Archives of
Disease in Childhood

Priorities for Child Health research across the UK and Ireland

Journal:	*Archives of Disease in Childhood*
Manuscript ID	archdischild-2021-322636.R1
Article Type:	Original research
Date Submitted by the Author:	12-Oct-2021
Complete List of Authors:	Cathie, Katrina; University Hospital Southampton NHS Foundation Trust, Child Health; University of Southampton Faculty of Medicine Health and Life Sciences, Sutcliffe, Alastair; University College London, UCL and Great Ormond Street Institute of Child Health Bandi, Srini; Leicester Childrens' Hospital, Paediatrics Coghlan, David; CHI at Tallaght, Paediatrics Turner, Stephen; NHS Grampian, Women and Children Division Powell, Colin; Sidra Medical and Research Center, Emergency Medicine; Cardiff University School of Medicine, Division of Population Medicine
Keywords:	Child Health, Paediatrics, Health services research, Child Health Services

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Priorities for Child Health research across the UK and Ireland

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Word count: 1872

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ABSTRACT

Background

The General and Adolescent Paediatric Research Network in the UK and Ireland (GAPRUKI) was established in 2016. The aims of GAPRUKI are to unite general paediatricians around the UK and Ireland, to develop research ideas and protocols and facilitate delivery of multi-centre research.

Objectives

To undertake a research prioritisation exercise among UK and Ireland general paediatricians.

Methods

This was a four phase study using a modified Delphi survey. The first phase asked for suggested research priorities. The second phase developed ideas and ranked them in priority. In the third phase priorities were refined and the final stage used the Hanlon Prioritisation Process (HPP) to agree on the highest priorities.

Results

In phase one there were 250 questions submitted by 61 GAPRUKI members (66% of the whole membership). For phase two, 92 priorities were scored by 62 members and the mean Likert scale (1-7) scores ranged from 3.13 to 5.77. In a face to face meeting (phases three and four), 17 research questions were identified and ultimately 14 priorities were identified and ranked. The four priorities with the highest ranking focussed on these three respiratory conditions, asthma, bronchiolitis and acute wheeze. Other priorities were in the diagnosis or management of constipation,

UTI, fever, gastro-oesophageal reflux and also new models of care for scheduled general paediatric clinics.

Conclusion

Research priorities for child health in the UK and Ireland have been identified using a robust methodology. The next steps are for studies to be designed and funded to address these priorities.

What is already known

- Paediatric Emergency Research network UK and Ireland (PERUKI) and other international paediatric research networks have established research priorities of their members
- There are no general paediatric research priorities for the UK

What this study adds

- General paediatric research priorities for UK and Ireland have been determined using a robust methodology
- These results could be considered by research funders in the UK and Ireland when creating their research strategies

Introduction

General paediatrics is an underfunded and underrepresented area of paediatric research.[1] Half of the medicines used for in general medical care of children and infants are given 'off label',[2 3] and most practice is not evidence based. Commissioned calls for research funding in general paediatrics are unusual and most funding opportunities are for research in paediatric subspecialty areas.[1]

The lack of available funding presents a challenge to converting research ideas into evidence based practice.[4] The present situation means that 80% of consultant paediatricians have no time in their job plan for research.[3 4] Although 47% of newly appointed consultant would like to undertake more research work, only 23% expected to do so in 2017.[4]

The General and Adolescent Paediatric Research Network in the UK and Ireland (GAPRUKI) was established in 2016 to facilitate research in general paediatrics.[5] The GAPRUKI collaborators include general paediatric consultants, trainees, nurses and research personnel in the UK and Ireland who work in district general or tertiary paediatric hospitals. GAPRUKI will identify and develop research ideas and support multi-centre studies. GAPRUKI works closely with established networks including the National Institute for Health Research (NIHR) Clinical Research Network (CRN) and General Paediatric Clinical Studies Group (CSG).

Other research networks have conducted prioritisation surveys to help plan the future direction of their research. For example Paediatric Emergency Research Network in the UK and Ireland (PERUKI),[6] Paediatric Research in Emergency Departments International Collaborative Network in Australia and New Zealand (PREDICT)[7] and

other research networks in North America, West Europe and Australia.[8 9] Here we report the GAPRUKI general paediatric research priority exercise.

Methods

A Four phase study was conducted using a modified Delphi technique survey[10] and the Hanlon Prioritisation Process (HPP), see figure one.[11] Our survey was distributed using collaborative professional networks. Ethical approval was not required according to the Health Research Authority (HRA) framework decision tool.[12]

Stage One: Delphi survey one

Delphi survey one was carried out using the Bristol Online survey tool (21st February – 30th March 2018).[10] All GAPRUKI members were asked 'Thinking about your practice in the field of general paediatrics, both acute and in outpatients, what are the important research questions that need addressing?' Participants could list up to ten priorities/questions and were encouraged to submit these in a PICO (Population, Intervention, Control and Outcome) format. Responses were anonymised and response to the survey was taken as implied consent. Submitted questions were reviewed, combining matching themes and duplicates were removed ahead of stage two.

Stage Two: Delphi survey two

Delphi survey two ranked the questions from stage one (7th September – 7th November 2018). All GAPRUKI members were asked 'Thinking about your practice in the field of general paediatrics, both acute and in outpatients, can you rank these questions according to your consideration for prioritisation of future general paediatric research?' Ranking was performed by respondents using a Likert scale of 1-7, 1=not a priority,

2=low priority, 3=somewhat priority, 4=neutral, 5=moderate priority, 6=high priority, 7=essential priority.

Stage Three: Refinement of research questions

Research questions from stage two were reviewed (May 2019 – September 2019). GAPRUKI members were invited to attend a face to face meeting to refine the research questions in preparation for the HPP. Questions from stage two were allocated to attendees to review the literature and feedback their findings at the meeting in relation to the following criteria[7]:

1. Is the question amenable to multicentre research? Questions that were felt to only be relevant to a single centre were excluded as GAPRUKI is a multicentre research network.
2. Is the question amenable to the PICO format? Questions felt to not be amenable to the PICO format were excluded.
3. Is there current existing evidence to answer the question? Questions where there was already felt to be an answer in the current literature or a study ongoing at the present time to answer the question, were excluded.

To ensure patient and public involvement invitations were sent to three organisations that represent parents, children and young people (CYP) within healthcare settings (Generation R, Wellchild, National Network of Parent and Carers Forums - NNPCF).

Stage Four: The Hanlon Prioritisation Process

In the fourth stage (September 2019), following face to face review and discussion, members present voted ('Yes' or 'No' to the following statements) on which questions to take into the final stage of the HPP:

Yes – the question is in (or amenable to) a PICO format and currently there is no answer in the literature or study ongoing to answer the question.

No – the question is either not amenable to a PICO format or there is an answer to the question already in the literature or a study ongoing that will answer the question.

Questions achieving >50% 'yes' vote from attendees were included in the final stage of the HPP. Attendees scored each question according to the guidance in Table 1. For every question, a mean score in each domain (A,B and C) was calculated and used to determine the HPP priority score and final ranking (HPP=(A+2B)xC).[11] Scoring and analysis from the HPP was completed in January 2020.

Results:

Response rates and characteristics of respondents

GAPRUKI had 92 members at stage one and 103 at stage two. There were 61 (66%) responses to the first survey and 62 (60%) to the second survey, figure one. 24 individuals attended the final HPP meeting, comprising 23 GAPRUKI members and one of the three invited organisations representing parents and CYP.

Stage one: Delphi survey one

250 questions were submitted by respondents in survey one (range 3-10 per member). Initial questions were reviewed, combining matching themes and removing duplicates. 92 questions, of different categories, were submitted for survey two as shown in Table 2.

Stage two: Delphi survey two

92 questions were ranked in survey two. The mean scores for questions ranged from 3.13 to 5.77 (Likert scale of 1-7, 1=not a priority, 7=essential priority). The top ten questions are presented in Table 3.

Stage three: Refinement of research questions

Following survey two, 92 questions were reviewed. In September 2019 23 GAPRUKI members attended the face to face meeting to present their findings alongside one of the three invited organisations representing parents and CYP.

Stage four: The Hanlon prioritisation process

75 questions were excluded due to not being amenable to a PICO format or multi-centre research, there already being an answer in the literature, or a study is currently attempting to answer the question. These are listed in the supplementary material. Of the remaining 17 questions, three covered constipation clinic models and two focussed on UTI sampling methods and were therefore combined, resulting in 14 questions/topics being submitted for the Hanlon scoring process.

Table 4 shows the final scores and ranking for the HPP alongside the ranking after stage two of the Delphi process for comparison.

Discussion

This is the first study to consider the research priorities for general paediatrics in the UK and Ireland. The range of priority (as evidenced by the Hanlon score) was wide, but respiratory themes occupied the top four ranked priorities. The priorities described here may be useful to funding bodies when considering their funding strategies.

There are inconsistencies across the UK for care of unscheduled respiratory presentations in children[13-16] and research may address these atlases of variation, for example evaluating the impact of pathways of care to standardise practice. Bronchiolitis causes a large burden of disease and use of High Flow Nasal Cannula therapy (HFNC) for respiratory support has become widely practiced yet evidence for this practice is uncertain.[17] [18] Respiratory conditions remain common causes for hospitalisation in the UK and interventions are required to safely reduce admissions.[19]

Some priorities have been the focus of research, for example HFNC in bronchiolitis [17] [18] and fluids in sepsis (FISH trial),[20] which found that a larger scale trial would not be feasible in the UK population due to lower severity of illness. Indeed, the UK resus council updated guidance now recommends 10ml/kg bolus in all situations.[21] New methodologies may be required to address priorities where uncertainty regarding best evidence remains. There are currently no studies on the NIHR portfolio that address any of the priority areas, although studies may be underway in other countries.

A number of the research priorities reported are similar to those published by other research networks in UK, North America, Australia, New Zealand and West Europe.[6-9] These comprise respiratory illness, including bronchiolitis and asthma, and also point of care testing for febrile infants. IV therapy in asthma was the top GAPRUKI priority, and also ranked first in the PREDICT prioritisation exercise[7] whilst the PERUKI prioritisation ranked this fourth.[6]

Collaboration with other established networks to design and deliver studies to meet research priorities will be key, including the NIHR CRN and PERUKI but also, if required, internationally with other general paediatric research networks in Canada (PIRNCanada)[22] and Australia (CIRCAN)[23]. Partnerships have already proven

successful with GAPRUKI and PERUKI delivering joint projects involving defining significant childhood illness and community acquired pneumonia.[24 25]

Other common conditions in the priority list included constipation, urinary tract infections (UTIs) and bedside tests in febrile infants. Patients with these conditions use NHS resources, yet there exists a large variation in practice both around the UK and within departments.[26] Effective management of bladder and bowel problems are important to parents and these conditions impact on quality of life for CYP[27] yet they are underlooked in research at present and, like many paediatric conditions managed everyday in primary and secondary care, still require a more robust evidence base.

This study has a number of strengths. The Delphi process response rates were over 60% and participants were from multiple disciplines in several nations, indicating that our results are widely generalisable. The combination of the Delphi and Hanlon processes was rigorous and yielded a robust final list of priorities. The limitations of this study include the subjective nature of the process and the addition of new members between the first two stages. While the number of GAPRUKI members taking part in stages one and two was very similar we do not know if these were mostly the same individuals, and introduction of new members to stage two may have led to different ranking of questions compared to if the same members suggested and ranked questions. Ideally the process would have been completed in under twelve months, but we do not believe that the time between completion of the different stages has affected the relevance of the priorities. Patient and parent/carer input was limited by the response to invitations to join the process. Future research prioritisation initiatives need to explore how to better engage with patient groups.

The COVID pandemic started a few months after the face to face meeting, so this process could not consider COVID research priorities. Many COVID priorities, e.g. long COVID, PIMS-TS, vaccination, have already received research investment.

This study has identified research priorities for general paediatricians in the UK and Ireland, which remain, despite the COVID-19 pandemic. On review of the NIHR portfolio (Oct 2021) we can confirm that there is no funded research, in the priority areas identified by GAPRUKI, currently being conducted in the UK, although research overseas may be underway. We suggest that funding bodies could seek applications from research teams to undertake clinical trials in the priority areas identified.

Contributorship Statement: CP and AS designed the Delphi survey, CP compiled the Delphi data. KC managed the Hanlon Prioritisation Process (HPP) and compiled the HPP data. KC wrote the paper, CP revised, AS, SB, DC, ST reviewed and contributed to the manuscript.

Acknowledgements: All GAPRUKI members who contributed to the prioritisation process

Competing Interests Statement: There are no competing interests for any of the authors

Funding Statement: No funding was received for this study

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Table 1: Hanlon scoring guidance[11]

Score	A: Rating Size of Health Problem (% of population health problem)	B: Seriousness of Health Problem	C: Feasibility of study (including feasibility of funding)
9-10	>25%	Very serious	100% possible
7-8	10-24.9%	Relatively serious	60-80%
5-6	1-9.9%	Serious	40-60%
3-4	0.1-0.9%	Moderately serious	20-40%
1-2	0.01-0.09%	Relatively not serious	5-20%
0	0	Not serious	<5%

Table 2: Number of questions included in Delphi survey two by category

Category	**Number of questions**
Infection	17
Gastroenterology	15
Service delivery	13
Respiratory	11
Mental health	8
Neurology	7
Public health	7
Others	7
Complex care	4
Patient and parent experience	3

Table 3: Top ten questions following Delphi survey two

Rank	Question	Mean Likert score
1	In infants with bronchiolitis is continuous Positive Airways Pressure (cPAP) superior to high flow oxygen (HFO) in preventing Paediatric Intensive Care Unit (PICU) admissions, reducing apnoea severity, or shortening length of stay (ready for discharge)?	5.77
2=	In systemically well febrile infants and children will the use of bedside tests safely reduce (Intravenous (IV)) antibiotic use?	5.71
2=	How to reduce deaths in children in the UK and Ireland?	5.71
4	In children and young people (CYP) with acute severe asthma that is not responsive to maximal inhaled bronchodilator therapy, which is the most effective intravenous bronchodilator with the least side effects?	5.64
5	What is the optimal length of course of antibiotic treatment in children with Meningococcal (Streptococcal, Staphylococcal, Mycoplasma) infections?	5.49
6	In CYP with suspected meningitis, what are the indications for starting (and stopping) acyclovir?	5.45
7=	What is the most important intervention in preventing admission to hospital in CYP who have presented with deliberate self harm?	5.44
7=	What is the sensitivity and specificity of rapid molecular bedside tests for bacterial/blood stream infection in febrile infants/children with current immunization (rates, status)?	5.44
9	In CYP with septicaemic shock, is conservative fluid management associated with better outcomes compared to aggressive fluid management?	5.41
10	In obese CYP, what is the optimal strategy for normalizing weight	5.38

Table 4: Final Hanlon scores and ranking alongside Delphi ranking

Rank after Hanlon Process (n=14)[a]	Hanlon score	Question	Rank after Delphi Process (n=92)[b]
1	162	In CYP with acute severe asthma that is not responsive to maximal inhaled bronchodilator therapy, which is the most effective intravenous bronchodilator with the least side effects?	**4**
2	152.9	In infants with bronchiolitis is cPAP superior to HFO in preventing PICU admissions, reducing apnoea severity, or shortening length of stay (ready for discharge)	**1**
3	131.6	In pre school children admitted to the ward with viral associated wheeze (absence of interval symptoms and not on inhaled corticosteroids) does prednisolone confer any benefit or harm to the outcomes of time in oxygen, time to discharge and symptoms at 7 and 28 days?	**13**
4	113.5	In CYP aged 6-16 on low dose Inhaled Corticosteroids (ICS) with poor control of their asthma, what is the most effective choice of treatment to achieve symptoms control?	**24**
5	101.1	What is the sensitivity and specificity of rapid molecular bedside tests for bacterial/blood stream infection in febrile infants/children with current immunization (rates, status)?	**7**
6[c]	100.8	In infants with suspected UTI which method of sampling is acceptable to the parents : clean catch, catheter or Supra pubic Aspirate (SPA)?[c]	**74 =**
		In CYP with suspected Urinary Tract Infection (UTI), is clean catch, catheter or SPA the most accurate method of identifying UTI?[c]	**79 =**
7[d]	96	In CYP with constipation, does a nurse led clinic compared to a consultant led clinic reduce costs without increasing risk to patient management?[d]	**11 =**
		In CYP with constipation is management more effectively delivered in primary care compared to hospital based management?[d]	**61=**
		In CYP with constipation what is the role of drop in clinics?[d]	**85=**
8	92.2	Do general paediatric clinics held in primary care, reduce unnecessary referrals to secondary care (out patients or acute referrals)?	**14**
9	85.2	In infants with simple gastro-oesophageal reflux does ranitidine or omeprazole compared to no intervention make a difference to symptoms?	**17**
10	84.6	In CYP with constipation, which laxative; lactulose compared to movicol compared to senna has an improved effect on time to relapse?	**47**

11	82.7	In CYP with acute asthma, unresponsive to maximal inhaled therapy, does the addition of intravenous low dose ketamine infusion, reduce the need to for intubation or improve other asthma outcomes such as severity scores, need for supplemental oxygen, length of stay or need for other IV bronchodilators	**61**
12	75.8	What is the most cost effective way of preventing admission of children to hospital with acute infective gastroenteritis?	**38**
13	69.1	In CYP with cerebral palsy and Gastro Oesophageal Reflux (GOR) disease, does omeprazole compared to ranitidine have a better outcome of symptoms (eg aspiration, vomiting)	**57**
14	58.9	In CYP with chronic abdominal pain with unknown cause, what modalities of treatment(hypnosis, mindfulness, Cognitive Behavioural Therapy, Solution Focussed Brief Therapy, probiotics, buscopan, peppermint oil …) impact symptoms control?	**47**

[a] there were 14 priorities scored and subsequently ranked during the Hanlon process

[b] there were 92 priorities/questions ranked during the Delphi process

[c] there were 2 similar questions relating to UTI sampling methods which were combined for Hanlon scoring in order to score the issue rather than the specific question. Thought was given to the need for a working group to define the 'correct' question if this priority is taken forward for to study design.

[d] there were 3 similar questions relating to constipation clinic models which were combined for Hanlon scoring in order to score the issue rather than the specific question. Thought was given to the need for a working group to define the 'correct' question if this priority is taken forward for to study design.

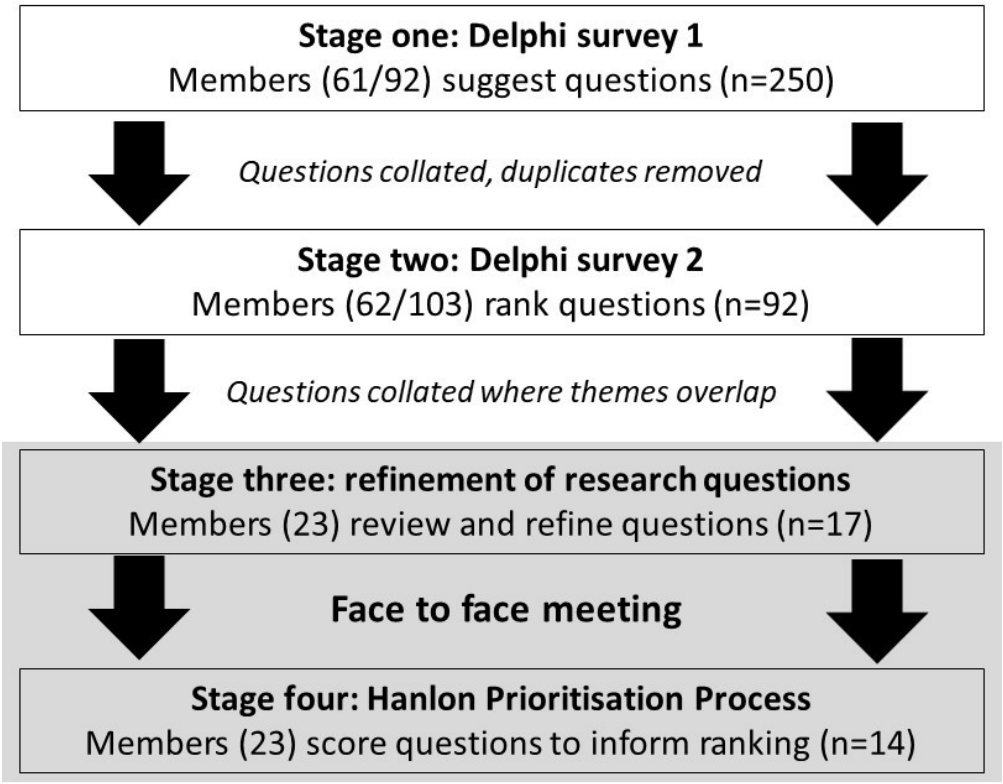

Figure 1: Prioritisation process

171x134mm (120 x 120 DPI)

Supplementary material:
Questions excluded during Stage four of the prioritsation process

Delphi Rank	Question
2=	In systemically well febrile infants and children will the use of bedside tests safely reduce (Intravenous - IV) antibiotic use?
2=	How to reduce deaths in children in the UK and Ireland?
5	What is the optimal length of course of antibiotic treatment in children with Meningococcal (Streptococcal, Staphylococcal, Mycoplasma) infections?
6	In Children and Young People (CYP) with suspected meningitis, what are the indications for starting (and stopping) acyclovir?
7=	What is the most important intervention in preventing admission to hospital in CYP who have presented with deliberate self harm (DSH)?
9	In CYP with septicaemic shock, is conservative fluid management associated with better outcomes compared to aggressive fluid management?
10	In obese CYP , what is the optimal strategy for normalizing weight?
11=	For acute general paediatric services, how do we develop better ways to understand, measure and improve the quality of care we provide?
15=	In infants with bronchiolitis what oxygen saturation is safe for discharging focusing on long term neurological outcomes?
15=	Has the sepsis six program, made any impact on the outcome of sepsis management?
17=	What should be the quality indicator measurements in General Paediatric care?
19=	In CYP with tonsillitis, what impact does bedside testing for group A strep (GAS) eg RAT have on rates of antibiotic prescription, long term symptoms resolution and complication rates?
19=	What interventions are effective in changing medical practitioners behavior to reduce over testing and over treatment?
21 =	In CYP with osteomyelitis or septic arthritis does a short course of antibiotic treatment compared to a long course increase complication rate?
21=	Are general paediatricians working in a community setting, better at preventing unnecessary referrals to hospitals compared to general practitioners?
23	What interventions improve the care and co-ordination to reduce hospital inpatient admissions for CYP with complex needs?
25	In children presenting to the Emergency Department (ED) does the presence of a general Practitioner seeing non emergency cases , reduce unnecessary admissions, length of stay in the departments and improve outcomes for patients?
26	How are parents and CYP involved with decision making in their treatment and care?
27	Are paediatric admissions units (PAU) cost effective?
28	How do we effect the relationship between poverty and adverse child health outcomes?
29	What are the methods to reduce the number of CYP who DSH?
30	Can we derive a scoring system with the addition of blood lactate to predict the likelihood of sepsis in children with a fever?
31	In CYP presenting with petechiae, what is the role of a standardized clinical decision rule in improving management, reducing cost and unnecessary antibiotic prescribing?
32	In children with fever, is remote assessment of illness as effective at detecting serious

	illness compared to face to face assessment?
33	In CYP with chicken pox, does the use of paracetamol compared to ibuprofen reduce the risk of secondary skin infection and necrotizing fasciitis?
34	In CYP with acute wheeze, does the use of high flow nasal oxygen confer benefits over standard oxygen therapy in time to resolution of symptoms?
35=	In CYP with acute croup requiring steroids, does 0.6 mg/kg, 0.3 mg/kg or 0.15 mg/kg od dexamethasone result in reduced re-attendance rates with the same condition in the following 48 hours?
35=	What are the system resource implications for the care of children with complex needs?
35=	How happy are parents and CYP with their health care experience?
39	In acute medical pediatrics does assessment between primary and secondary care doctors using videoing conferencing reduce the numbers of children referred to hospital for secondary care?
40	Are there variations in the way children requiring High Dependency Unit (HDU) care are managed within District General Hospitals and what are the effects if this variation on clinical service and patient outcomes?
41	Does a primary care hub supported by a Specialist Community Paediatric Nurse or Nurse Practitioner, operating until 10.00pm offer a safe acceptable option, relative to attending ED or PAU as measured by cases managed at home, referral rates, GP satisfaction, time to treatment, time to discharge and safe patient outcomes?
42	In infants with bronchiolitis is it as safe to discharge children taking 50% normal feed volumes compared to the recommended 75% feed volumes?
43=	Is there a role for text messages or SMS messages in reducing 'was not brought' (or did not attend) rates in paediatric outpatients?
43=	In CYP with Chronic Fatigue Syndrome (CFS) can a multiagency pathway, employed to general paediatricians achieve equivalent outcomes compared to a specialist delivered service?
43=	In CYP requiring procedural sedation does a combination of medication work more effectively that a single sedative agent?
46	In CYP with cervical lymphadenopathy, which clinical criteria mandate investigation?
47=	In CYP with complex needs is community care with a named lead nurse and Multi-Disciplinary Team better than no co-ordinated care?
50	What medical apps, for parents and professionals, are effective and safe in helping identify unwell children reducing ED referral and avoiding hospital admission?
51	How do we reduce significant head injury in CYP?
52	In CYP who have taken a paracetamol overdose and require treatment with Parvolex, what level of INR is safe to stop the infusion and what further testing is required to ensure no long term liver damage occurs?
53=	In CYP with suspected meningitis requiring a lumbar puncture, does a pre procedural CT scan of the head compared to no scan alter the management decisions/patient outcomes?
53=	Epidemiological study of current health threats to CYP eg diet, exercise, stress, computers, phones, Adverse Childhood Experiences?
55=	In term infants with excessive weight loss in the first weeks of life, does outpatients compared to inpatient management affect duration of breast-feeding?

55=	In CYP with epilepsy who have been on Anti Epileptic Drugs that have been withdrawn and remain in remission (depending on syndrome or type of epilepsy) what is the long-term prognosis?
58	In CYP with CFS, do any online, self-directed behavioral therapy tools improve outcomes?
59=	In CYP with croup do two doses of oral dexamethasone given within 24 hours of admission compared to one dose reduce duration of symptoms, need for adrenaline nebuliser or readmission rates?
59=	What influence do maternal factors have on severity of feeding problems in infancy?
61=	In CYP with acute asthma, unresponsive to maximal inhaled therapy, does the addition of IV low dose ketamine infusion, reduce the need to for intubation or improve other asthma outcomes such as severity scores, need for supplemental oxygen, length of stay or need for other IV bronchodilators?
61=	In CYP with constipation is management more effectively delivered in primary care compared to hospital based management?
63=	In preschool children with faltering growth, do high energy liquid feed supplements compared to standard oral nutrition improve growth?
63=	Establish a national audit of trauma management in children?
65=	In formula fed infants with colic (unconsolable frequent crying) what is the cost effectiveness of feeding with a hydrolysed formula?
65=	What proportion of CYP with CFS relapse after recovery and can the relapse be predicted?
65=	In CYP with eating disorders what are the cognitive outcomes?
65=	What do we know about the family experiences of those children with rare disease?
69	Is there regional variation of severity of illness for CYP presenting to acute and urgent care?
70	In CYP with cerebral palsy do biophosphonates prevent fractures?
71	In CYP with Anorexia Nervosa does being underweight lead to long term height and developmental issues?
72	In CYP with Bells palsy, does oral prednisolone compared to no treatment reduce the duration of symptoms or speed resolution?
73	In CYP who have suffered their first afebrile seizure, which investigations should be performed to identify aetiology?
75	In CYP with severe eczema does early introduction of egg reduce the risk of developing allergy?
76	What is the prevalence of retinal hemorrhages in accidental brain injury?
77	In infants treated for sepsis with an antibiotic, do prefilled syringes (with doses and timings clearly documented) prepared by pharmacy reduce the chance of medication error?
78	Is having written patient information superior to verbal information as assed by parental and CYP knowledge retention one week (or six weeks) after information given?
80	A study to clarify the definition of medically complex CYP and studying the epidemiology and trends in prevalence.
81	In exclusively breast fed infants with faltering growth, referred to an outpatient clinic, does being seen by a consultant with an expertise in breast feeding compared to a consultant with no specific training, lead to sustained exclusive breast feeding rates, as

	opposed to the introduction of formula feeds?
82	Do CYP with coeliac disease under the care of the general paediatricians, as compared to the gastroenterologists, have worse outcomes?
83	In young girls, do regular vinegar baths influence quicker resolution of symptoms?
84	In CYP with cerebral palsy do *Lycra* (compression) garments have any major effect in improving motor function?
86	In CYP with a Fontan circulation is warfarin aspirin or Low Molecular Weight Heparin best to prevent thrombotic complications?
87	In infants with Neonatal Abstinence Syndrome (NAS) is Finnegan scoring dependent on the profession of the observer?
88	In CYP with migraine, does acupuncture compared to sham acupuncture influence headache frequency over 36 months post intervention?
89	What is the optimum therapeutic range for oral theophylline in maintenance therapy for the treatment of chronic asthma?
90	In CYP with constipation does trans-abdominal ultrasound of the rectum aid to targeting treatment?
91	What is the role of the cardiologist/pulmonologist in the investigation and management of chest pain in CYP?
92	Is there a role for the use of Gavison to minimise excoriated buttocks in NAS?