



# Models of Child Health Appraised

## Executive summary

### 1.1 Summary of the context and overall objectives of the project

Children are a fifth of Europe's population; they are citizens, future workers, future parents and carers, and the future elderly population. However they are dependent on society meeting their specific needs for effective primary care, which provides some 90% of all health contact, yet there is little research into how well current services do this.

The MOCHA project appraised models of child primary health care in all 30 EU/EEA countries. The 20 partners used local agents, networks, and literature to assess aspects including structural, cultural, sociological and political. An External Advisory Board assisted the project; partners from Australia, Switzerland and the USA gave global context.

MOCHA reached six conclusions:

1. Primary care for children in each country comprises many components; their cohesion as a system is determined more by their accessibility, capacity, and relationship than by their style (such as general or paediatrician primary care practitioner).
2. Effectiveness is primarily determined by access, workforce, service coordination and continuity, inter-sectoral governance, sociocultural linkage, and financing. However, robust appraisal is hampered by the lack of comparative data.
3. Optimal primary care for children is child-centric, equitable, proactive, integrated with specialist, social care and education services, and based on (and yielding) robust evidence.
4. Interdependence of health, economy and society is more influential than system construct, but there is inadequate public health, primary care and inter-sectoral collaboration on child health and development concerns.
5. Children are unacceptably invisible in health data and policy in Europe, including rights definition, data sets, research activity, e-health, and policy innovation.
6. Focussed cross-Directorate and inter-agency activity within Europe would strengthen evidence and policy to facilitate stronger national systems.



## **1.2 Work performed from the beginning of the project to the end of the period covered by the report and main results achieved**

The MOCHA Project ran in accord with the Description of Activities. Our study was wide-ranging, multidisciplinary and multi-method. We identified criteria, schemas, and tracer conditions for assessing primary care; sought to analyse policy governance and local policy making; reviewed public concerns; considered the use and effects of incentives on service delivery and uptake; explored the interface between primary and secondary care; and examined delivery of complex care for long-term conditions. School and adolescent health services were each assessed. Equity was studied in detail in two disadvantaged groups, and as a key consideration throughout the project. The views of children and parents were sought and reported. Studies of economic and financial factors, workforce, and professional education specific to children's health care needs yielded challenging findings. The approaches to electronic record-keeping and utility of large searchable databases were critiqued.

An important aspect of the research design was use of Country Agents to supply comparable national data; and validation via an External Advisory Board. We sought formative feedback from stakeholder bodies, and established collaboration with agencies including WHO, ECDC, HL7, ICHOM, and EMIF.

We found that child primary care services, despite being a crucial feature throughout childhood, are generally under researched and disempowered. We concluded that production of an optimal model was impossible, but we did identify beneficial principles, components, and policy targets.

### **Deliverables and Milestones:**

MOCHA has produced all 17 formal deliverables due, available on the project web site ([www.childhealthservicemodels.eu/deliverables](http://www.childhealthservicemodels.eu/deliverables)). Internal reports were important formative steps and the basis for formal deliverables and scientific papers. Many are published on the website. The project has achieved all eight set milestones.

### **Dissemination**

The MOCHA project has conducted continuous dissemination, with seven external collaborative meetings, 51 stakeholder conferences, 37 papers in high-ranking journals (plus seven in review and others being drafted), and two open access e-books in press.

## **1.3 Progress beyond the state of the art and expected potential impact (including the socio-economic impact and the wider societal implications of the project so far)**

Although the MOCHA research found effective practices, the diversity of health services in Europe is such that there is no single model which could translate into all national settings. Differences in scale, context, infrastructure, funding, and professional and public expectations all compound the difficulty. However, MOCHA identified a number of key issues to improve efficiency and effectiveness of child and adolescent primary care, which should inform service development in all countries. Though a national competence, considerable positive impact could be made upon children's primary health care services from instigation of EU cross-Directorate and cross-agency coordination to generate evidence and standards to facilitate good policy and health care delivery. This should focus on ten major issues:



1. European Health Data Systems are unfit for purpose regarding children
  - Demographic, socio-economic and health data do not show children aged 0-17 as a group
2. There are no comparative European data on primary care
  - There are no data on provision, activity or the workforce
3. Health economic data do not consider children
  - Data on public spend and co-payment do not identify services for children
4. Large anonymised databases have huge potential but lack harmonised access
  - Over 150 anonymised databases contain data about children, but lack of harmonisation of access rules and charges hampers utility.
5. Education of doctors, nurses and other professions on treating children has neither harmonisation nor supporting evidence at curriculum level
  - Mutual recognition of qualifications across the EU suggests equivalence in education, but this is not the case. Optimal skills and knowledge for treating children are little researched, thus evidence-based competence, skills mix and education cannot be realised
6. Activities of dentists, opticians and optometrists, pharmacists, psychologists, and ancillary therapy professions are largely invisible
  - There are few data on workforce, activity or outcomes
7. E-health is inadequately harnessed for children
  - Data and functionality for children's records are minimally standardised; few countries have development or accreditation of web sites or apps for children
8. The development of understanding and autonomy through childhood is unrecognised in legal and regulatory systems
  - Children develop cognitive, analytic and decision-making capacity at different rates, especially those with long-term illnesses, but this is unrecognised in law; children can be consulted effectively but Europe has yet to develop tools comparable to those for adult health evaluation
9. Children's rights to health are not meaningfully defined in terms of health care delivery
  - The 'right to health' is important but has little practical meaning or interpretation
10. Economic, cultural and political contexts are major determinants of children's health
  - Inadequate data allow little comparative analysis of economic or societal impact on health, equity, or disadvantage



## Further information

[www.childhealthservicemodels.eu](http://www.childhealthservicemodels.eu)

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