Evaluation of the swiss child health booklet

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Background

In 1996, Switzerland joined several European countries, Australia and some American states in introducing a parent-held child health booklet. A good echo from the canton of Valais, which introduced its own booklet in 1986, coupled with the results of a pilot study signaled the parents’ acceptance of such a booklet, their propensity to use it, and their desire to have their own record of their child’s health data. Similar findings regarding parental opinions were reported by other countries in the 1980s and continued to be verified throughout the following decade. Although the Swiss booklet was developed primarily as an information tool for parents, initial reactions by the pediatricians were not entirely enthusiastic. Other countries report an increasing acceptance of parent-held records by professionals with increased use.

Purpose and design of study

While the child health booklet is distributed at the birth of each child in hospital, its utilization is voluntary. This study was designed to determine the satisfaction, the frequency of use and reasons for use by both the parents and the pediatricians, as well as to collect suggestions for a proposed revision of the booklet. Additionally, the study explored variables affecting the parents’ frequency of use, including the opinions and attitudes of their pediatricians. Data was collected in three phases: a general inquiry to all Swiss pediatricians to determine where and how often the booklet was being used, a sampling of parents, and a survey of the pediatricians’ opinions.

Phase 1: Use by pediatricians

A simple questionnaire, translated into three national languages, was sent via email to the 1088 addresses of the Society of Swiss Pediatrics. Pediatricians indicated their frequency of use of the booklet in each of five possible work settings.

Phase 2: Parent users

The parents’ questionnaire containing fourteen items was translated into three national languages and pre-tested. Data was collected on two pre-selected, normal working days in May-June, 2005 in 60 pediatric practices selected at random from the respondents to the Phase 1 inquiry. Office personnel were instructed to recruit the first 10 parents arriving with a child, giving the questionnaire in the language best understood by the parent. The child with the appointment was designated the study child.
Because the sample from the first round of data collection contained a large number of very young children, the second round was instructed to select the first 10 parents bringing in children born before 2003. One practice withdrew from the study.

Phase 3: Pediatricians’ experiences and opinions
At the conclusion of the parents’ survey, each of the 59 host physicians received a twelve item questionnaire marked with the same code used for the parents queried through that practice. At a later date, this same questionnaire was electronically mailed to all addresses on the Swiss Society of Pediatrics roster.

Supplemental data: School medical services
There was a brief inquiry of the school health services in 9 metropolitan cities and to 1 regional office of child health nurses.

Results
Phase 1
The survey obtained 252 usable questionnaires from pediatricians employing the booklet in 113 municipalities located in 22 cantons that cover all geographic and language areas of Switzerland. Table 1 depicts the frequency of booklet use in five work settings.

Phase 2
The host practices returned 593 usable parent questionnaires. The parent sample was largely between the ages of 30 and 40, of which 48% were German-speaking, 18% were French-speaking, 12% Italian-speaking, and 22% spoke a mother tongue other than a Swiss national language. How often and for what age of child the parents use the booklet is seen in Table 2.

Overall, 73% of parents reported using the booklet either regularly or occasionally. While the frequency of use was significantly correlated with age of child, it can be seen that the two older age groups still register a good percentage of users. Other data showed that use was significantly correlated with the language of the mother: the non-national language parents and Italian-speaking parents use the booklet more regularly than the German- or French-speaking parents (P<0.01).

How the parents use the booklet can be seen in Table 3, which depicts their frequency of choosing any of 7 reasons offered. Multiple answers were possible; 75% of parents chose more than one reason. The table is ordered according to the popularity of each choice.

Because a primary purpose of the booklet is to deliver health promotion information, the survey investigated this aspect further. Tables 4a and 4b show how often parents consulted this information and how they rated its value.

Phase 3
The opinions and experiences questionnaire was completed by the 59 host physicians who each received a personal copy, and by 160 other pediatricians who responded voluntarily by email. Most physicians (71%) were in private practices. Regarding their general opinion of the booklet, 85% were positive, 9% were indifferent, and 6% were rather negative. Reasons for indifference or negativity were varied; comments from 6 of the 13 rather negatives group suggested a discontent that the health booklet does not adequately serve the purpose of documenting child health data in a more complete way. There were no significant correlations between a physician’s general opinion and the length of time in practice or the work setting. The reasons physicians felt the booklet was useful are shown in Table 4, in descending order of popularity of choice.

Other reasons affirmed the usefulness to emergency room personnel, to doctors substituting for vacationing colleagues, or when children change pediatricians.

The role of the booklet in information exchange was further highlighted by other data showing that, while medical assistants may record heights and weights, 75% of the physicians report writing entries into the booklet themselves and 72% say they read entries made by other professionals.

Joint analysis of parents and pediatricians data
A joint data set was constructed by matching each parent’s survey to their pediatrician’s opinion and experiences survey. A coding error resulted in the exclusion of data from 3 practices, leaving a joint dataset containing 563 parents matched with 56 physicians. The parents’ frequency of use was compared with their pediatrician’s opinion of the booklet, his or her policy regarding parents’ use, and how the practitioner personally handles the booklet in the practice. Additionally, each of the reasons a parent gave for using the booklet was compared with corresponding reason(s) for use on the pediatrician’s survey, and with the way the booklet is handled in the practice. The analyses of the joint data set revealed no significant correlations.

The school health doctors
The directors of 6 city school health services returned the survey and 1 responded by telephone. While nearly all agreed that the booklet was worthwhile, only 3 said it was utilized in their school service «sometimes». The other services indicated that their needs cannot be met by the Swiss child health booklet, although having access to the health data and care history could facilitate their work in certain cases.

Discussion
Ten years after its introduction in Switzerland, the child health booklet has found a place in the routine medical care of children.
where it is appreciated by both parents and pediatricians. The confirmation that use by parents continues through the oldest age group of children in the study was an encouraging finding, as was the 85% positive general opinion received from the self-selected group of physicians.

Of 7 possible reasons for use by parents, «As a record of measurements and other health data» and «As a reminder of the health supervision visits or vaccinations» were the two most frequently selected. That the booklet has apparently taken on the role of memory jog for the recommended health care routine is an interesting development, one welcomed by the pediatricians who also indicated that the booklet’s greatest value lies in motivating parents for the health check-ups. Curiously, parents and physicians’ answers were independent of each other.

That 70% of the pediatricians selected the reason «For the professional exchange of information (child health nurse, other specialists)» suggests the booklet has gained a footing in cross-professional exchange of information. However, while the doctors attest to writing into the booklets themselves and reading what others have written, exactly what kind of information is noted and which information is read cannot be answered by this data. Physicians’ commentary indicated that the health booklet is not frequently used to transfer specialized medical information about a child at the present time. An investigation of the issue of recording information in the child health booklet might use methodology similar to Hampshire et al.7,8.

Although 70% of the practitioners felt the booklet was important in providing health promotion information, only a fourth of the parents selected this reason. These results, however, are moderated by the findings that 96% of parents report having some contact with the material and 94% attest to its usefulness. That language group has a significant association with the use and estimation of the health promotion information deserves further investigation.

Contacting parents via the pediatric practices was a particularly successful method for getting a large sample while keeping the costs low. However, relying on the individual practices to manage the data collection added variability to the procedural discipline. Also, the study could have been strengthened with more complete socio-economic data, especially in light of findings from Walton et al.9 that use of the record is lower for mothers living in disadvantaged circumstances. Adding an investigation of true non-users of the booklet would have made the study more complete.

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**References**


