THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Report on correspondence and papers of

KEITH FREDERICK BOWDEN

(1936-1982)

computer scientist

relating to

computerization of medical records

deposited in

Essex University Library

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CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE

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Catalogue of papers and correspondence of

KEITH FREDERICK BOWDEN

(1936 - 1982)

Relating to the
University of Essex / Guy's Hospital Medical Records Project

Compiled by:
Jeannine Alton and Peter Harper

Deposited in Essex University Library

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GENERAL INTRODUCTION

The Thamesmead Community Health Project was originally suggested by G.A. Barnard of Essex University and W.J.H. Butterfield of Guy's Hospital Medical School. It envisaged the use of computer facilities for information handling in respect of positive health care at a medical centre in the new town of Thamesmead.   In February 1967 the Ministry of Health agreed to finance, for five years from 1 October 1967, a Senior Lecturership at the University of Essex with special reference to the health service. The person appointed (Bowden) was to work in the first instance on the Thamesmead Project.   At the same time the Ministry also agreed to finance two temporary fellowships to run from July to September 1967 'to keep in touch with work on the Thamesmead computer specification'.   Bowden and I.R. MacCallum were appointed to these temporary fellowships before starting on their appointments to the staff of Essex University in October.

By June 1967 the Ministry of Health had decided that the provision of a computer at Thamesmead did not accord with their priorities for computer development in the health service, but they wished the project to continue if computer facilities could be made available elsewhere.   In October, Bowden and MacCallum, with M.E. Abrams and J.O.P. Chamberlain of Guy's Hospital, presented to the Ministry a major feasibility study on 'a system of information handling in the Thamesmead Health Project', which was now defined in terms of the creation of integrated health records stored on and accessible by means of a computer (see A.1).   For the purposes of the project it was proposed to use computers at the University of Essex linked to an established health centre which would provide 'earlier and diverse experience' of general practitioner needs. Funding, chanelled through Essex University, was provided for three years from May 1968 and subsequently extended for eighteen months.   The original title of Thamesmead Project was changed to the Guy's/Essex General Practice Computing Project.   The computer personnel were based at Essex, Guy's Hospital provided medical support, and an established general practice at Harlow (Dr. J.B. Davis) provided the experience of general practitioner needs necessary for the creation of integrated health records.   Eventually about 2,500 records were computerised and the project went 'live' for approximately fifteen months with direct links between the Harlow practice and the Essex computer.   This was

the first time all the general medical records of a doctor had been maintained on a computer system and also the first time a doctor had the opportunity to consult and update a computer-based record at the time of consultation.   The project documentation was subsequently sent to Exeter Hospital where many of the ideas developed in the Essex/ Guy's Hospital project were incorporated into another experimental project with a practice at Ottery St. Mary.

ACKNOWLEDGEMENTS

The papers were received from Mr. I.R. MacCallum of the Department of Computer Science, University of Essex.   We are grateful to Mr. MacCallum for help in identifying and describing material, and for comments on sections of the draft catalogue.

SECTION A   REPORTS   A.1 - A.3

A.1   Thamesmead Report

'A request to the Ministry of Health for support for the development
of a system of information handling in the 'Thamesmead' health
project' (4pp.) with 'A report concerning a system of information
handling in the 'Thamesmead' health project' (38pp. +8 appendices),
October 1967.

In original folder.

The report was the work of M.E. Abrams and J.O.P. Chamberlain
of Guy's Hospital Medical School and Bowden and I.R. MacCallum
of the University of Essex.

A.2   Medical Project Report, August 1971

'An application for extension of funds for the period January 1972-
30 September 1973 for the Guy's/Essex medical project (includes
progress report)'

19pp. duplicated typescript +15 appendices.

In original spring-back binder.

A.3   University of Essex/Guy's Community Health Computer Unit Visitors'
Handbook for the Mark 2.0 System, September 1973.

34pp. duplicated typescript.

SECTION B   CORRESPONDENCE AND COMMITTEE PAPERS   B.1 - B.59

B.1-B.12   Ministry of Health (later Department of Health and Social
                  Security), 1967-73

                  A chronological sequence of correspondence and papers re grant
                  awards and renewals, the progress of the project, policy objectives,
                  computer equipment, etc.

B.1   1967

                  Includes copies of correspondence with G.A. Barnard re appoint-
                  ment at the University of Essex of a senior lecturer in computing
                  with special reference to the health service; also copy of letter
                  to W.J.H. Butterfield re Thamesmead Community Health Service
                  Project computer proposal.

B.2   1968

                  Includes correspondence re National Health Computing Services
                  Group.   In August Bowden agreed to take on responsibility for
                  a working party on the structure and coding of data.

B.3   January-February 1969

                  Includes 3pp. draft statement on the Essex/Guy's Hospital project
                  and the use of computer systems to improve the efficiency of the
                  general practice arm of the health service, 21 January.

B.4   July-November 1969 and n.d.

                  Includes undated letter referring to the choice of a group practice
                  at Harlow as a suitable place to install a display/keyboard during
                  the pilot phase of the project.   The reference to Harlow and the
                  absence of any claim to have installed the equipment dates the
                  document between July 1968 and July 1969 (private information
                  from I.R. MacCallum).

B.5   January-May 1970 and n.d.

                  Includes material re National Health Computer Services Group and
                  conference on 'Man-Computer Interaction' organised by the Institution
                  of Electrical Engineers.   Also includes undated handwritten draft
                  re application for an eighteen-month extension to the project,
                  probably written in the last quarter of 1970 (private information from
                  I.R. MacCallum).

Correspondence and committee papers

B.6   1971

               Includes correspondence re extension of DHSS support for the
               project.

B.7   January–February 1972

               Material re extension of grant including Bowden's letter of 15
               February setting out principal objectives of project.

B.8   March–April 1972

               Includes letter from DHSS, 15 March, confirming extension of
               support for project.

B.9   May 1972

               Folder includes copy of DHSS paper setting out the department's
               views on the principles and methodology for evaluating the use of
               computers in the health service.

B.10   July–November 1972

               Further material re the renewal of support (to September 1973) and
               the future of the project.

B.11, B.12   December 1972–January 1973

               Correspondence and papers re 'Annual Review of the Use of Computers
               in the National Health Service (1973)'

               2 folders.

Correspondence and committee papers

B.13-B.29   Harlow

B.13-B.22   Harlow correspondence, 1967-73

                   A chronological sequence of correspondence re the organisation
                   and running of the project at the Lister House group practice,
                   Harlow (Dr. J.B. Davis).

B.13   1967-68

                   Includes copy of press statement issued from the University about the
                   Ministry of Health grant for the development of computerised
                   community health care records, October 1968.

B.14   April-July 1969

B.15   August-November 1969

                   Includes draft checklist of diseases of the lower respiratory system
                   and 2pp. typescript statement by J.B. Davis headed 'Patient
                   Identification (Internal)'.

B.16   January-April 1970

B.17   July-September 1970

B.18   October-December 1970

                   Includes Bowden's ms. note of a meeting with Davis, 5 October.

B.19   February-September 1971

B.20   October-December 1971

                   Includes copy of 'Practical Applications of Computing in Medicine:
                   The Doctor/Patient Relationship: The Impact of a Computer on a
                   Group Practice', a paper presented by Davis at the British Computer
                   Society Medical Computing Conference, 1971.

Correspondence and committee papers

B.21   1972

B.22   1973

                        Includes material about visit to Harlow by members of Ministry of
                        Defence medical computing group.

B.23-B.29   'Harlow Working Party.   Miscellaneous', 1967, 1969-71

                        Contents of a folder so inscribed divided into seven folders for ease
                        of reference.

B.23   December 1967, January-May 1969

                        Includes Progress Report on the Lister House (Harlow) Working Party,
                        27 January 1969, and investigation of the work of the receptionists
                        at Lister House with a view to the computerisation of the appoint-
                        ments system.

B.24   August-November 1969

                        Includes material re the editing task of the project and the cost-
                        effectiveness of general practice.

B.25   January 1970

                        Includes proposals for the input editing of check-lists and the
                        definition of check-list assembly code.

B.26   1970-71

                        Includes material re input formats for medical records and the print-out
                        of certificates and forms, note of Harlow Working Party decisions
                        up to 7 May 1970 and restatement of aims of Guy's/University of
                        Essex Community Health Care Project, 26 August 1970.

Correspondence and committee papers

B.27-B.29   Undated Papers

B.27   Papers on the administration and organisation of the Harlow practice.

B.28   Papers re checklists of drugs and diseases.

B.29   Miscellaneous

               Includes ms. notes for untitled lecture by Bowden.

B.30-B.39   Steering Committee

B.30-B.35   'Signed Steering Committee Minutes', 1968-73

               Contents of a spring-back binder so inscribed divided into six folders
               for ease of reference.

               The papers are duplicated typéscript agendas and minutes of the meetings
               of the University of Essex/Guy's Hospital General Practice Computing
               Unit Steering Committee for the Medical Research Project.

               At the first meeting on 11 June 1968 it was decided that the Steering
               Committee would be responsible for the progress of the Project and
               that the project leader, Bowden, and the Medical Adviser, Dr. M.E.
               Abrams, would report directly to the Committee.

               At the second meeting on 18 July it was decided to organise a small
               working party, chaired by Bowden, to cope with day-to-day project
               studies.

               The Steering Committee met alternately at Essex University and Guy's
               Hospital.

Correspondence and committee papers

B.30	1968	B.33	1971
B.31	1969	B.34	1972
B.32	1970	B.35	1973

B.36-B.39   'Steering Committee for the Medical Research Project.   Correspondence', 1968-73

Contents of a folder so inscribed, divided into four folders for ease of reference; the material is mainly correspondence relating to organisation of, and attendance at, committee meetings.

B.36   1968

Includes 3pp. ms. note by Bowden on meeting of 18 July and letter from Bowden to Ministry of Health, 14 November, re the ministry's financial support for the project.

B.37   1969

Includes copy of British Medical Association Planning Unit Report no.3 'Computers in Medicine', with heavy underscoring and marginal emphasis, and 3pp. ms. notes, December, on the medical project timetable and hardware.

B.38   1970

Includes copy of National Health Computing Services Group 'Report of the Working Party on Education and Training', March.

B.39   1971-73

Correspondence and committee papers

B.40-B.53   'Essex Medical Project Meetings', 1970-74

                 Contents of a folder so inscribed.

B.40-B.48   Agendas and minutes of meetings of the computer personnel at
                 Essex involved in the project.

B.40   February 1970

                 Includes 8pp. duplicated ms. paper 'A note on the proposed I.P.R.
                 [Integrated Patient Record] structure'.

B.41   March-April 1970

B.42   May-July 1970

B.43   January, November 1971

B.44   April-May 1972

B.45   June-July 1972

B.46   August 1972

B.47   September-December 1972

B.48   1973-74

B.49   Undated ms. and typescript notes re computer operations found with
                 the Essex medical project meetings papers.

Correspondence and committee papers

B.50-B.53   Papers clipped inside front cover of 'Essex Medical Project Meetings'
              folder.

B.50   February 1970, April 1972

              'Input Formats for Past Medical Records of Patients Prior to System
              Operation.   Revised 2.2.70.'

              5pp. duplicated typescript.

              2 ms. diagrams: 'Disc map - Side O' and 'Disc map - Side 1',
              28 April 1972.

B.51   July-August 1972

              Includes minutes of Harlow Working Party, 13 July and 24 August,
              and note on proposed specification for investigations, 2 August.

B.52   October-December 1972

              Includes ms. notes by Bowden.

B.53   n.d.

              Includes 'Medical Research Project Installation Instructions' (24pp.
              duplicated typescript).

B.54-B.56   Thamesmead

B.54   'Thamesmead Correspondence', January-April 1972.

              Contents of a folder so inscribed.

              Includes 2pp. memorandum 'Thamesmead & Guy's/Essex Computer
              Project', 22 January.   By P.M. Higgins.

Correspondence and committee papers

B.55   'Thamesmead Working Party. Visit only'

            Contents of a folder so inscribed.

            Correspondence and papers re visit of Bowden to Thamesmead Health
            Centre, 31 June 1972.

B.56   'Thamesmead Information'

            Contents of a folder so inscribed.

            Miscellaneous material re Thamesmead Computer Project including
            note by P.M. Higgins on the computer at Thamesmead (3pp.) and
            paper from M.E. Abrams on 'A real time system for the handling
            of integrated patient records'.

B.57-B.59   Miscellaneous

B.57   Institution of Electrical Engineers Control and Automation Division
            Colloquium on Cathode Ray Tube Displays, 19 May 1969.

            Duplicated proceedings.

B.58   National Health Service Computer Policy and Development Branch
            Seminar on Visual Display Units, 20 January 1970.

            Duplicated proceedings (25pp.) including presentation on the basic
            principles of VDUs by Bowden.

B.59   Printed material re medical records, computers in the health services,
            etc.

SECTION C   FINANCIAL ADMINISTRATION   C.1 - C.33

C.1-C.5   'Medical Project Financial Correspondence (mainly Harlow)', 1969-74.

Contents of a folder so inscribed divided into five folders for ease of reference.

C.1   1969

Includes Bowden's ms. note of expenditure 'calculated as of 19/11/69'.

C.2   1970

Includes 2pp. note of the 'Burroughs Disc Saga', 23 December 1968-5 February 1970, and breakdown of costs of medical project, 4 August 1970 (8pp. ms.).

C.3   January-August 1971

Includes Bowden's ms. notes of projected costs for 1972, cost breakdown of medical project as of 18 January 1971, etc.

C.4   November-December 1971.

C.5   1972-74

C.6-C.12   'N.25 Medical Project Fund', 1968-74

Statements of expenditure on the Ministry of Health (Medical Information Project) Grant N.25.

C.6	1968	C.10	1972
C.7	1969	C.11	1973
C.8	1970	C.12	1974
C.9	1971		

Financial administration

C.13, C.14   'N.55   Thamesmead Fund'

Statements of the account.

C.13   1971   C.14   1972

C.15-C.31   Invoices, 1968-74

C.15	June-December 1968	C.24	July-September 1972
C.16	January-June 1969	C.25	October-December 1972
C.17	July-December 1969	C.26	January-March 1973
C.18	January-June 1970	C.27	April-June 1973
C.19	July-December 1970	C.28	July-September 1973
C.20	January-June 1971	C.29	October-December 1973
C.21	July-December 1971	C.30	1974
C.22	January-March 1972	C.31	n.d.
C.23	April-June 1972		

C.32   'Expenditure. Printing Slips', 1969-70

In original folder.

C.33   Large hard-backed cash book, with record of expenditure from grants
                  N.25 and N.30, 28 June 1968-20 February 1975.

                  Also includes list of books purchased from grant N.25 enclosed as a
                  loose page.

SECTION D   BIOGRAPHICAL   D.1

Biographical material of K.F. Bowden, founder member of the University of Essex Department of Computer Science and leader of the project to apply computers to the maintenance of personal medical records.

Curriculum vitae and list of publications.

Press-cutting of obituary notice published in The Times.

INDEX OF CORRESPONDENTS

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