

SHORT REPORT

Rationalisation of data collection for a child health service

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Introduction

Health information systems at a health facility level tend to develop historically, with components and variables being added as the need arises or as higher echelons of the bureaucracy dictate. Consequently, data collection can become cumbersome and time-consuming. In the latter half of 1992, the Pietermaritzburg City Health Division reviewed its child health service (also known as well-baby clinic) data collection system to determine the extent of unnecessary data collection and duplication in the system and, if these were found to be substantial, to rationalise the system.

Methods

Since all the child health clinics used the same data collection system, one clinic was selected and its data collection procedures were examined by means of a walk-through that followed the standard clinic procedures, as an attending mother would. At each point in this visit, the data collected and the method of collection were noted. The requirements of the central government for the purposes of their quarterly statistical returns were established as were the child health-related information needs of the Chief Community Health Nurse of the City Health Division. The opinions of the nursing and clerical staff of the child health clinics were sought through individual interviews and group discussions conducted by one of us (S.S.A.K.) before and after the data collection system was rationalised.

Results

The clinic walk-through revealed that information was recorded on twelve separate pieces of paper. The extent of duplication is exemplified by the finding that a child's name was recorded seven times. While the clinic staff opinions of

the system varied from 'good' to 'cumbersome' to 'hopeless', the majority felt that the system had a few flaws, but that these were minor and that the system overall was acceptable to them. A consistent finding from the interviews was the nurses' opinion that data collection consumed a large amount of their time.

Based on these findings and the data requirements of local management and central government, the data collection system was modified so that only two forms were used: a comprehensive clinic record kept at the clinic and a Road-to-Health card kept by the parent. The existing consultation record card (CRC) was modified to serve as the clinic record; variables relating to date of initial visit, the assisted feeding scheme and source of the patient in relation to borough boundaries were added. In the new system, a mother received the modified CRC, which was cross-referenced to the Road-to-Health card, on entry to the clinic. All information at each point of the clinic visit was then entered directly onto the CRC and the mother deposited the CRC in a box as she exited the clinic. At the end of the clinic session, the data from the CRC were transferred onto collation sheets and the CRCs were then filed according to the year and month of the child's birth, and within that alphabetically according to surname. The collation sheets were summarised weekly and these were used to complete the monthly statistical return form.

Discussion

The new system was discussed extensively before implementation. It was tested for a month in one child health clinic before it was implemented in the remaining clinics. Some clerical staff initially resisted the new system, fearing that they might be made redundant, and detailed discussions were necessary to allay these fears. At the group discussion 3 months after the implementation of the new data collection system, the comments were uniformly favourable. 'Report writing at the month end is a pleasure' and 'We have much more time for the patients' were some of the comments.

This experience highlighted the unnecessary duplication in child health service data collection systems. Despite this, clinic staff may find the system acceptable, possibly because the incremental way in which the duplication arises, does not make the duplication immediately apparent to those involved on a daily basis. A valuable lesson from the rationalisation process was the importance of allaying the fears of those collecting and managing the data. The process of building an effective national health information system requires a commitment to rationalise health information systems at a local level. Rationalising data collection systems is an important step in this process.

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