Why are Children brought to the Paediatric Office?

A health Services Research Study from Germany

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An Answer Should be Found for the Following Questions

- **What advice do parents/families seek?**
  Why do they come to a paediatric primary care practice?

- **What are the acute / chronic / preventive / psychosocial issues with which paediatricians have to deal with in primary care?**

- **How much time do doctors spent for the individual consultations?**

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The Data will be used

- **To better define Primary Care Paediatrics**
- **To develop a curriculum for training in Primary Care Paediatric Practices in Germany**

Characterisation of Practises and Patients

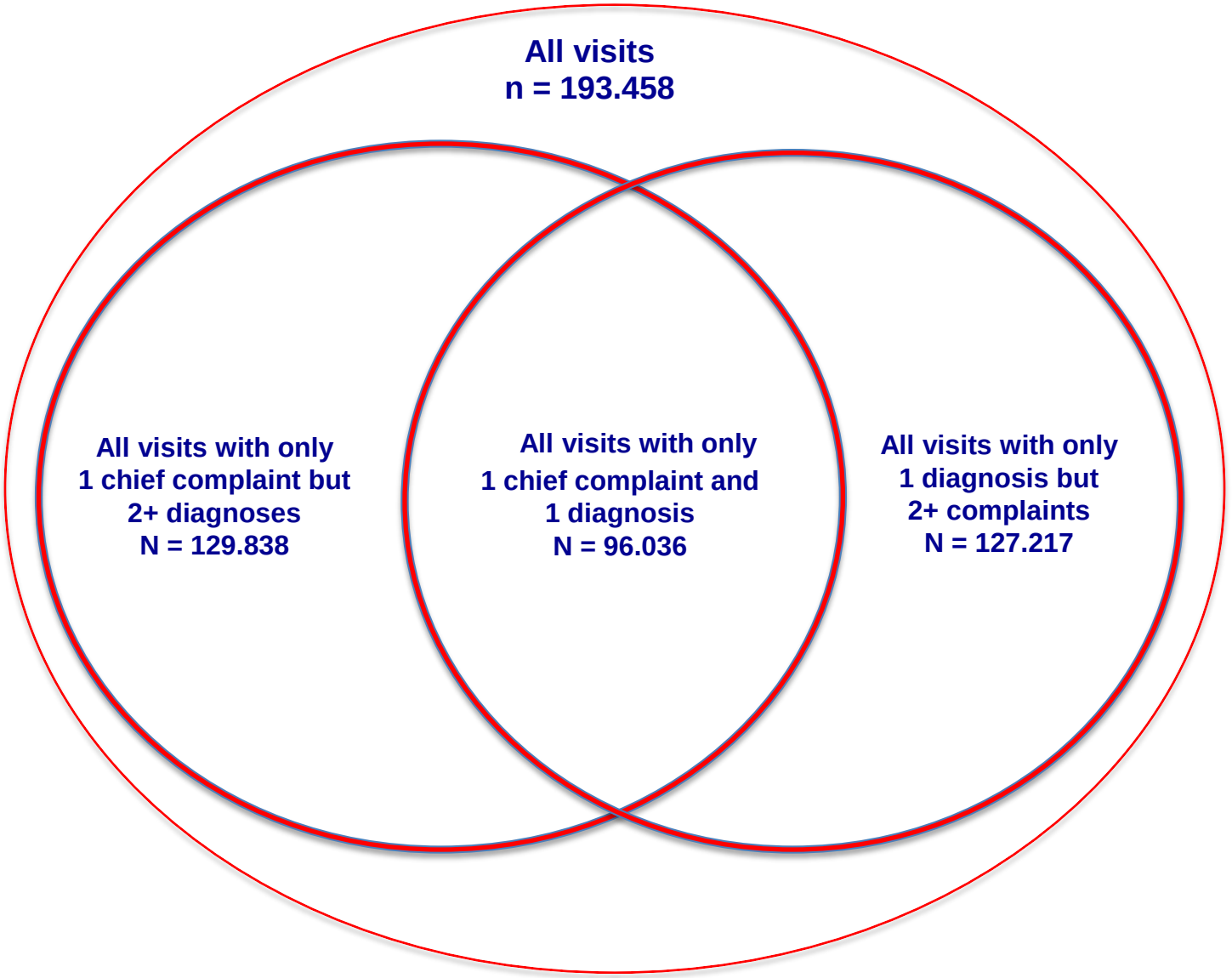
From April 2010 to March 2011

29 Primary Care Paediatric Practises (Single and Group Practices) throughout Germany (East and West / Cities and Rural Areas) electronically documented each visit of their patients with

- ✧ **Chief complaint**
- ✧ **Diagnosis**
- ✧ **Doctor's time spent for each visit**

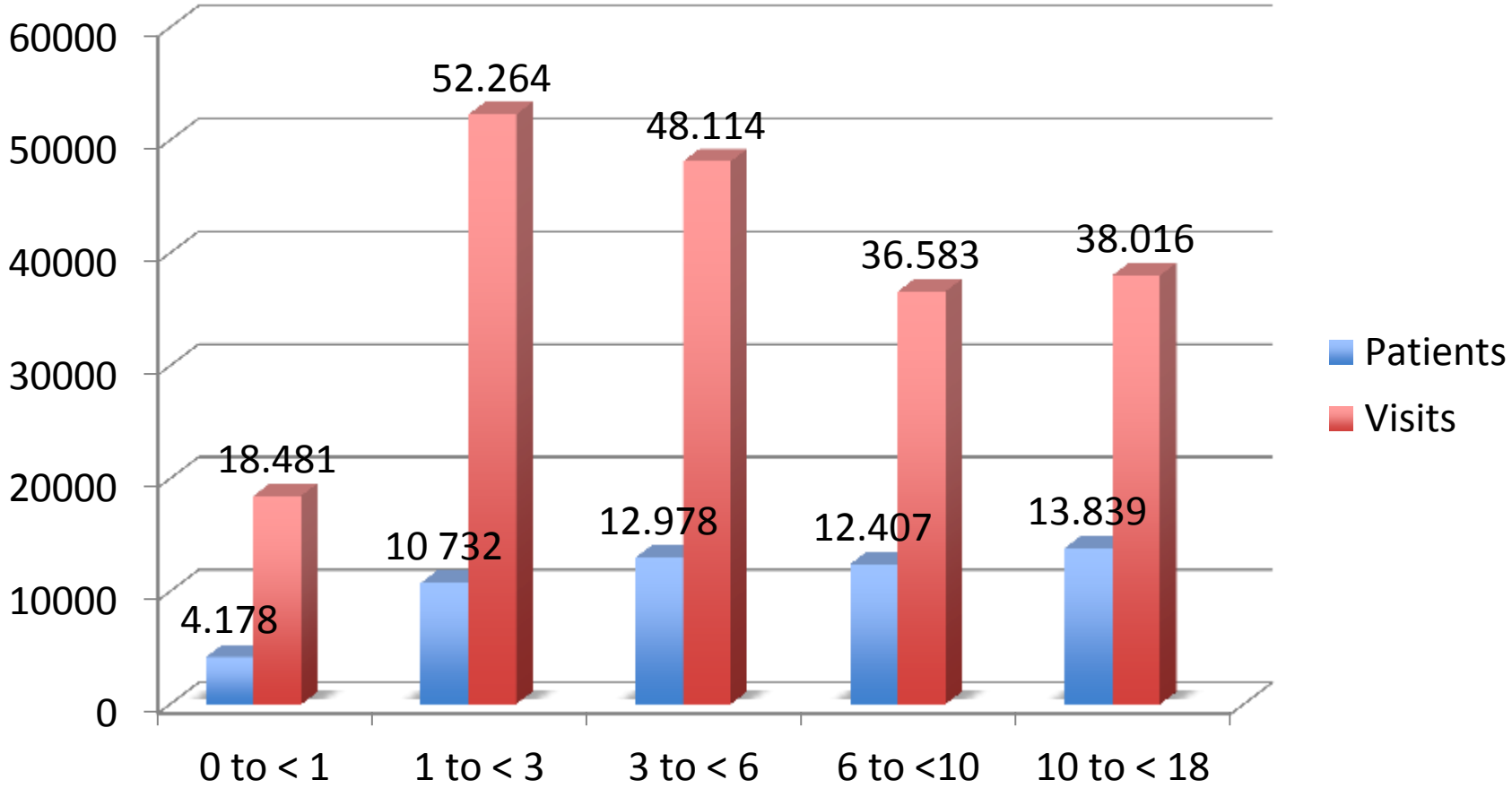
Age, gender, migratory background were recorded for each patient

Data Records of n = 54.134 Patients



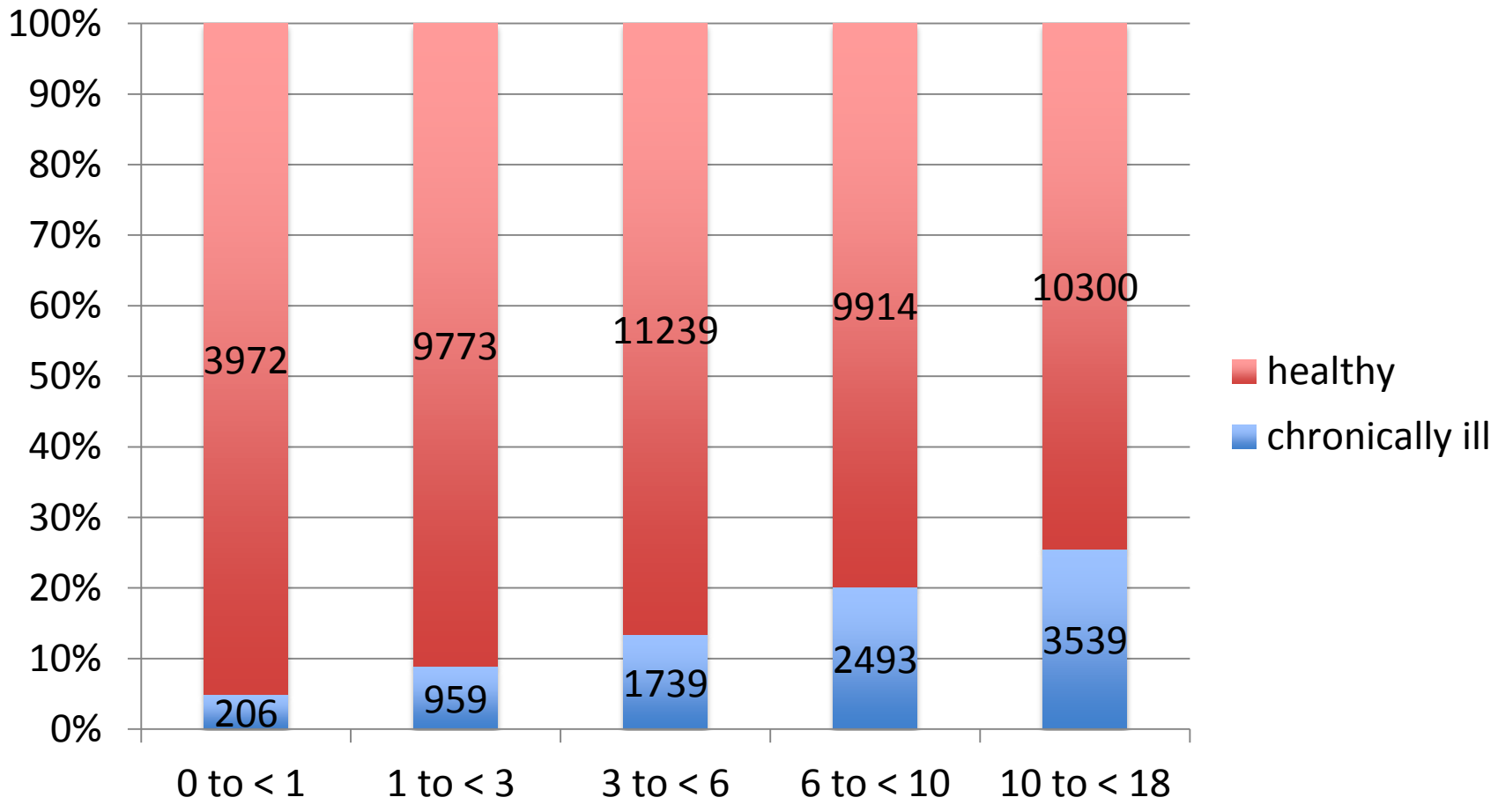
Percentage of all Patients and Visits in the Age Groups

(n = 54.134 Patients; n = 193.458 Visits)

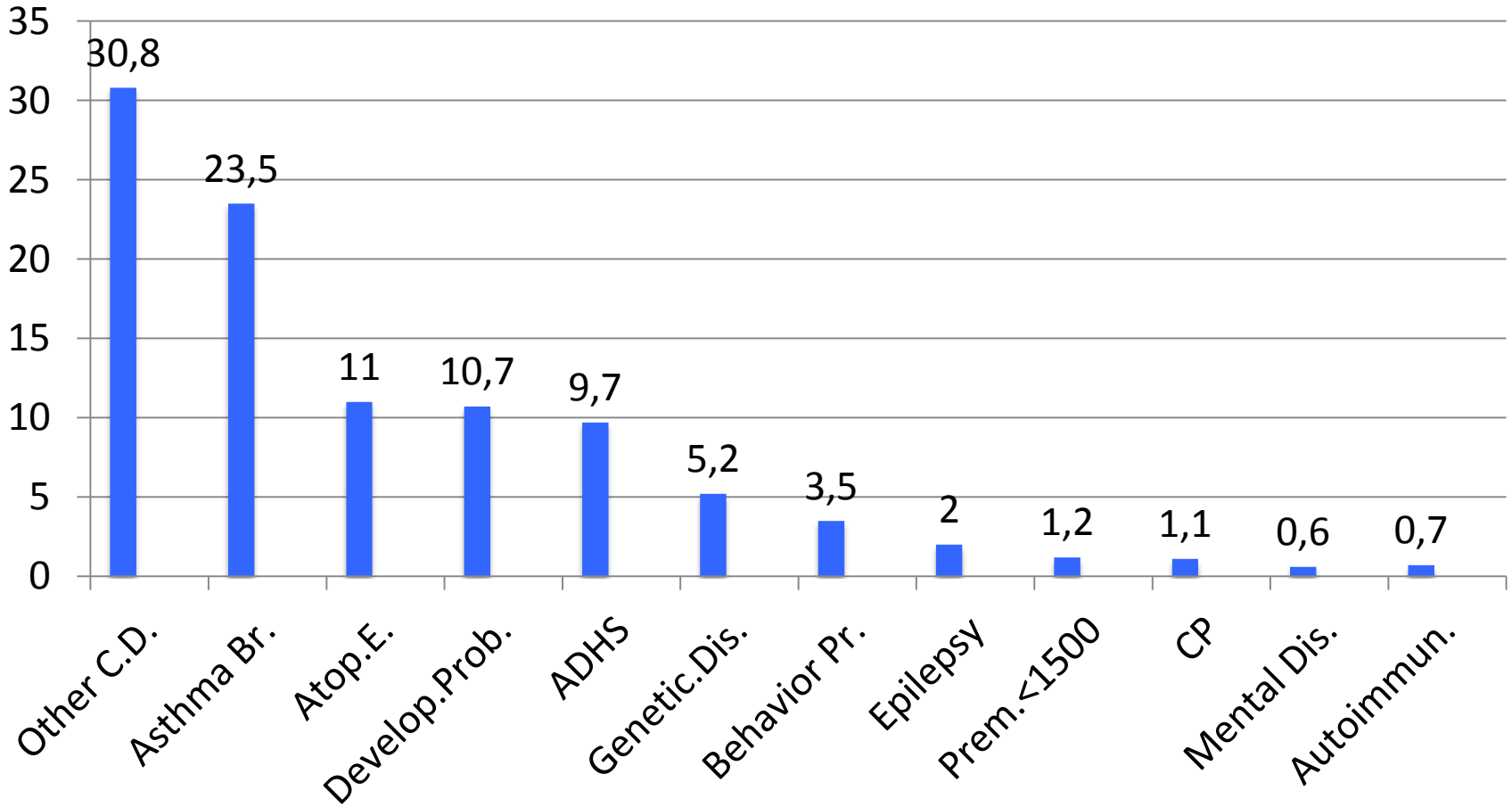


Increasing Percentage of Chronically Ill Patients in the different Age Groups

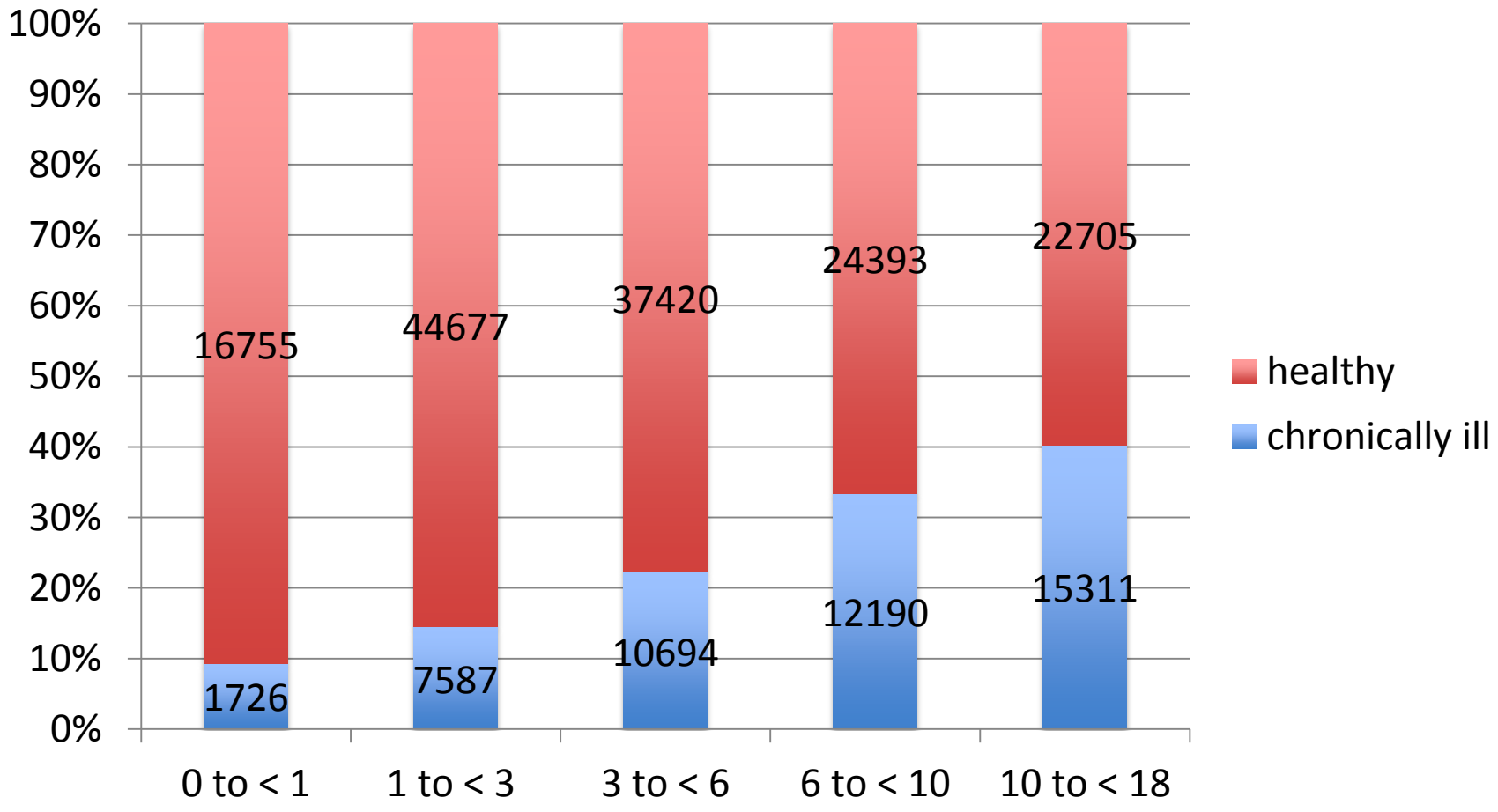
n = 8.936 out of 54.134 Patients



8.936 Patients with Chronic Diseases
Percentage of Chronic Diagnoses



Percentage of Visits by Chronically ill Patients of Total Visits (n = 193.458 visits)



Relative Frequency of Visits by Otherwise Healthy vs. Chronically-ill Patients

	Patients	% Patients	% Visits	Visits / Patient per Year
Otherwise Healthy	45.198	83,5%	75,4%	3,2
Cronically ill	8.936	16,5%	24,6%	5,3
Total	54.134	100,0%	100,0%	3,6

Reason for Visits

n = 96.036

	Reason (%)
Acute complaints (cough; fever; skin/nails/hair; diarrhea, vomiting; accidents etc.)	49,7
Prevention (check ups; immunizations)	30,3
„New Morbidities“	3,6
Control Visits	10,2
Referral	0,1
Other	0,4
Without doctor‘s contact	2,9
Therapies (inhalations; dress of wounds etc;)	2,8

The 20 Most Common Diagnoses (n = 96.036)

Rank	Diagnoses	Numbers
1	URTI (with or without fever)	23.737
2	Immunizations	18.794
3	Preventive check ups	13.027
4	Dermatologic disorders	7.949
5	Acute bronchitis	7.394
6	Acute gastritis +/- enteritis	6.483
7	High fever without focus	4.025
8	Otitis media (bacterial)	3.259
9	Tonsillopharyngitis (bacterial)	2.963
10	Allergic diseases	2.946
11	Accidents	2.805
12	Conjunctivitis	2.332
13	Somatoform disorders	1.853
14	Exclusion of a suspected disease	1.764
15	Infectious diseases with exanthemas	1.532
16	Specific language impairment	1.473
17	ADHS	1.462
18	Musculoskeletal disorders	1.287
19	Gastrointestinal disorders (non infectious)	1.263
20	Parasitic infections and arthropod bites	1.168

Diseases due to Infections
Percentage of all Acute Diagnoses

Acute Diagnosis	% of all
URTI (with or without fever)	17,8
High fever without focus	2,8
Infectious disease with exanthema	1,1
Tonsillopharyngitis (bacterial)	2,2
Otitis media (bacterial)	2,4
Conjunctivitis	1,9
Chronic disease of adenoids +/- tonsils	0,4
Infections of the oral cavity	0,6
Acute bronchitis without obstruction	1,8
Acute bronchitis with obstruction	3,6
Community acquired pneumonia	0,8
Croup syndrome	0,6
Acute gastritis +/- enteritis	5,1
Urinary tract infections	0,7
Dermatological diseases (non atopic)	5,0
Accidents	2,2

29,2 %

36,0 %

41,8 %

Percentage of Diagnoses within the Age Groups
(n = 96.036)

Age Groups	0 to < 1 yrs	1 to < 3 yrs	3 to < 6 yrs	6 to < 10 yrs	10 to < 18 yrs
% Acute Diagnosis	37,6	56,9	65,4	62,3	65,3
% Prevention	53,9	37,1	22,5	18,9	23,1
% "New" Morbidities	3,9	2,1	6,0	11,2	9,7

Mean Time Required for Preventive Measures

Diagnosis	Visits	Mean Time Required	Mean Time over all Preventions
Immunization	18.148	7,2	13,6
Preventive Check up	12.711	22,7	

“New Morbidities”: The Hidden Agenda?

“NM”: e.g. Infant crying-, sleeping-, feeding-problems; Developmental problems, Behaviour problems; Psychosomatic-, psychological-disturbances; ADHS, Eating disorders etc.

- ✧ **3.6 % as chief complaint brought forward by parents**
- ✧ **6.4 % of all diagnoses**
- ✧ **8.4 % of the total time doctors have worked with patients**

Time Requirement

The paediatricians of this study have in the average

- **Looked after 50 Patients per day**
- **Spent 8,6 hours per day with patients, thereof:**

32.1 % with acute illnesses
38.1 % with prevention
8.4 % with problems of “the New Morbidities”

Themes for a Curriculum for the Training in Primary Care Paediatric Practices

An add-on curriculum should concentrate on those professional activities that are primarily carried out in ambulatory settings:

- **Prevention (preventive check ups and immunizations)**
- **Developmental paediatrics**
- **Psycho-social and psychic disorders**
- **Infections**
- **Dermatological disorders**
- **Adolescent medicine**
- **Primary Care for patients with chronic diseases**

Training in Primary Care Paediatric Practises

Apart from the acquisition of medical knowledge, training should focus on the core competencies, that are important in the routine of child - and adolescent patient care.

- **Medical knowledge**
- **Communication**
- **Management and safety**
- **Health education and advocacy**
- **Inter-professional cooperation**
- **Teaching**
- **Professional attitude**