have addressed the care closer to home agenda in a number of different ways, including:

• working with walk in centres, reviewing the age criteria for attendance and extending care to under 2's (South of Tyne and Wear)

• collaborating with the ambulance service so that they use locally agreed pathways to deliver consistent care (Luton)

• supporting health visiting services to deliver parent education, based on pathways within children's centres (Luton)

• providing GPs with oxygen saturation monitors to monitor oxygen levels in children (South of Tyne and Wear and Luton).

Many systems are reviewing community children's nursing services to explore and extend 'hospital at home' services. Significantly, many of the participating sites are exploring the enhancement of children and young people's community services. This has included extending the patient group of community children's nursing teams (CCNTs) to include acutely ill or injured children. The aim is to support children in the home and, thereby, reduce admissions and facilitate early discharge through extending the days/hours of community children's nursing team services.

Chapter Six: Critical Success factors

Teams that have adopted a whole system approach have identified critical success factors in achieving enhanced quality and efficiency. The key factors include:

- an understanding of and commitment to working across organisational boundaries
- agreement of a shared vision and commitment to working together to achieve this
- the inclusion of ALL parts of the system
- commissioner leadership and CEO commitment
- clinical leadership and the time to dedicate to the work of redesign
- the engagement of GPs
- the engagement of front-line staff
- comprehensive communication and the use of creative techniques for key messages and information sharing
- engaging, listening and responding to children, young people and their families/carers in very practical ways
- the identification of measures to demonstrate impact
- quick wins are important
- working in this way across a whole system is now viewed as mainstream not an 'add on'.

Some views from those who have participated in this work

"It has been invaluable to work as a team."
Tracy Nicholls, ambulance service

"Breaking down barriers and building trust has been great. Just knowing staff from other teams personally makes a real difference." Eileen Forbes, children and young people's matron.

"The project has brought together professionals who are all committed to making a difference to children and their families. Collaboratively we are, indeed, making things better."
Ben Small, A&E charge nurse

"Teams have found that developing one pathway naturally leads to another!"
Dr Tomasz Rajkowski, consultant paediatrician.

"This is about true collaborative whole system working, not just talking; you need enthusiasm to make it happen."
Dr Beryl Adler, clinical director & consultant paediatrician, Luton & Dunstable Hospital Foundation Trust

> **TOP TIP:** Recognise that local teams don't always have the answers. We can network with others nationally, as they may have addressed similar issues. All sites have been keen to share their experiences and build on their learning.

Resource Pack Ⓡ

References

1. 'Focus On: Emergency and Urgent Care for Children and Young People'. NHS Institute for Innovation and Improvement ISBN No. 978-1-907045-78-3 March 2010.

2. Young People's Emergency and Urgent Care Health and Social Care Lesson Plan. NHS Institute for Innovation and Improvement. 2010

3. Office for National Statistics - National population projections.
http://www.statistics.gov.uk/CCI/nugget.asp?ID=6

4. Professor Sir Ian Kennedy The Report of the Public Health inquiry into Children's Heart Surgery at the Bristol Royal Infirmary 1984-1995 The Stationery Office 2001 www.dh.gov.uk

5. Royal College of Paediatrics and Child Health response to Our NHS, Our Future, available at the Royal College of Paediatrics and Child Health website at:
www.rcpch.ac.uk/doc.aspx?id_Resource=3374

6. Professor Sir Ian Kennedy. Getting it right for children and young people: Overcoming cultural barriers in the NHS so as to meet their needs. September 2010
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_119445

7. Health and Social Care Bill January 2011
http://www.dh.gov.uk/en/Publicationsandstatistics/Legislation/Actsandbills/HealthandSocialCareBill2011/index.htm

8. Department of Health (2008), Real Involvement. Department of Health

9. Department of Health (2009), The Handbook to the NHS Constitution. Department of Health

10. Office of the United Nations High Commissioner for Human Rights (2007), (online) Address:
http://www2.ohchr.org/english/law/crc.htm#art12

11. Feverish illness in Childhood. NICE .
http://guidance.nice.org.uk/CG47

12. Diarrhoea and Vomiting in Children under five. NICE http://guidance.nice.org.uk/CG84

13. Head Injury. NICE.
http://guidance.nice.org.uk/CG56/Guidance

14. Bronchiolitis in Children. Scottish Intercollegiate Guidelines Network
http://www.sign.ac.uk/pdf/sign91.pdf

1. Supporting products to help you
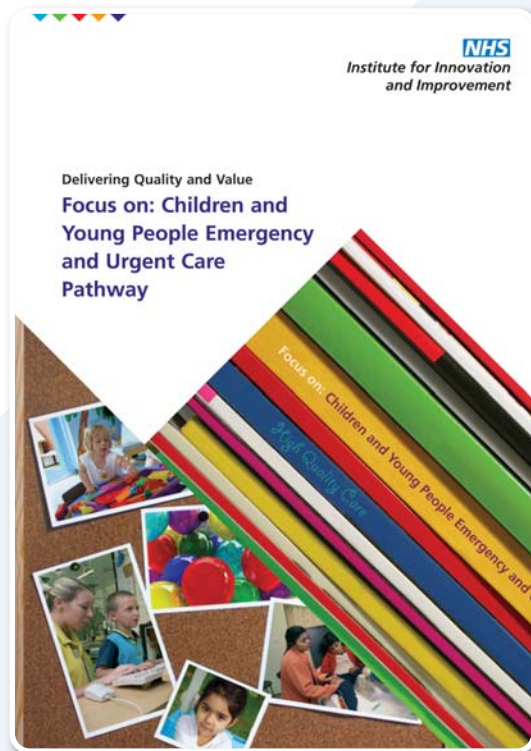
1.1 Focus On document

Updated in March 2010, the NHS Institute team published the Focus On: Children and Young People Emergency and Urgent Care publication, available to download at **http://www.institute.nhs.uk/focusoncyp** The document demonstrates practically how to ensure high quality emergency and urgent care for children and young people and how this is achievable for all healthcare organisations.

1.2 A lesson plan on emergency and urgent care

This helps the NHS to engage children and young people in improving local health care services.
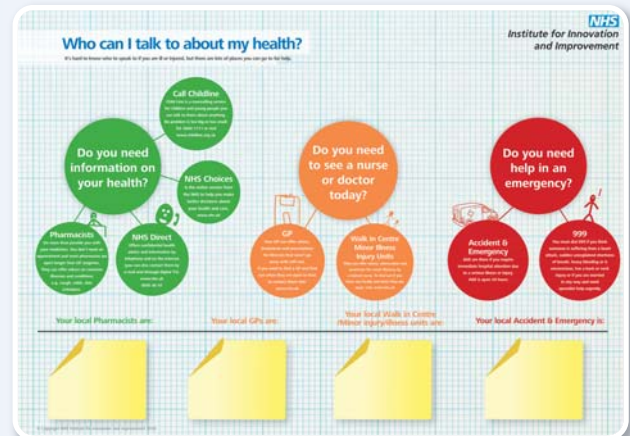
This lesson plan for schools teaches students about different emergency and urgent care options in their area. The lesson is an opportunity to invite health professionals from across the entire pathway to share their knowledge of the NHS (including self-care, walk in centres, NHS Direct, GP surgery, pharmacy, ED and 999), expand the pupils' learning, as well as helping the NHS to ensure it is listening and responding to children and patient's needs.

To see a comment from one of the young people who participated in a lesson click here:
http://www.institute.nhs.uk/lessonparticipant

The lesson plan is available to download at:
http://www.institute.nhs.uk/lessonplanorder

1.3 Film clips and programme website
The NHS Institute has the following useful clips:

Ten best practice case study films, with professionals sharing their experience:
http://www.institute.nhs.uk/cypfilm

A rapid improvement event, where over 60 professionals from across NHS Luton joined together to review current practice and to encourage the development of new ways of working:
http://www.institute.nhs.uk/videoluton

Links to our website, sharing and disseminating learning

The NHS Institute Children and Young People's work on Emergency and Urgent Care can be found at:

http://www.institute.nhs.uk/focusoncyp
There are also various presentations from events.

Contact details for our 10 Health System Partner teams available on request or at:

http://www.institute.nhs.uk/healthsystempartner teams

Email link at NHS Institute – if you have a query please contact us at cyp@institute.nhs.uk

2. Service improvement tools
There are a range of service improvement tools that can be used either individually, by local teams, within project meetings or at rapid improvement events.

An excellent set of guides that include further detail on the service improvement tools is:

2.1 Fundamentals for Quality Improvement:
http://www.institute.nhs.uk/fundamentals

2.2 And there are tools listed at:
http://www.institute.nhs.uk/qualityandvalueimpro vementtools

2.3 Improvement Leaders' Guide: Improvement Knowledge and Skills:
http://www.institute.nhs.uk/fundamentals

2.4 This work requires us all to THINK DIFFERENTLY
The Thinking Differently book from the NHS Institute will provide you with a range of practical approaches and tools that many NHS leaders and frontline teams have already used to fundamentally rethink pathways of care and service delivery. This guide will not only help you to learn how to improve the services you provide, but how to transform them. It can be obtained from:

http://www.institute.nhs.uk/thinkingdifferently

3. Engagement tools

There are a number of other tools and resources available to the assist in engagement work that you may find useful:

3.1 Involving Children and Young People in Healthcare: A Planning Tool

This tool aims to help in planning the assessment, design, delivery and evaluation of the participation and involvement of children and young people in healthcare settings. It can be found at:

http://www.nhscentreforinvolvement.nhs.uk/docs /Learning%20-%20Resources%20%20PPI%20 Guides%20-%20Children%20and%20Young %20People.pdf

3.2 You're Welcome quality criteria: Making services young people friendly

This publication from the Department of Health aims to make sure that young people are able to access services that are better suited to their needs:

http://www.dh.gov.uk/en/Publicationsandstatistic s/Publications/PublicationsPolicyAndGuidance/DH _073586

3.3 Not Just a Phase

Not Just a Phase was published by the Royal College of Paediatrics and Child Health in 2010.

http://www.rcpch.ac.uk/Policy/Advocacy/Not-Just- a-Phase-Guide It provides information to ensure the safe, meaningful and ethical participation of children and young people in the delivery of quality child health services and practically demonstrates how we can contribute towards creating a culture of participation. It is a guide designed primarily for paediatricians, senior children's nurses and leaders of organisations that provide general and specialised health services for children and young people.

4. Pathway definitions

The codes for the six high volume conditions are listed below, in alphabetical pathway order. All data is from HES universe 2008/09 v 14.

Pathway:	Abdominal pain
ICD10	Description
B26.0	Mumps orchitis
I88.0	Nonspecific mesenteric lymphadenitis
K52.8	Other specified noninfective gastroenteritis and colitis
K56.0	Paralytic ileus
K56.1	Intussusception
K56.2	Volvulus
K59.0	Constipation
N39.0	Urinary tract infection, site not specified
R10.1	Pain localized to upper abdomen
R10.2	Pelvic and perineal pain
R10.3	Pain localized to other parts of lower abdomen
R10.4	Other and unspecified abdominal pain

Pathway:	Asthma & wheeze *
	* Asthma codes are: J459, J46X, J450, J451, J458 and Wheeze codes are: J069, J00X,R062
ICD10	Description
J00.X	Acute nasopharyngitis [common cold]
J06.9	Acute upper respiratory infection, unspecified
J45.0	Predominantly allergic asthma
J45.1	Nonallergic asthma
J45.8	Mixed asthma
J45.9	Asthma, unspecified
J46.X	Status asthmaticus
R06.2	Wheezing

Pathway:	Bronchiolitis
ICD10	Description
J21.0	Acute bronchiolitis due to respiratory syncytial virus
J21.8	Acute bronchiolitis due to other specified organisms
J21.9	Acute bronchiolitis, unspecified
J22.X	Unspecified acute lower respiratory infection
R06.0	Dyspnoea
R09.2	Respiratory arrest

Pathway:	Fever & minor infections
ICD10	Description
A87.9	Viral meningitis, unspecified
B01.9	Varicella without complication
B02.9	Zoster without complication
B34.9	Viral infection, unspecified
H05.0	Acute inflammation of orbit
H66.9	Otitis media, unspecified
H70.0	Acute mastoiditis
H70.9	Mastoiditis, unspecified
J02.8	Acute pharyngitis due to other specified organisms
J02.9	Acute pharyngitis, unspecified
J03.0	Streptococcal tonsillitis
J03.8	Acute tonsillitis due to other specified organisms
J03.9	Acute tonsillitis, unspecified
J05.0	Acute obstructive laryngitis [croup]
J36.X	Peritonsillar abscess
K12.1	Other forms of stomatitis
K12.2	Cellulitis and abscess of mouth
L03.0	Cellulitis of finger and toe
L03.1	Cellulitis of other parts of limb
L03.2	Cellulitis of face
L04.0	Acute lymphadenitis of face, head and neck
L08.9	Local infection of skin and subcutaneous tissue, unspecified
R05.X	Cough
R06.1	Stridor
R06.8	Other and unspecified abnormalities of breathing
R50.0	Fever with chills
R50.9	Fever, unspecified
R56.0	Febrile convulsions

Pathway:	Gastroenteritis/diarrhoea & vomiting
ICD10	Description
A02.0	Salmonella enteritis
A02.1	Salmonella septicaemia
A02.9	Salmonella infection, unspecified
A03.9	Shigellosis, unspecified
A04.4	Other intestinal Escherichia coli infections
A04.5	Campylobacter enteritis
A04.7	Enterocolitis due to Clostridium difficile
A04.8	Other specified bacterial intestinal infections
A04.9	Bacterial intestinal infection, unspecified
A07.1	Giardiasis [lambliasis]
A07.2	Cryptosporidiosis
A08.0	Rotaviral enteritis
A08.1	Acute gastroenteropathy due to Norwalk agent
A08.2	Adenoviral enteritis
A08.3	Other viral enteritis
A08.4	Viral intestinal infection, unspecified
A08.5	Other specified intestinal infections
A09.X	Diarrhoea and gastroenteritis of presumed infectious origin
K52.9	Noninfective gastroenteritis and colitis, unspecified
R11.X	Nausea and vomiting

Pathway:	Head injury
ICD10	Description
S00.0	Superficial injury of scalp
S00.1	Contusion of eyelid and periocular area
S00.2	Other superficial injuries of eyelid and periocular area
S00.3	Superficial injury of nose
S00.4	Superficial injury of ear
S00.5	Superficial injury of lip and oral cavity
S00.7	Multiple superficial injuries of head
S00.8	Superficial injury of other parts of head
S00.9	Superficial injury of head, part unspecified
S01.0	Open wound of scalp
S01.1	Open wound of eyelid and periocular area
S01.2	Open wound of nose
S01.3	Open wound of ear
S01.4	Open wound of cheek and temporomandibular area
S01.5	Open wound of lip and oral cavity
S01.7	Multiple open wounds of head
S01.8	Open wound of other parts of head
S01.9	Open wound of head, part unspecified
S02.2	Fracture of nasal bones
S06.0	Concussion
S09.8	Other specified injuries of head
S09.9	Unspecified injury of head

Terms of Reference

Aims:

The network will be clinically-driven, with participation from all NHS organisations. The high level aim will be to introduce a change in the culture and way of planning these services to create a whole system shared vision.

The children and young people (CYP) urgent care network will:

1. Establish a children's network:

• to share best practice across the health community for CYP

• to seek solutions that prioritise quality and reduce variations in standards of care across an integrated system

• to understand the population needs in the medium to long-term (1-10 years).

2. Enhance efficiency of pathways and address the 'care closer to home' agenda by seeking:

• to map current service provision, including pathway, resources, quality measures

• to ensure that investigations are undertaken in the appropriate setting.

3. Create evidence-based, whole system, high volume pathways and oversee the implementation of action plans:

• to develop strategies that make the best use of existing tools, such as Map of Medicine

• to use existing guidelines, NICE guidance and other national guidance, and adapt to local use

• to agree on a training and education strategy across the health community.

4. Engage with CYP and families/carers regarding appropriate use of services:

• to ensure appropriate public, patient and carer involvement in developing and monitoring healthcare services for children and young people

• to encourage the appropriate use of services for children

• to contribute to the development of a social marketing strategy to direct the public to appropriate children and young people's unscheduled care services.

Tool: Example project group agenda

Part 1 – Stakeholder presentation for CYP E&UC group (e.g. minor injury units, MIU)

Part 2 – Linking and mapping of current processes of Interest group (e.g. MIUs) within the whole system

Part 3 – Other service developments:

e.g. community childrens nurses (CCNs) being funded extended hours to cover paediatric assessment unit (PAU) admissions in the evenings and weekends.

New idea: CCNs – can they go into ED daily to facilitate referrals? – would be a no-cost service development.

Action: identify possible scenarios where this assists in enhancing quality and reducing length of stay in ED.

Part 4 – High volume pathway working – e.g. currently fever roll-out

Fever

- Governance approval on pathway documents – needed from the PCT perspective.

- Send copy of latest documents to the whole group.

- GP commissioning/PBC (practice-based commissioning) engagement - attend cluster meetings to raise awareness (also see need for primary care data for our performance monitoring below).

- Training on fever pathway - particularly with regard to the training needs of/opportunities for each of the different stakeholder groups.

Diarrhoea and vomiting (D&V)

- D&V pathway - The D&V patient information leaflet and staff traffic light have been circulated for comments – should be complete and ready for PPI (patient and public involvement) by end of month.

Head injuries

- Need to focus on the primary care end of the pathway.

Respiratory pathway

- On hold pending completion of first three.

Whole system data monitoring

- The report prepared includes data from across the system. It was re-presented. Report still needs primary care data but is an excellent model to take forward – it needs clinical sign-off before coming to our project meeting.

Lesson plan

- Engagement tool to be progressed with local education colleagues.

AOB

- Next meeting date.

Tool: Collecting core data
Children and young people (CYP)
Emergency and urgent care (< 19 years) – a prompt sheet of questions

Name of PCTs and acute trusts covered in your health system:

Population
- Children and young people (CYP) for local area, breakdown if possible 0-1, 1-5, 5-12, 12+ (approx.)
- Key issues for the population: e.g. is there a high level of deprivation/rural issues/immigration etc.
- GPs – numbers of children registered – are there high referring practices to secondary care?

Summarise current services in your local patch, you may wish to consider:
- Community services such as walk in centres/urgent care services - do they see children?
- Community children's nursing services - do they provide acute care at home?
- What hours does your children's A&E service operate, does it meet NSF standards?
- Do your services provide ambulatory care facilities?

Performance data (< 19 years) for emergency and urgent care for one full year

Total number of A&E attendances:

Total number of admissions (excluding elective):

Total number of in-patients who stayed less than 1 day:

Total number of in-patients who stayed between 1-2 days:

Total number of in-patients who stayed more than 2 days:

- Admission rates (CYP) and proportion of short stay admissions (figure derives from above i.e. number of short stay admissions (<2 days stay)/total admissions)

Other useful data:
- Walk in centres/urgent care centres – what are the attendances there? Do staff receive education and training in CYP issues?
- Ambulance service – how many children do they pick up? Do staff receive education and training in CYP issues?
- A&E attendance (CYP) - volume, peak times of day and admission rates
- Management of GP referrals, numbers and pathway

What are the 6 high volume conditions that CYP present with at A&E?

1.

2.

3.

4.

5.

6.

What current level of whole system working exists e.g. is there a network that operates across the whole system, bringing together NHS Direct, GPs, ambulance services, walk in centres, community nursing services, A&E, paediatrics?

Do you have in place agreed common pathways that operate across the whole system?

How are children, young people, families and carers engaged in service design and delivery?

Describe your biggest challenges in improving the urgent and emergency care services for children and young people in your area, e.g. shared information systems, sustainability.

Tool: Model risk management sheet

Area affected	Risks	Mitigation
Overall Project	1. Lack of clear value to stakeholders.	Chief executives support from across organisation and executive sponsor is a key advocate; monthly monitoring report as part of the governance of the network ensures we have a mandate from all relevant 'balloons' along the pathway – the collaboration effort will be enhanced with high level support and buy-in.
	2. Unanticipated level of support required by trusts.	High volume work which should yield benefits in the longer term for all the stakeholder organisations.
Local trust implementations	3. Lack of strong clinical championship.	Regular (weekly) contact by CYP clinical lead to their clinical lead/medical director.
	4. Availability of project management, data analysis and clinical resources.	Should be part of routine data monitoring and not too much more onerous
	5. Inadequate training/support for trust project leads and teams – invest to save monies – difficult to 'persuade'.	CEO mandate to work in this collaborative approach – executive sponsor to assist ensuring the work is supported to achieve objectives.
	6. Lack of co-ordination across primary and secondary care.	Multidisciplinary project team (which is clinically driven) in place.
	7. Lack of spread and ownership by local health professionals.	Multidisciplinary team to feed back to their own teams and to facilitate understanding and adoption of the new jointly agreed pathways across the system.

PROJECT CHARTER: Children and young people emergency and urgent care rapid improvement programme

Objectives and Timeline

- Map selected clinical pathway (based on high volume HRGs (healthcare resource groups)) through the whole system (primary to secondary care).
- Develop and test the updated pathway, based on best practice and local need, using rapid improvement techniques/events.
- Engage key stakeholders/users (including one school).
- Establish project group/governance in line with rapid improvement.

Scope

- Urgent care activity for children and young people e.g. febrile illness focusing on high volume HRG admissions.
- Non-elective admissions for HRG Chapter P (childhood diseases) with short lengths of stay.
- Review arrangements for discharge/community team involvement and opportunities for improvements to length of stay.
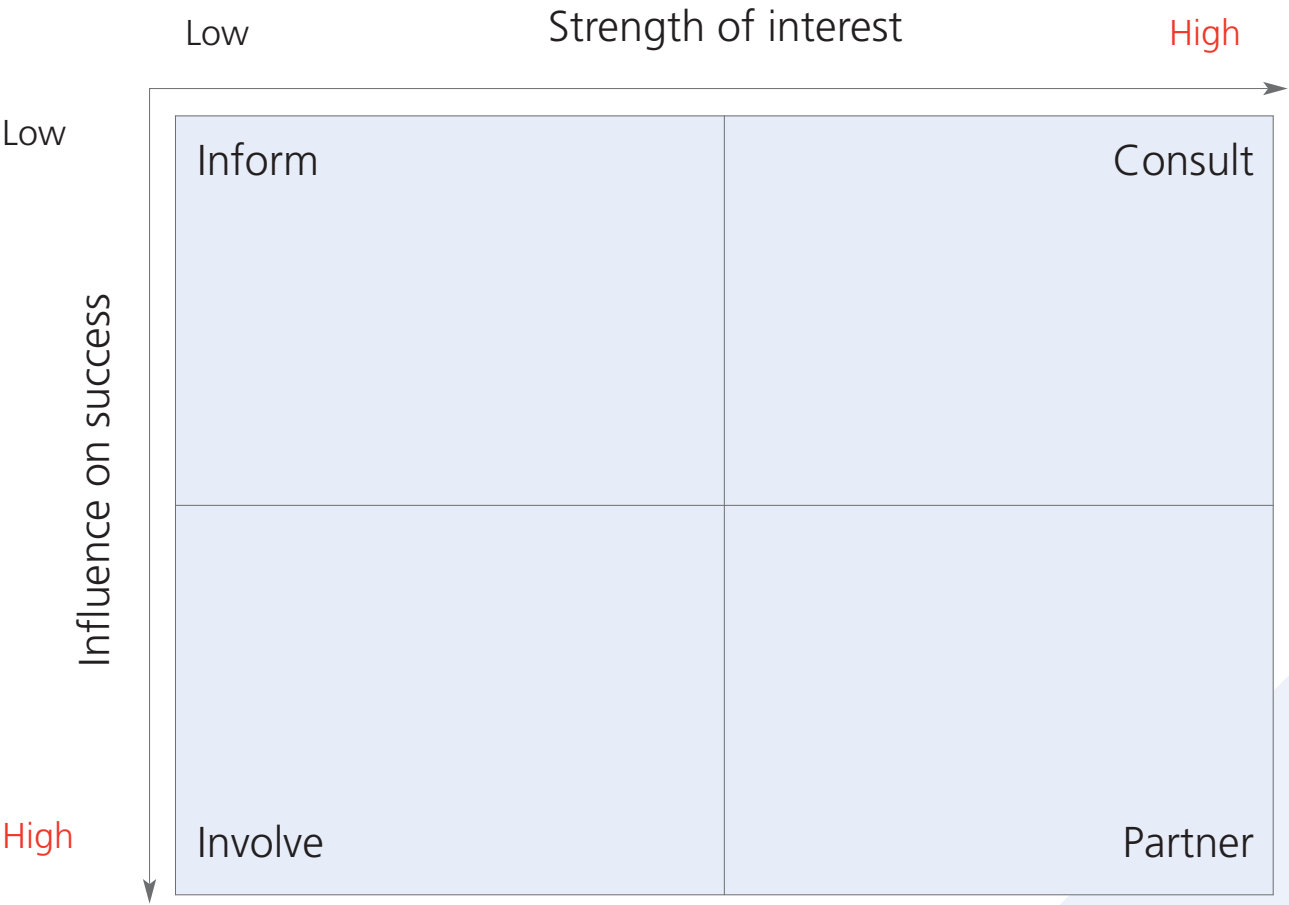- Links to development of Urgent Care Specification and Procurement Programme.

Key Deliverables	Measures/Targets	Timeframes
Review activity relating to specific pathway.	Baseline activity for management of fever HRGs/ICD10 Codes • S13: Pyrexia of unknown origin. • P06: Minor infections (including immune disorders). • P08: Febrile convulsions.	Baseline to be obtained HRG data then to be reviewed • 3 months after development of pathway • Project span Milestones: Show a reduction of : 5% of total by Month 4 10% by Month 6 Full 25% reduction by Month 9
Development system-wide care pathway. Including common assessment tool/patient information across whole system. Facilitation of early discharge from hospital, where appropriate.	Production of whole system wide tools. Review of data in 3 months, following development and test of new pathway. Reduction in number of attendances to secondary care facility by 25%. Reduction in emergency admissions for febrile management by 25%. (NB: Attendances to walk in centre and primary care will also have to be monitored as these may rise appropriately and commensurately with the pathway work being undertaken).	In first 3 months - Completion of revised system wide pathway • Data to support these targets for monitoring impact on HRG/attendance with UCCWIC, PAU and main A&E, will be provided monthly or as necessary – Data needs to be provided to the local project lead for circulation to the rest of the project team. Data for the past 24 months will be useful as a one off to provide the SPC trend figures) Review activity & HRGs to monitor impact
Trial of engagement tool.	Enhanced stakeholder and user involvement.	

Team structure, roles and weekly time commitment

- **Commissioning lead:** 2 hr/wk
- **Clinical leads:** 2 hr/wk
- **Project lead:** 3 days/wk
- **Nurse lead:** 2 hr/wk
- **Allied health professional lead:** health visitor/ 2hr/wk
- **Executive lead:** as required
- **Other support:** sponsored by CEO/As required

Tool: Stakeholder map

Strength of interest

Low   High

Influence on success

Low

High

Inform	Consult
Involve	Partner

Enhancing quality and efficiency of emergency and urgent care services for children, young peoples and families across the health care system

Action Plan

Progress to date: RED = Not yet started/complete, AMBER= In progress/Working towards, GREEN = Achieved/Completed

Action Required	By Whom?	By when?	RAG rating	Possible issues
Priority 1: Stakeholder engagement and communication				
Agree communications plan for secondary, primary care, children's centre staff				
Facilitate a whole system stakeholder event				
Present at GP communication events				
Develop internal communication plan to support project members in disseminating information to their organisations.				
Priority 2: Data analysis and monitoring				
Analysis of all CYP activity and set up system to monitor monthly activity				
Agreement of thresholds for admissions activity, to aid interpretation for monitoring purposes				
Set up a system for collating activity from pathway use, telephone advice line, rapid access clinics, and GP referrals, including admissions prevented				
Identify GP practices who are not making best use of pathways, telephone advice line and rapid access clinics, so that some targeted awareness raising or peer-to-peer work can be done to encourage them to use it.				

Action Required	By Whom?	By when?	RAG rating	Possible issues
Priority 3: Develop clinical decision making tools to support consistency in management across the whole pathway				
Draft tools with involvement of stakeholders based on national best evidence				
Circulate to GPs for agreement				
Drafts of clinical decision making tools available for D&V, bronchiolitis, febrile illness, head injury, upper respiratory tract Infection and wheezing				
Final version of clinical decision making tools available				
Clinical decision making tools uploaded to extranet/Map of Medicine/other location				
Priority 4: Information and education for parents re managing common childhood illnesses				
Develop patient information/discharge tools consistent with the clinical decision making tools.				
Consult children's centre parent groups and hospital parents group re how to up skill parents in managing minor illnesses and providing information on managing common childhood illnesses				
Prioritise and develop sign posting information based on feedback from parents				

Action Required	By Whom?	By when?	RAG rating	Possible issues
Priority 5: Set up rapid access paediatric outpatient clinics (RAOPC)				
Agree referral guidelines for the types of patients the RAOPC should be used for, and those it should not. Ensure all paediatric staff are aware of its role.				
Identify a way of electronically recording outcome of treatment/admission/CCN/GP/home/OP, recording of whether or not admission was prevented, and monitoring of outcomes of those who cannot be seen at RAOPC because of no appointments (if necessary).				
Agree a system for booking RAOPC, with consultants as gatekeepers				
RAOPC availability to be confirmed i.e. slots per day				
Workforce planning to increase availability of RAOPC slots				
Sufficient RAOPC slots to meet demand				
Priority 6 – Staff development and education				
Investigate opportunities for secondments/rotations/shadowing etc for nursing/ ED/primary care etc staff				
Role out access to Spotting the sick child, DoH, e-learning programme,				

Action Required	By Whom?	By when?	RAG rating	Possible issues
Priority 7: Consultation with parents, children and young people				
Role out Emergency & Urgent Care lesson plan for 11-14yr olds within local secondary schools				
Obtain feedback from families receiving new services				
Consult child and young peoples forum at hospital engagement forums				
Priority 8: Appropriate use of 'Direct Access to Paediatrician' programme				
Establish criteria and review process for children, young people & families with direct access.				
Priority 9: Direct Access to Consultant 'Paediatrician hotline'				
Establish criteria for hotline use				
Establish telephone tariff				
Monitor use and capture activity				
Priority 10: Community children nursing service to provide acute care for child, young people and families				
Agree workforce to meet demand				
Establish referrals to service/governance processes				
Agree pathways				
Monitor and evaluate service				

Tool: Template for evaluation of a rapid test of change

CYP Emergency and Urgent Care - Evaluation on Rapid Tests of Change
Feverish Illness in Children (Based on NICE Clinical Guideline 47)
TESTING OUT Pathway and Patient Advice Sheet

Paediatric assessment unit/A&E/GP practice/school nurse/health visitor (circle as appropriate)

Date:

Age of child ………………………………………………………………………………………………………

In which department did the test take place?

Which traffic light group was the child in?

RED AMBER GREEN

What was the outcome of the assessment? (admission/seek further opinion/discharge)

Was this different from how you would usually manage this child?

What worked well? (communication, understanding, other issues?)

……

……

Views of parents/carers - what do they like or not about this advice sheet? (contact details if they are willing to participate in a follow up call)

……

……

What would you change/any other comments

……

……

Thank you!

Please return completed form to: Project Lead

Tool: Model agenda for a rapid improvement event

09.00	Registration and refreshments
09.30	Welcome and event opening by the chief executive/board level lead for CYP
09.40	Getting to know each other/warm up introductions (this will help set the tone of the day)
10.00	An overview of national achievements – inspiration for what can be achieved locally
10.20	The local picture, sharing the baseline – partners/high volume activity/opportunities
10.40	A way forward: Whole system pathway development: what does our pathway currently look like? Self assessment against 20 key characteristics/pathway mapping exercise in groups
11.30	Refreshment/comfort break
11.45	Tackling one high volume pathway
11.50	Clinical lead to provide an overview of best practice - what does this mean for primary care, secondary care and patient information?
12.20	Break-out groups: Developing tools for: Primary care Secondary care Discharge/patient information System-wide information
13.00	Working/networking lunch
13.30	Ongoing work on tools
14.30	Sharing of work and challenging
15.15	Refreshments/comfort break
15.30	Action planning and next steps
16.00	Evaluation sheets completed and close by the chief executive/board level lead for CYP
16.30	Close

Tool: Measures checklist

Measure name

Why is it important? *(provides justification and any links to organisation strategy)*

Who owns this measure? *(person responsible for making it happen)*

Measure definition

What is the definition? *(spell it out very clearly in words)*

What data items do you need?

What is the calculation?

Which patient groups are to be covered?

Goal setting

What is the numeric goal you are setting yourselves?

Who is responsible for setting this?

When will it be achieved by?

Measurement process

Collect

Is the data available?
(currently available/available with minor changes/prospective collection needed)

Who is responsible for data collection?

What is the process of collection?

Analyse

Calculate measure and present results

What is the process for presenting results? *E.g. create run chart or bar chart in Excel*

Who is responsible for the analysis?

How often is the analysis completed?

Acknowledgments

Our ten whole system test sites, partners and stakeholders

Authors

Kath Evans, Programme Lead - Children & Young People Emergency Care Pathway, NHS Institute for Innovation & Improvement

Christine McDermott, Clinical Pathway Improvement Facilitator - Children & Young People Emergency Care Pathway, NHS Institute for Innovation & Improvement

Dr Venkat Reddy, Consultant Paediatrician and National Clinical Lead - Children & Young People Emergency Care Pathway, NHS Institute for Innovation and Improvement

Sarbjit Purewal, Head of Design, NHS Institute for Innovation & Improvement