Evaluation of total purchasing pilots in England and Scotland and implications for primary care groups in England: personal interviews and analysis of routine data

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Abstract

Objectives: To evaluate the reported achievements of the 52 first wave total purchasing pilot schemes in 1996-7 and the factors associated with these; and to consider the implications of these findings for the development of the proposed primary care groups.
Design: Face to face interviews with lead general practitioners, project managers, and health authority representatives responsible for each pilot; and analysis of hospital episode statistics.
Setting: England and Scotland for evaluation of pilots; England only for consideration of implications for primary care groups.
Main outcome measures: The ability of total purchasers to achieve their own objectives and their ability specifically to achieve objectives in the service areas beyond fundholding included in total purchasing.
Results: The level of achievement between pilots varied widely. Achievement was more likely to be reported in primary than in secondary care. Reported achievements in reducing length of stay and emergency admissions were corroborated by analysis of hospital episode statistics. Single practice and small multipractice pilots were more likely than large multipractice projects to report achieving their objectives. Achievements were also associated with higher direct management costs per head and the ability to undertake independent contracting. Large multipractice pilots required considerable organisational development before progress could be made.
Conclusion: The ability to create effective commissioning organisations the size of the proposed primary care groups should not be underestimated. To be effective commissioners, these care groups will need to invest heavily in their organisational development and in the short term are likely to need an additional development budget rather than the reduction in spending on NHS management that is planned by the government.

Introduction

The NHS Executive's initiative on total purchasing provided an opportunity for volunteer fundholding general practices throughout Britain to receive a delegated budget from their local health authority to purchase potentially all the hospital and community health services for their patients.[1] We examined the factors contributing to the different levels of reported achievement among the first wave of these total purchasing pilot schemes—that is, in England and Scotland—in their first "live" year, 1996-7. We then explored the implications of the findings for the development of similar pilots proposed by the government for England—primary care groups.[2]

The pilots varied greatly in size, organisation, and ambition.[3] As there was no detailed blueprint for total purchasing, the pilots interpreted the concept in different ways and developed their scheme at different rates. As a result, several distinct types of pilot emerged (table 1):

- Commissioners—the predominant type of pilot, characterised by holding a delegated budget and directly purchasing care;
- Copurchasers—did not hold a budget but worked in partnership with their health authority to influence its commissioning;
- Primary care developers—focused purely on primary care development;
- Developmental pilots—used the first live year as a further preparatory period;
- Undeveloped pilots—did not aim to achieve any change in services.

Methods

The diversity in approaches, combined with the fact that many objectives of the pilots were not directly quantifiable (for example, to improve interagency relations), meant that evaluation of achievement was necessarily limited to assessment of self reported progress.[4] Two assessments were made: firstly, the achievement of objectives in the pilot's own terms—that is, regardless of scope—and secondly, achievements in service areas related to total purchasing. The latter assessment concerned achievements exclusively in services that total purchasers had the power to purchase for the first time: maternity services; services for seriously mentally ill patients; care of frail elderly patients in the

Table 1 Levels of reported achievement and selected characteristics of 52 total purchasing pilots, 1996-7. Values are numbers (percentages) unless stated otherwise

	Type of pilot*				
Level of achievement and characteristics	**Undeveloped (n=2)**	**Developmental (n=11)**	**Copurchaser (n=8)**	**Primary care developer (n=8)**	**Commissioner (n=23)**
Level of reported achievement† in pilot's own terms:					
Low	2 (100)	8 (73)	3 (38)	2 (25)	4 (17)
Medium	0	2 (18)	4 (50)	5 (63)	6 (26)
High	0	1 (9)	1 (13)	1 (13)	13 (57)
Level of reported achievement† in services related to total purchasing:					
Low	2 (100)	11 (100)	7 (88)	6 (75)	6 (26)
Medium	0	0	1 (13)	2 (25)	6 (26)
High	0	0	0	0	11 (48)
Size of pilot:					
Median No of practices	6	4	3	2	3
Median No of practitioners	17	23	13	16	13
Median population	32 689	36 590	24 750	27 500	25 000
Organisational structure:					
Complex	1 (50)	6 (55)	2 (25)	2 (25)	9 (39)
Intermediate	1 (50)	3 (27)	4 (50)	3 (38)	6 (26)
Simple	0	2 (18)	2 (25)	3 (38)	8 (35)
Median cost of direct management per patient (£)	0.91	2.86	1.61	2.80	3.10

*See Introduction for definitions of the five types. †Low achievement comprises groups 1 and 2; medium achievement, group 3; and high achievement, groups 4 and 5. See Methods for further clarification.

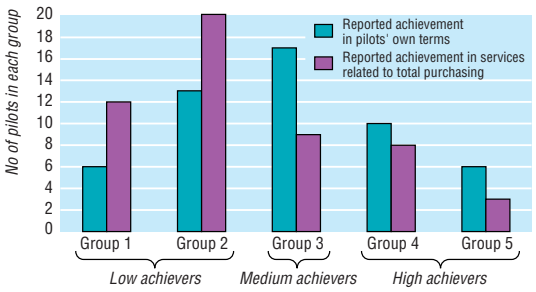
community; accident and emergency services; emergency medical inpatient services; and the development of alternatives to acute hospital inpatient services.

There were 52 first wave pilots (46 in England, 6 in Scotland). In autumn 1995 (midway through the pilots' preparatory year) and in spring 1997 (at the end of the first live year) we conducted face to face, semi-structured interviews with a lead general practitioner, project manager, and local health authority manager responsible for liaison in each project. In 1997 we asked each respondent whether the pilot had achieved its four main objectives derived from purchasing intentions documents and from the interviews in 1995. Recognising the subjective nature of the responses, and the need to reduce potential bias, we considered an objective to have been achieved only if there was agreement between all the three respondents. Moreover, where such achievements affected trusts, further corroboration was sought from provider representatives and, where relevant, hospital activity data.

Three researchers independently assigned each pilot to one of five hierarchical groups on the basis of its number of self reported achievements. For achievements in the pilot's own terms, a "group 1" pilot was one that had reported not having achieved any of its objectives in 1996-7, whereas a "group 5" pilot had reported achieving all four of its objectives. For achievements in services related to total purchasing, a group 1 pilot was one that had not influenced services in any area related to total purchasing, whereas a group 5 pilot had influenced at least three or four of these services. The grouping of pilots also took account of achievements of objectives that had emerged after the 1995 interviews. If the researchers' groupings differed, a consensus decision was reached through discussion.

Results

The figure shows the distribution of achievement reported by the total purchasing pilots in 1996-7. It shows a wide variation in the abilities of the pilots to meet their own objectives, suggesting that most had overestimated what they could achieve in the first year. For areas related to total purchasing, there was a shift towards the lower groupings, indicating that such objectives were more difficult to achieve and that a proportion of achievements in the pilot's own terms were in service areas already included in fundholding.



Distribution of total purchasing pilots by level of achievement (groups 1 to 5) in relation to objectives in pilots' own terms and to services related to total purchasing, 1996-7

Table 2 shows that about half the purchasing objectives were reported to have been met (with rates varying from 39% in mental health to 87% of objectives related to extending the primary healthcare team). That the lowest rate of achievement was in mental health is scarcely surprising given the complexity of purchasing and service development in this field. In the acute sector, pilots found it easier to meet objectives relating to early discharge than to reduce emergency admissions. Moreover, objectives were more easily achieved in primary than in secondary care. The pilots wishing to influence mental health care, for example, found making changes in inpatient services that were controlled by mental health trusts more difficult than extending existing primary care services through, for example, the development of community psychiatric nursing.

Hospital episode statistics were analysed to corroborate self reported achievements for the pilots that were trying to reduce emergency admissions and lengths of stay (table 3). This analysis showed a high level of

Table 2 Achievements of 52 total purchasing pilots by service area, 1996-7

Service area of four main purchasing objectives	No of pilots with objectives	No (%) of pilots reporting objective achieved
Early discharge/reducing length of stay	22	14 (64)
Community and continuing care	19	10 (53)
Maternity services	27	14 (52)
Reducing emergency admissions	32	14 (44)
Mental health services	28	11 (39)
Developing the primary healthcare team	15	13 (87)
Improving information/population needs assessment	12	10 (83)
Other*	35	21 (60)

*A wide variety, including oncology, cardiology, school health, and palliative care.

consistency between the achievements reported by the pilots and the activity changes seen in the hospital episode statistics. Table 3 shows that the hospital episode statistics corroborated the reported success in reducing length of stay in 13 of the 16 commissioner and copurchaser pilots. The other three pilots had implemented their expressed mechanism for change, but the hospital episode statistics did not show reduced average length of stay. Similar findings from the data analysis corroborate the reported achievements in influencing emergency admissions (unpublished data).

Levels of reported achievement seemed to be associated with type of pilot (table 1). Commissioner pilots tended to be the highest "achievers" in their own terms and were the only type that reported achieving all of their main objectives in services related to total purchasing. In comparison, copurchasers and primary care developers were most often medium achievers in their own terms, and most had had little or no impact on services related to total purchasing. Most developmental and all undeveloped pilots were low achievers.

Two other characteristics were associated with level of achievement[3]:

- Smaller pilots (those with fewer practitioners and smaller populations) were more likely than larger ones to report achieving their objectives; none of the large multipractice pilots with six practices or more was a high achiever (groups 4 or 5)
- Larger pilots had to establish complex organisations before they could make progress, whereas smaller, particularly single practice pilots, achieved their objectives with little organisational development.

The pilots with the highest direct management costs per head were the most likely schemes to meet their objectives. As the level of management spending was a matter of negotiation between each pilot and its parent health authority, the level allocated by the health authority might have been an indication of the confidence it placed in the ability of the pilot to bring about beneficial change.

Discussion

The New NHS white paper sets out the government's intention to establish primary care groups in England by April 1999.[2] All primary care groups will have a budget covering general practitioner prescribing and practice infrastructure. As the groups develop, they will take responsibility for a greater share of hospital and community health services resources and, in the latter stages, the General Medical Services budget. Primary care groups, designed to comprise "natural communities" of about 100 000 patients, should "grow out" of the range of existing general practitioner-led commissioning schemes in the NHS. Most total purchasing pilots in England are likely, therefore, to become integrated into these larger organisations.

It is encouraging that primary care groups will be able to hold delegated budgets as we found a clear relation between first year achievements in areas related to total purchasing, and commissioner pilots. In particular, the early success of commissioner pilots in reducing length of stay shows that primary care based budget holding with independent contracting has the potential to assist in the management of demand for expensive hospital facilities. In contrast, pilots trying to influence service changes without holding a budget made far less progress in the first year.

Organisational development needs

That the largest total purchasers achieved the least in 1996-7 suggests that primary care groups (which are likely to be almost three times as large) will require considerable time to develop organisationally before effective progress can be made. Multipractice pilots that reported the highest level of achievement had developed structurally complex organisations, employed a dedicated project manager, developed reasonable or good relations with their local health authority, had regular discussions with local providers, invested in information technology, encouraged the involvement of non-lead general practitioners, and ensured participation from all the practices within the group.[3] The low achieving multipractice pilots were characterised by poorly developed organisations (in particular, lacking a project manager).

The organisational development of primary care groups is likely to prove even more challenging because *(a)* primary care groups will comprise not just

Table 3 Level of agreement, by type of pilot, between total purchasing pilots' own reporting on whether they achieved their objectives to reduce length of stay and emergency admissions, and hospital episode statistics on activity levels*

	Pilot reported "achieved"				Pilot reported "not achieved"			
	Confirmed by hospital episode statistics?				Confirmed by hospital episode statistics?			
Objective	Yes	No	Data not available	Total	Yes	No	Data not available	Total
To reduce hospital length of stay:								
Commissioners	8	3	1	12	1	0	1	2
Copurchasers	0	0	1	1	1	0	0	1
To reduce emergency admissions:								
Commissioners	7	3	0	10	3	1	4	8
Copurchasers	1	0	1	2	2	0	0	2

*Full details of the methods and results of this analysis are available from the authors.

volunteer fundholding practices but all practices in a given area, including non-fundholders and some practices with little experience of commissioning services; *(b)* the requirement that community nurses should be involved in managing primary care groups is likely to add to the complexity of the developmental task; and *(c)* most total purchasers rely on a very limited number of motivated and skilled individuals—acquiring enough input from general practitioners and skilled management support to run 500 primary care groups effectively will be demanding.

Funding primary care groups

A final implication for primary care groups relates to the amount of funding. Most of the highest achieving multipractice pilots were in the top quarter for direct management costs. These pilots tended to pay for general practitioner locums and additional hours for general practitioners. In some cases they made a further allowance to each practice for staff participation in project development, and they all invested heavily in information systems.[5] Yet the government aims to reduce the total costs of running health authorities and primary care based commissioning by £200m each year for five years. In the short term, however, costs are likely to rise as health authorities will have to operate as the main purchaser until all the local care groups are fully established. In the longer term it is possible that management costs can be contained, but other evidence from the current national evaluation project indicates that it would be unwise to assume that primary care groups are necessarily a cheaper alternative to the status quo.[5]

The experience of the total purchasing pilots suggests that the organisational task in creating primary care groups should not be underestimated. In particular, engendering collective responsibility among all practitioners for staying within budget or adhering to prescribing and referral protocols, or doing both of these, proved difficult in the pilots, in which participation was voluntary.[3] In primary care groups—in which participation will be compulsory—a collective approach will take time to achieve as most groups are likely to include practitioners antagonistic to the concept, as it implies a reduction in individual autonomy and a greater emphasis on rationing. Primary care groups will also need to address the issue of sustainable management as the evidence suggests that total purchasing was typically run by a few individuals with high workloads.[3] The development of commissioning-style primary care groups is therefore likely to be slow in most cases.

However, primary care groups will operate not as pilots with a fixed life span but as the centre piece of the "new NHS" at local level. They will thus be able to call on the unambiguous support of their local health authorities, and trusts will have to recognise their standing. The concession for primary care groups to operate at a range of different levels, at least initially, is also appropriate and necessary as the volunteer total purchasing pilots developed at different speeds. Similarly, the government's intention that all care groups should ultimately move towards the commissioning-style model is supported by the experience of the pilots in relation to total purchasing.

Data are being collected on the second live year of total purchasing (1997-8); these will show whether the largest projects have managed to "catch up" in terms of overall achievement. If so, the evaluation will provide important lessons for the developmental needs of successful, large scale commissioning groups (such as primary care groups); if not, it will question the feasibility and desirability of primary care led commissioning at the larger scale proposed in the white paper.

Key messages

- The level of reported achievement between the total purchasing pilots in 1996-7 varied widely; achievement was more likely to occur in primary than in secondary care
- Single practice and small multipractice pilots were more likely than large multipractice pilots to report achieving their objectives in 1996/97; achievements were also associated with higher direct management costs per head
- Large multipractice pilots needed more time for organisational development before progress could be made
- Difficulties in creating effective commissioning organisations the size of the proposed primary care groups should not be underestimated
- Primary care groups will need to invest heavily in organisational development and are likely to need an additional development budget in the short term

The national evaluation of total purchasing is a collective effort by a consortium of health services researchers led from the King's Fund. Staff come from the National Primary Care Research and Development Centre at Manchester, Salford, and York Universities; the Universities of Bristol, Edinburgh, and Southampton; the Health Services Management Centre at the University of Birmingham; and the Health Services Research Unit at the London School of Hygiene and Tropical Medicine. The views expressed in this paper are those of the authors and are not necessarily those of the two funding departments.

Contributors: NG worked as project officer on the overall research programme; undertook some of the personal interviews; participated in the analysis of each pilot's achievements; and led the drafting and revision of the paper. NG and NM led the design of the questionnaires on the total purchasing pilots' achievements and will act as guarantors for the paper. NG, NM, and GM jointly developed the analytical approach used to characterise and assess the pilots' achievements. NM designed and led the overall research programme; undertook some of the personal interviews; and participated in the drafting and revision of the paper. HMcL participated in the design of the hospital episode statistics analysis, collected and analysed these episode data, and contributed to the content and writing of the paper. GM worked as a project officer on the overall research programme and participated in the analysis of each pilot's achievements and in the drafting and revision of the paper. JR took the lead on the examination of routine data analysis; was responsible for the analysis of the hospital episode statistics used to inform the paper; and contributed to the content of the paper.

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Primary care: core values

Patients' priorities

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This is the last in a series of six articles reflecting on the core values that will underpin the development of primary care

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How to run a 24 hour system of general practice has been a bone of contention between general practitioners and the public in recent years.[1 2] Doctors are loath to continue doing their own on-call work at nights and weekends.[3 4] Patients, however, prefer to see their own doctor or a general practitioner from their own practice,[5 6] where the service may be better,[7] rather than a doctor from an agency that provides the on-call service.[8 9]

This is the nub of the difference in perception between doctors and patients (and to some extent between healthcare professionals and the general public) about the quality of service they would like to see, and that difference in perception is one which needs to be taken seriously. When asked, patients express a wish to be involved in planning services and their delivery,[10 11] and practices find this process worthwhile.[11 12] And yet, radical changes in out of hours services have occurred without overt consultation with patients.

Summary points

The conflict between the priorities of patients and the aspirations of general practitioners and their teams can be overcome to an extent by increased communication and patients' participation

Primary care services could do much more to meet patients' needs through offering extended advocacy

Vulnerable and other groups will increasingly look to primary care teams to lead community action on housing and benefits, as well as ensuring equal access to high quality health and social care

The starting point

General practitioner service in particular, and primary care services in general, are the jewel in the NHS crown for much of the British public.[13] There is no doubt that the vast majority of the population regards the general practitioner as the first port of call for health care, and as the health professional who they trust to give them advice and treatment. They recognise the need for a guide through the maze of services that make up this increasingly complex health service.

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A simple first priority for most patients is getting really good advice from their primary healthcare providers. That advice includes such details as the best treatment for a particular condition and the downside to it[14]; by whom or where that treatment would be provided; and where the highest success rates are to be found. Indeed, there is some irritation among the general public at the profession's lack of openness about success rates from procedures, although some evaluations are available.[15]

People point out that doctors always know where, and to whom, they would go to be treated for particular conditions, and where they would send their family—and patients cannot see why that kind of information should not be directly available to them. They access this knowledge indirectly through the general practitioners' choice of referral, but objective evidence on which to judge specific hospitals, units, and consultants is still not available, although some will be provided in the near future.

It also has to be recognised that patients may define success differently from healthcare professionals, and that increasingly the public expects to get its definition of quality and benefit recognised. The emphasis on biomedical outcomes used by healthcare professionals or health economists has to be tempered by a recognition of patients' definitions of outcome.

This applies to preferences concerning general practices themselves. While partnerships get bigger and teams more complex, patients express greater satisfaction with smaller practices,[16] practices that are not

involved in training,[17] and those that run personal registered lists.[18] Patients seem to be valuing different characteristics to those given greatest priority by general practitioners, and this will inevitably lead to tensions.

Patients want to know what the choices are for people with various forms of chronic conditions and where the best alleviation can be found. These days they expect to have access to a full primary care team[19 20] and to be advised to use alternative forms of health care if they seem valuable—notably osteopathy and chiropractic, but also aromatherapy (for some end stage cancer patients and for women who have chronic severe mental illness) and acupuncture (for intractable pain). That advice is now seen as part of the armoury for living with illness and chronic conditions and therefore as a part of healthcare advice that people expect from the primary care team.

Accessibility

The general public puts high priority on out of hours services. That applies to the on-call service and to the sense of general lack of availability of primary healthcare services over public holidays. There is an increasingly strong feeling that primary healthcare services should be available, at least in part, on some of those holidays, so that the public is not kept away from those services for up to four days over Christmas and Easter.

This applies especially to certain groups of patients and their families. If primary care is to mean anything to much of the population, it has to be based on the notion that people live with families, partners, or carers and that part of the role of the primary care team is to care for the rest of the family. So, for instance, the fact that services are not available for four days over some public holidays makes many of those who live with severely mentally ill people angry and renders them helpless. There is a strong feeling that primary care services for certain groups, notably mentally ill and elderly people, should be better in general and more widely available in terms of hours of service.

Extending the concept of primary care

Patients often report that they express their views to members of the primary care teams but are not listened to. They feel that their priorities are different from those of the practice team and that there should be more fundamental questioning of whom the service is for and how it can be provided more in accord with patients' needs.

Patients want to be listened to,[10–12] both about their demands for health care and in general. The increasing availability of counselling in primary care is certain evidence of the need for listening of professional quality.[21] The problem for many patients is the variable quality of counselling services offered, from thoroughly trained professionals to those who have attended only a short course. The British Association for Counselling's register and gradual licensing of counsellors is much to be welcomed, but it needs urgent implementation. The concerns of members of the public about quality of counselling and the amount of counselling they are offered in primary health care need to be addressed.

Patients also want a wider range of services to be easily available, be it physiotherapy (always much in demand and something that could be made available in larger practices), podiatry, osteopathy, or consultant sessions for common conditions that require referral. But it is not only healthcare services that the public wishes to see. As primary care expands its range of interests and skills, it becomes more essential that we should see primary care centres as one-stop shops for services that are determinants of health. These include housing and some social services in addition to the current system of health care.

This is not to suggest that all housing offices for a local area should be made available at health centres—rather, elderly people and people with enduring mental illness or learning difficulties could receive specialist housing advice from representatives of local authorities or housing associations based within the health centres.

That is equally true of advice on welfare benefits, and there is good reason to think of Citizens' Advice Bureaux operating from within health centres along with social services, especially those that are targeted at people with chronic poor health. It is extraordinary that, in Britain's well developed primary health care system, so little development of joint premises for health and other services has taken place. Since primary care is going to be increasingly the focus of services, and the gateway to them, it is essential that other services are to be found under the same roof. Only that way can a primary healthcare worker be certain that adequate social services are being provided for a very dependent patient.

It could be argued that general practitioners and other primary care workers, such as district nurses, should be orchestrating the services that enable people who are severely handicapped to stay in their own homes. That is particularly important for elderly people, and the role of the primary healthcare team in ensuring that elderly people stay in their own homes as long as possible, properly supported, clearly needs further development. Primary care teams can orchestrate services for elderly and other patients only if their access to other service providers is good—one reason at least for social services and housing to be located in health centres.

Members of the practice team as advocates

The public looks to health professionals, and particularly general practitioners, to help them to access services. However, the reality is that the advocacy role—so often claimed by primary healthcare professionals—needs developing if helping obtain access to services is to become a major role.

Just as mental health requires an integrated approach, services for elderly people raise issues of access, advocacy, and coordination. The range of models—from services managed by general practitioners or nurses to low key units offering outreach of specialist care from the acute section (as has been so successfully piloted by Lambeth Community NHS Trust)—requires active management. As the movement

of services out of hospitals continues, the role of the primary healthcare team in delivering inpatient services for less acute conditions will need to be explored, including a possible return to provision of local cottage hospitals. Such a choice may be valuable for elderly people and their families.

Meanwhile, the public is worried by ownership of nursing homes by general practitioners—a move that creates a conflict of interest and undermines doctors' advocacy role. In the light of more general anxieties about standards in nursing homes, the primary healthcare team could act as an impartial unofficial inspection team of these and other community based institutions, since their interest must be the patients' welfare, rather than the profit motive of the owner.

Lastly, there is a perceived need for general practitioners and primary healthcare workers to act as advocates of particular groups of patients. Where the patient group is genuinely inarticulate and these patients have no one else to stand up for them, health professionals may play a vital role—a role that is limited at present.

There is always a danger when health professionals take on the mantle of the patient's advocate or friend: professional interests and concerns can differ from personal ones, and some distance needs to be maintained. Nevertheless, the public expects the primary healthcare team to orchestrate services, advise, inspect services, and educate.

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A memorable patient

A death on the Rock

This is a tale of serendipity tinged with sadness and it spans some 55 years. Edwin Hutt, a 24 year old stoker in the Royal Navy, sustained fractures of both legs and other injuries when his ship was torpedoed in the Mediterranean in 1942. He was taken to the military hospital in Gibraltar where I was serving in the Royal Army Medical Corps as a graded pathologist.

After a prolonged illness complicated by lung abscesses and septicaemia he died three months after admission. *Bacterium* (now *Fusobacterium) necrophorum* was isolated repeatedly on anaerobic culture of blood samples and abscess pus. This anaerobe is responsible for, or closely associated with, a variety of diseases of domestic animals known collectively as necrobacillosis, and its rarity as a pathogen in humans prompted the surgical specialist, Major J C Goligher, and me to write up the case for publication in the *Lancet*.[1]

The source of infection remains a mystery. The injuries were sustained at sea and the patient was transferred directly by ship to hospital in Gibraltar, a station which is virtually isolated from farming activity. But the patient had spent most of his life on farms before voluntarily enlisting in the Royal Navy two years beforehand.

The clinical picture in our case conforms for the most part with that described in recent studies—namely, the occurrence in previously healthy young adults of a severe septicaemic illness with metastatic abscesses.[2] However, an initial sore throat, which is a feature of most case histories, was not suffered by our patient either before or at any stage in his illness. Treatment with penicillin and metronidazole effect a slow recovery and cure in the majority of cases. Unfortunately, these drugs were not available to us in 1942.

And so to the present time. I was reading an article in a daily newspaper which took the form of an interview with Mrs Doreen Louie West, the author of a recently published book describing life on an Oxfordshire farm as seen through the eyes of her mother, Mrs Louie Hutt. In the interview she mentioned the death of her sailor brother in Gibraltar during the war from septicaemia following a fractured leg. This remark struck a chord in my memory; a successful search in my attic for a reprint of the *Lancet* paper and a telephone call to Mrs West confirmed that our patient of all these years ago was, in fact, Mrs West's brother.

There is a sad postscript to this coincidence. I felt that the coauthor of our paper, by now a distinguished emeritus professor of surgery at Leeds, should be told of this turn of events. I looked up Professor Goligher's address in the *Medical Directory* and was about to write to him when I learnt from a newspaper announcement that he had died two days previously.

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1 Forbes GB, Goligher JC. Necrobacillosis in man. *Lancet* 1944,1:399.
2 Eykyn SJ. Necrobacillosis. *Scandinavian Journal of Infectious Diseases* 1989;62:41-6.