



Electronic data interface in general practice improves debtor days

To the Editor: One of the many challenges facing medical practitioners is financial survival; essential to this end is ensuring that fees earned are received as soon as possible. Electronic data interface (EDI) providers claim that EDI expedites this by processing claims quickly, efficiently and accurately.¹ In the USA, EDI halved the average age of accounts and reduced costs of processing claims by 35%.² We aimed to ascertain whether claims of shorter account turnaround times when using EDI were valid in South Africa.

Methods. A retrospective before-and-after study of financial records was conducted to quantify any change in account turnaround times in general practice. The relationship between implementing EDI and a change in debtor days (number of days from date of service to date of payment) was investigated. The average debtor days for the year before implementing EDI were compared with the debtor days for the year after implementing EDI. The possibility that the number of claims submitted, or the EDI clearing house/medical aid used, influenced the debtor days was analysed.

The study population comprised all general practitioner practices in South Africa that had used the EDI systems of Digital Healthcare Solutions (DHS) or HealthBridge for more than a year and had submitted paper claims for a year before using EDI. During the study period, 1 178 practices contracted with EDI services. Sampling was done by retrospective computer search. Two EDI clearing houses in South Africa (HealthBridge and DHS) provided lists of practice numbers of practices, fulfilling the selection criteria. Anonymity of practices and patients was assured by only using practice numbers. Every 9th practice on the list was selected; the final sample included 135 practices (102 were needed for a confidence level of 99.9%). The practice numbers were used to extract the dates of service and dates of payment data from the medical aid computers. Data collection was done by a computer operator with no knowledge of the study objectives.

Results. Data sets representing DHS/Medscheme and HealthBridge/Discovery medical aids respectively were used. Paired Student's *t*-tests were done to determine the significance of the difference in debtor days. Results for combined data indicated that average days to payment for paper claims were 44.38 days, compared with 26.81 days for EDI claims ($p=0.0001$). Neither the specific clearing house for the medical aid used nor the number of claims submitted, significantly influenced debtor days ($p=0.86$).

Conclusions. There was a statistically significant decrease in debtor days after implementing EDI, indicating that

investment in EDI technology may result in similar benefits in South Africa to those in the USA.

Selma Smith

Department of Family Medicine
Kalafong Hospital and
University of Pretoria
selma.smith@up.ac.za

Jean Viviers

Private Practice, Pretoria

1. Lazenby G, Hatch T, Slater J, Lauer E, Blind J. HFMA roundtable. Provider tips for moving to electronic payment receipt and reconciliation [interview]. *Healthcare Financial Management* 2007; 61(6): 1-4.
2. Dolan KP. Speed up payments with electronic transmissions. *Med Econ* 1997; 74(21): 59-64.