DATANEWS

'PROFESSIONAL DATACARE - COMPUTING FOR A HEALTHIER FUTURE'

ISSUE 8 - APRIL 1993

THE NEWSLETTER OF THE PROFESSIONAL DATACARE ORGANISATION

HEALTHCARE COMPUTING '93

Harrogate 15-17 March

PROFESSIONAL DATACARE GOES NATIONAL

The nationally important Healthcare computing Conference and Exhibition was the scene of Professional Datacare's first major exhibition. A high profile stand location enabled the thousands of visitors to have the opportunity to find out more about the organisation.

The Professional Datacare theme for the exhibition was a family of products which interface with the Standard Payroll Systems (SPS) and provide information to assist in the management of Human Resources.

Visitors to the stand were able to see demonstrations of the Direct Input of Pay System, (DIP) and the Payroll Data Query System (PDQ). These two products provide facilities which enhance SPS, and which are not widely used outside the North Western Regional Health Authority. Opportunities exist elsewhere to market these products to existing SPS customers.

In addition Professional Datacare have negotiated strategic alliances with two suppliers of manpower systems. The aim is to link the POWERtec Manpower System, and the Open Door manpower products to the Standard Payroll System via the Direct Input of Pay System. Customers have a choice of a manpower system option to use with the Standard Payroll System.

Visitors to the Professional Datacare stand were very interested to hear of these developments and a great deal of interest was generated. There is an increasing interest from healthcare customers for systems which will help to effectively manage the significant spend on human resources.

Professional Datacare are able to provide 'state of art' manpower systems which link with the established and reliable Standard Payroll System. The total solution can be offered as a managed service by Professional Datacare from its

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SPRINGBOARD

Womens Development Workshops

Women's Development Workshops are being held all over the Country and in all types of industries; their purpose being to "unlock" the potential of women in the workplace. The package has been put together by its two presenters - Liz Willis and Jenny Daisley.

Four ladies from Professional Datacare attended the four one-day workshops between September and December 1992, held in the Conference Hall at Prestwich Hospital. Over 100 women were present from a variety of jobs throughout the North Western Regional Health Authority. This was one of the largest groups ever undertaken by the two presenters for the Springboard programme.

On arrival at the first session, each was presented with a daunting looking workbook - of almost telephone directory proportions - and assigned to small groups made up of people who had never met each other before. As one of the team says "women being women," everyone was soon chatting away, swapping stories and experiences regarding work and home situations and conditions. This socialisation process created interaction from each member of the group, causing greater team cohesion and a sense of belonging and camaraderie.

The workbook consists of written exercises with illustrated examples, recommended reading and case histories of women who have progressed up the ladder against all the odds. Student answers are based on self analysis and experiences and when completed the book becomes a "personal bible" so that a reference back can be made and entries altered as you progress.

Pictured above are the four participants in the "Springboard" programme - Top left: Maureen Haslingden, top right: Sylvia Storey, bottom left Mary Duncan and, bottom right: Jennifer Bennett

The main objectives of the Springboard programme are:

- **TO INCREASE SELF-AWARENESS**
- **BOOST SELF ESTEEM**
- **BUILD CONFIDENCE**

Several group members were allowed time during working hours to spend on the workbook, and as 3 hours per week were considered by the organisers to be the ideal requirement, this was a real advantage. Whilst some Managers displayed a keen interest in the project as a whole, some women however, discerned a general lack of interest on behalf of management, and in some cases were subjected to a few scornful remarks about the scheme.

Comparing notes with fellow group members was an interesting experience when they met each month. By the end of the fourth workshop, most people had engineered some change in their life - whether fulfilling a long time intention to start an evening class, or the confidence to apply for and succeed in getting a job which initially seemed out of reach.

Although the situation is gradually changing, compared to the number of women employed in the NHS, there is a very small percentage of women in managerial positions.

All team members from Professional Datacare feel that Springboard was very well organised, and considerable experience was gained. Women in general are underestimated in their ability to hold key posts, but in reality given the opportunities, women have proved that they are more than capable of holding positions of responsibility and authority, showing that there need not be hierarchical division between men and women in the workplace.

You Rang!

A new "State of the Art" telephone system has recently been installed to improve customer access to Professional Datacare.

Additional lines and an improved service will enable quick, effective and efficient communications. As time progresses, the new system will demonstrate its cost effectiveness as it has the ability to monitor outgoing calls.

The objective is to improve the communications between Professional Datacare and its customers. The way in which organisations respond to the telephone often gives a guide to how effective the whole organisation can be.

UNIX

Direct Input of Pay

DIP is a comprehensive screen based payroll data input system, designed specifically for the NHS to provide an input file for the Standard Payroll System (SPS).

The system was originally developed on McDonnell Douglas computers within the PICK environment. The UNIX version has been developed to answer a need for the product to operate in the Open system Environment with implementations currently available on a ICL DRS6000, IBM RS6000 and a Sun Sparc 2 computer.

Data is entered using block codes which correspond exactly with those in use by SPS. Screens are designed to reflect the SPS input documents, e.g. SP3, New Starter, Holiday Pay, together with Write Backs and Advances.

The system ensures comprehensive data checking and correction prior to transfer of data to the processing centre.

Transmission is effected electronically by means of the FTAM software.

The sickness module records details of sickness and absence and calculates SSP, OSP, SMP, OMP and sickness benefit.

The system operates within a security tight environment which restricts each user to specific routines defined by their password access privilege. The facility ensures a full audit trail from data input to transmission.

DIP has been developed to allow personal details to be used in conjunction with the POWERtec Manpower System and SPS. Links between SPS and other systems are under review.

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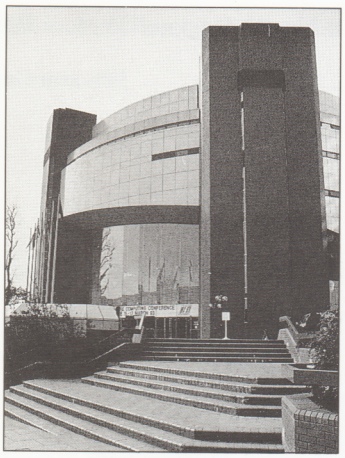
Healthcare Computing '93



purpose built data centre on the north side of Manchester, 2 minutes from Junction 17 of the M62.

Reference sites for the solution which uses the POWERtec Manpower System are being developed with four Professional Datacare customers in the Mersey Region. Professional Datacare believe that offering a managed service for this solution has significant appeal for healthcare customers. It means that customers do not need to get involved with complicated and costly hardware issues. Professional Datacare as part of the managed service will provide the solution, which obviously includes hardware for an annual fee, allowing the client to concentrate on using the information generated to help control and manage human resources.

◀ *Harrogate Exhibition Centre.*

Bob Phillips explaining some of the finer points of DIP to one of the many visitors to the stand.

In order to assist Professional Datacare in achieving significant market penetration a computer associate agreement has recently been signed with ICL Limited. This arrangement will allow Professional Datacare to benefit from the sales and marketing activities of ICL. Professional Datacare's products and services will be marketed by ICL.

Professional Datacare and ICL were able to announce this joint arrangement at Healthcare Computing '93, and it means that Professional Datacare join a small selected group of 20 suppliers who have this kind of relationship with ICL. Professional Datacare have been able to secure the same stand at next years event - Healthcare Computing '94 and are looking forward to enhancing further the profile of Professional Datacare in the Healthcare Computing market place.

NEW MEMBERS OF STAFF

Professional Datacare welcomes the following new members of staff:

MIKE WALSH - *Analyst Programmer, Standard Payroll Systems.*

ALISON LEE - *Analyst Programmer, CH/IPS.*

ANDREW HOLT - *Senior Analyst Programmer, Patient Administration Systems.*

Executive Information System

EIS

The Executive Information System (EIS) has been successfully implemented in fifteen sites across the region. The provision of an effective human resource management system has been developed through a project team led by the Regional Personnel Department with technical support from the IPS team at Professional Datacare.

With the need to provide an effective, efficient and high quality health care service, personnel executives must identify and respond quickly to the changing demands on the human resource. EIS supports senior management and enhances the decision making process by allowing managers to focus on critical success factors and track strategic indicators. An EIS finds and creates this critical information and packages and delivers the information in a crisp and colourful graphical user interface. The beauty of an EIS is that the end user requires absolutely no PC knowledge.

Regional Personnel performed extensive evaluations of the available EIS product range and judged Comshare's Commander EIS to be superior in quality and value. Comshare is an international company at the leading edge in the EIS software arena, committed to product development and support.

Professional Datacare's Integrated Personnel System (IPS) generates a wealth of manpower data relating to personnel details using a complex set of categorisations. The IPS system on the McDonnel Douglas mini computer provides an automatic interface for the periodic downloading of manpower data to the PC based Executive Information System. The EIS breaks down the difficulties associated with the use of, and access to vast amounts of data. Rather than presenting the information on individual employees the EIS model aggregates information and creates a powerful four dimensional model. The EIS can hold up to fourteen submodels of the organisation which may be customised to reflect clinical directorates, or other appropriate structures, and bring them together under a fifteenth overview model. Each model focuses on the following viewpoints:-

STAFF GROUPS:	All Staff
	Doctors (Medical & Dental)
	Nurses
	Senior Managers
	Professional & Technical (Pharmacy - Scientists - Technicians - PAM's)
	Admin & Clerical
	Ambulance - Maintenance - ancillary - Works
MANAGEMENT UNITS:	Individual Management Units
	Consolidated Management Unit Groups
TIME PERIODS:	Monthly
	User Calculated Monthly Combinations
PERFORMANCE VARIABLES:	Age & Gender (Full Time - Part Time - Bank)
	Vacancy Profile
	Source of Recruitment
	Staff Stability & Turnover
	Absence Profile
	Leavers Profile (Reason & Destination)
	Costs Profile

Paul Lee, Senior Analyst/ Programmer, and Peter Scott, Programmer, CH/IPS.

Jackie Stringer, Network Manager and Robert Hunt, Personnel Dept.

The absence profile filters the vast array of data elements in the IPS absence module and produces aggregations as a percentage of the total contracted hours.

The costs profile utilises the IPS interface to the SPS payroll data to provide information relating to all elements of pay including access to over 1500 allowance code values and a selected number of pay deductions.

User access to this wealth of data is gained through two EIS facilities:

- ***Briefing Book***
- ***Execu-View***

Briefing Book consists of a set of user defined screens, navigated by onscreen 'hotspots', that present the data in a text and graphical form. The user may set colour coded exceptions on the displayed data and use a series of in-built tools to calculate trends and variations.

Execu-View gives a more flexible, though slightly more complex perspective on the information within the model. Users may manipulate the four dimensions and drill down into any level of the model structure allowing them to peel, slice and core the body of the database. Once the desired information is obtained it can be enhanced with a variety of graph forms and stored as a user view for later retrieval.

Underpinning commander lies the powerful multi-dimensional modelling software - Comshare One-Up. If the need arises, the raw data feeding Briefing Book and Execu-View can be accessed and viewed or amended as required. Indeed, the user may use the Comshare modelling software to build their own complex spreadsheets.

Behind the scenes, and transparent to the end user, the district information provider utilises builder tools to supply customised briefing book screens, management of the document database and all aspects of security management.

Training and implementations have been spearheaded by Jackie Stringer at Regional personnel. Jackie has organised and presented pre-implementation courses for end user senior managers and EIS administrators and continues to supervise, onsite, new EIS software installations. The district/trust based administrator is charged with keeping the EIS operating reliably and successfully. This means installing new versions of Commander software, correcting problems with the system, maintaining security within the system and monitoring hardware usage. Users, therefore, can be confident of full support, both from their local EIS administrator and the Comshare helpline.

An exciting recent development has been the release of the Comshare EIS package on the Windows 3.1 platform which Professional Datacare is currently evaluating. In addition to the superior Windows graphical user interface, users will be able to multi-task and take advantage of Windows clipboard support which will allow them to capture screens at will. Improved output presentation can be accomplished with the Truetype font and printing capabilities within the windows environment. Significant benefits can be expected from the powerful Windows Dynamic Data Exchange (DDE) and Object Linking and Embedding (OLE) facilities which allow data elements from a variety of Windows packages, spreadsheets, word-processing, DTP, etc to be dynamically linked so that changes in one, cascade throughout.

The IPS - EIS bonding opens up new avenues of opportunity for manpower resource managers within the North Western Region, allowing them to get to the heart of the decision making process and achieve positive results.

MATERNITY PROJECT

PAUL STREET
Patient Administration Systems

Following a successful pilot exercise at the Royal Oldham Hospital the Euroking Maternity System, from European Information Technology (UK) Ltd., is currently the subject of a Region wide Rollout Programme, aimed at implementing the system into a further eight Districts and Trusts.

Professional Datacare have been commissioned by the North Western Regional Health Authority to co-ordinate the project management of the rollout programme and are responsible for ensuring that the first phase of the implementation is completed on time and within budget.

Project management is being provided in collaboration with the system supplier (EIT), local project boards and staff from Professional Datacare and is overseen by a small Regional Project Board comprising representatives from Midwifery, Clinical, Professional Datacare and RHA staff. Local Project Boards responsibly for managing their own implementations have been established in all Districts and Trusts and typically comprise of representatives from Clinical, Midwifery, Computer Services and General Management/Resource Management. The Regional Co-ordinator from Professional Datacare attends the local meeting in an advisory and support capacity and also works as an arbiter to smooth out any problems that may arise between the supplier and districts.

The key person in each implementation is the Project Midwife, nominated by, and responsible to, the local board, they are responsible for completing the main aspects of each implementation, these being the identification of terminal numbers and locations, the identification and specification of the local software requirements and the task of training all the midwives and clinical staff.

The eight Districts and Trusts involved in the programme are Blackburn, Bolton, Bury, North Manchester, South Manchester, Rochdale, Salford and Tameside. The rollout programme initially covers the implementation of Phase I of the system, which comprises management of the mothers' Labour and Mother and Baby Discharges, PAS Read and data download, and Korner. It was originally intended to have completed all sites by the end of June 1993, however, two Districts (North and South Manchester) have requested a delay until July/August '93 which will result in the programme being extended until the end of the calendar year. Other phases are currently under consideration but any future implementations will largely depend on the amount of money available.

The Euroking System was originally designed in 1985 based on research undertaken at King's College Hospital, London, and has been continually developed and enhanced to meet the ever changing needs of midwives, clinicians, health service management and patients. The company currently has upwards of 40 implementations across the country and are quoting a healthy order book for future implementations.

The use of Bar Codes and Pens as input devices is fundamental to the system, with ease of use by midwives and clinical staff being offered as one of the main reasons for the success of the system. A comprehensive set of bar-coded questions and answers has virtually eliminated the need for keyboard entry and offers fast, efficient and accurate data entry.

The system is very much a clinical management and audit system. Indeed the analysis of information produced by the Euroking is constantly used to plan and refine clinical and midwifery practices and to identify patients that may be 'At Risk' during their pregnancy thus enabling midwifery and clinical staff to prepare the most appropriate care and treatment patterns for their patients.

At present Bolton, Bury and Salford are all planning to go-live before the end of March 1993 and will be followed closely by Blackburn and Rochdale. The remaining three districts will go live during the latter half of the calendar year.

FES

Breaks the Speed Limit

INTRODUCTION OF VERSION 3.0

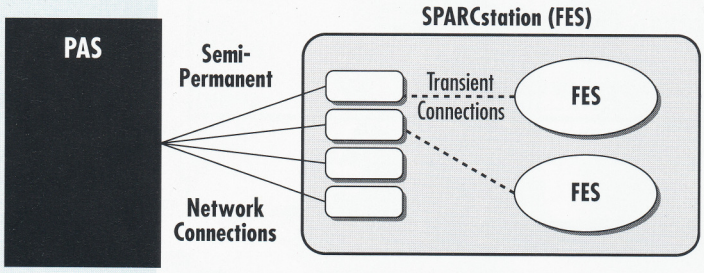
April sees the introduction of version 3.0 of the Professional Datacare Front End System (FES), to the SMS PAS, including a number of features aimed specifically at speeding up access to patient data.

Many of the new features have been introduced at the request of high volume data users such as Pathology departments, where request rates of between one and two thousand per day have been envisaged. The enhancements will greatly decrease the time taken to process transactions from all departments, including Radiology and A & E.

The key elements of the high performance release are as follows:

* **Network Links to PAS**
* **Preloading of the FES cache**
* **A secondary casenote cache**

Network links to PAS will be used to replace the existing serial lines, giving a two to three fold improvement in response times. Additionally, ports on terminal servers can be reclaimed for 'real' users.



Network Link Processes - LAT connectivity in FES v3.0

Preloading the cache which FES uses to improve query response times will be possible on a daily basis., allowing the demographic details for all current inpatients and planned admissions and outpatients to be loaded into the system ahead of departmental queries. As typical cache query times are in the order of half a second or less, departmental users experience virtually no performance penalty for querying PAS data. As a useful side effect, the load on active PAS systems will be minimised by the use of this technique.

Providing a secondary cache for casenote numbers allows sites to take full advantage of the cashing, even when casenote numbers are the only available identifier. The secondary cache, loaded through ad-hoc queries as well as the preload mechanism, maps any of the patients' casenote numbers to their district number.

MARTIN O'NIONS
Senior Analyst/ Programmer Patient Administration Systems

POLICING THE SYSTEM

Medical records departments have commented extensively on the hazards associated with wider access to the PAS. In particular, the ability of departmental systems to register new patients and update existing records makes the job of tracking and correcting errors much more difficult.

FES v3.0 contains an enhanced auditing facility which allows the production of daily reports on all registrations and changes made by departmental systems, including the changed details and the time of the operation. Future releases of FES will make it possible for departmental systems to identify down to site or user level the source of these operations.

The PAS demographic change logs will also be captured. The information from these will be made available to departmental systems, as well as being used to update the FES cache.

Version 3.0 will be provided to all FES sites under the terms of the existing maintenance agreements, but many of its features require the purchase of a third-party DECnet connectivity package to 'enable' them. Further details on v3.0 can be obtained from Martin O'Nions at Professional Datacare.

FES 12 : PDC 2

With twelve sites now running FES, including Portsmouth, sold through SMS, and the number of applications connecting through FES rising rapidly, the need for another permanent member of the PAS team has been highlighted. The appointment of Andrew Holt (see 'New Members of Staff') will allow Professional Datacare to fully implement the long-awaited ISV scheme. From April, Professional Datacare will be working even more closely with suppliers to ensure that their software is properly tested for use with FES.

In addition to his involvement with the ISV scheme, Andrew will be providing front-line technical support for FES users and will, with Project Leader Martin O'Nions, be offering additional UNIX and networking consultancy services to our customer base.

PAS BACKUP PROBLEM RESOLVED!

The following information details the actions which should be taken when a magnetic tape runs off the end of its reel during a backup of the Patient Administration System VAX computer. In the unlikely event that this problem occurs, a message similar to the following will be displayed on the computer console:

```
%BACKUP-I-OPERASSIST. operator assistance has been requested
%%%%%%%%%%% OPCOM 11-DEC-1992 19:27:40. 78 %%%%%%%%%%%
Request 22, from user OPS at STK000
%BACKUP-I-OPERSPEC, specify option, (QUIT, CONTINUE or RESTART)
```

The operator should go to an "untied" terminal, and log onto the VAX computer using the FIELD user name. The following commands should be typed in to identify the operator:

```
$ SET PROCESS/PRIV=OPER
$ REPLY/ENABLE
```

The computer response will be as follows:

```
%%%%%%%%%%  OPCOM  11-DEC-1992 19:29.13.42  %%%%%%%%%%
Operator _LTAxxx: has been enabled, username FIELD

%%%%%%%%%%  OPCOM  11-DEC-1992 19:29.13.42  %%%%%%%%%%
Operator status for operator LTAxxx:
CENTRAL, PRINTER, TAPES, DISKS, DEVICES, CARDS, NETWORK,
CLUSTER, SECURITY, LICENSE, OPER1, OPER2, OPER3, OPER4, OPER5,
OPER6, OPER7, OPER8, OPERA, OPER10, OPER11, OPER12
```

The command to be typed into the computer depends upon the required action to be taken, as follows:

The QUIT Option

Type the following command, replacing the xx by the number of the request that was displayed on the computer console:

```
$ REPLY/TO=xx QUIT
```

This option should be used ONLY if the whole backup procedure is to be cancelled. This command should not normally need to be used.

The CONTINUE option

If this option is selected, the error will be ignored and the backup procedure will continue. It is recommended that this option should NOT BE USED as the integrity of the backup cannot be guaranteed.

The RESTART option

This option should be used to restart the backup from the beginning of the current volume. The following command should be typed into the computer console, replacing xx with the number of the request as displayed on the remote console:

```
$ REPLY/TO=xx RESTART
```

Before this command is entered, the tape MUST be rewound and put back on-line. This option is not recommended if it is the first tape of a backup procedure.
Further information on this subject can be obtained from VAX Technical Specialist Gary Broadhurst.

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