Background and Aims Informed consent underpins medical practice. However, the immediacy of PICU can make obtaining informed consent challenging. Nevertheless, consent could be obtained for less urgent procedures and investigations.

We aimed to survey the current practice of obtaining consent for commonly performed procedures and investigations.

Method We conducted a survey of UK PICUs and Paediatric Transport Services to determine if consent is obtained and the form it takes.

Results We obtained responses from 16 PICUs or transport services. No unit has a written consent policy.

Abstract 470 Table 1

Procedure	Written Consent	Verbal Consent	No Consent	Comments
Intubation	0	2	14	
Arterial or Central Line	0	2 (including 1 occasionally)	14	Occasionally (n=1)
Blood transfusion	1	1	14	Time permitting (n=1); Occasionally (n=1)
Chest drain	1	2	13	
PD catheter	3	0	8	Not applicable (n=5)
Bronchoscopy (on PICU)	1	1	9	Not applicable (n=5)
Bronchogram	2 (including 1 occasionally)	0	5	Not applicable (n=9); Occasionally (n=1)
CT Scan	1 (only if contrast required)	1	14	Follow local guideline for transport service (n=2)
MRI	4	2	8	Follow local guideline for transport service (n=2)

Conclusion Current practice is variable both across and within units. Predictably, consent is most commonly obtained for less urgent procedures; consent may be impossible for time critical procedures. There are aspects of consent that the PIC community may need to review - for example the dichotomy of obtaining consent for the same procedure (eg bronchoscopy) being undertaken in theatre but not on PICU.

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471 **CARE FOR THE CHILD WITH A RARE DISEASE: A JOINT VENTURE**

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Novel digital communications and data registration add to a collaborative management approach for chronic diseases. Primary health care (PHC) providers, patients, and families can effectively prevent many major contributors to the disease burden. Patients need information, motivation, and skills in prevention and self-management. Prevention measures should be provided by professionals. This study aims at establishing opportunities for PHC to detect children with rare and chronic conditions and provide PHC with tools for personalized prevention for children.

Methods 931 newborns where followed in the Dutch youth health records, during 2 years to detect children with a rare condition. The preventive scheme includes registration of pregnancy and delivery information, neonatal and vision screening, growth-, development and physical evaluation.

Results 12 children had been diagnosed because the child's obvious congenital anomalies recognized at birth or presenting with an acute illness. In another 10 children, the first signs and symptoms were recorded at the PHC. Of all 22 children, 5 children have a condition suitable for a coordinated care program with help of e health. We developed a system based on clinical "Detailed Clinical Models", for self management and continuous preventive care for children with a rare condition in primary care.

Conclusion Rare diseases can be detected in primary care and after proper diagnosis primary care can again be involved in collaborative management.

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472 **THE INFLUENCE OF AEROPOLLUTANTS ON THE DEVELOPMENT OF ASTHMA (BA) IN CHILDREN**

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Aim The aim of our study was to evaluate the impact of aeropollutants on the development of asthma in children.

Materials and methods To solve this problem we used the method of compatibility of geochemical and medical data using GIS technologies and the R-factor analysis. Using our own and compilation data we have created database with the frequency of asthma disease in children in different cities of Crimea. Average annual data on the pollution of the cities by different gases and dust were taken at the local medical service. Then, having made the database with the calculated values of the factors at each point.

Results The study in some cities we have found out only 3 global integrated pollution zones. We have found out that the highest incidence of asthma is observed in adolescents and it is 10 times higher than for 7–14-year-old children, this group of children is the most susceptible to the effects of polluting factors. All the studied pollutants: carbon monoxide, dust, nitrogen dioxide, sulfur dioxide, formaldehyde et al. in case of increasing of their levels in the air, are fully involved in the development of asthma in children. But even single limit doses of dust and ammonia (normal maximum allowable doses a year) within the year for children with asthma are significant and contribute to the development of disease exacerbation.

Conclusion The R-factor analysis can solve many problems for the prevention of diseases including asthma.

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473 **DETERMINING THE CORRELATION BETWEEN THE SCAR SIZE OF BCG AND SUFFERING FROM ASTHMA IN CHILDREN, BY ASSESSING THE LEVEL OF THELPER1/ THELPER2**

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The Bacille Calmette-Guérin (BCG) vaccine is used more than any other vaccines in the world, whereas a lot of studies have spoken about allergy and its relationship with the BCG vaccine. The aim of this study was to determine the relationship between the levels of Thelper1(INF-gamma)/Thelper2 (IL-4, IL-13) in children suffering from Asthma and the scar size of BCG in them. 100 children who have got scar, 60 of them suffered from asthma and 40 did not suffer from it, were studied. The Chi-square test revealed that the frequency of cases with scar size larger than 5mm, is 43%in Asthmatic patients and 70% in control group that the observed difference was statistically significant ($P = 0.01$). T test also revealed that the average of INF-gamma is considerably lower in patients suffering from Asthma than the control group. (6.95 ± 3.83 (pg/ml) in asthmatic group compared with 10.75 ± 6.98 (pg/ml)in control group)($P = 0.001$) whearease the average of IL-4 (30.90 ± 16.51(pg/ml) in asthmatic group compared with9.95 ± 7.44 (pg/ml) in control group) ($p<0.001$) and IL-13 (48.85 ± 13.66 (pg/ml) in asthmatic group