MEDICAL PRACTICE

Contemporary Themes

Comparing aspects of personnel management in the NHS with IBM

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Introduction

Many doctors, particularly those in training grades, feel that they are on an uncertain career ladder, with inadequate or patchy training, which adds to the stress of an already difficult job, and little or no opportunity for airing grievances or getting support. In the business world IBM has a reputation as a company which lays emphasis on personnel management: it emphasises staff training, welfare, and rewards, knowing that a contented, well trained staff will work effectively. It is instructive to compare the progress of a doctor in training with that of an IBM employee, in this case a systems engineer who is trained to give technical advice to customers on the use of their computer systems.

Selection

Since clinical medicine is largely vocational selection takes place at 18-19 years of age. Entry into medical school is usually based on A level results, a reference from school, and an interview with the dean. Careers advice at school largely consists of matching careers to A levels and vice versa, rather than assessing suitability for a particular job.¹

Most systems engineers are graduates, not necessarily of science subjects, who are recruited during their final year at university. There is also mobility within the company, and computer engineers or programmers, secretaries or administrators may apply to become

systems engineers. Certain values are paramount: respect for the individual, the best customer service, and the pursuit of excellence.² Interviews are designed to establish whether the applicant is comfortable and compatible with those values, as well as having the necessary motivation and aptitude for the particular job. The process of selection is continually being revised as IBM seeks to improve the quality of recruits.

Initial training

Once in medical school individuals are largely left to their own devices. Provided various examinations or assessments are passed, the end result is a medical degree. Personal tutors drop away at the end of the preclinical years, and clinical attachments lead to brief encounters of two or three months with various doctors of different grades. Attachments to peripheral hospitals, usually residential, where the student is immersed in clinical work and part of the ward team, provide an opportunity for clinical acumen to be observed. But because of pressure of clinical work, research, examinations, committee work, and other chores most doctors have neither the time nor the inclination to assess a student's ability or suitability, and as yet there is no compulsion to do so.

The first 18 months for a systems engineer consist of courses and work in the department. Courses cover the three main areas of technical aspects, business, and communication. A particular manager is assigned to set tasks and projects which illustrate how trainee and other departments interact. Attachments are also made to more experienced systems engineers. The trainee meets monthly with the manager to discuss progress, the trainee's strengths and weaknesses, and the specific objectives and priorities for that month. (This occurs throughout the company for employees of all levels.)

No one is assigned to look after the individual medical student. If problems arise it is impossible to consult someone who can proffer advice based on a relationship with the student. Even if the student was to question his or her suitability or inclination for medicine

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there is little incentive to abandon the course because no qualifications are obtainable until "finals."

Regular meetings between trainee systems engineer and manager allow a relationship to develop in which there can be an increasingly open exchange of ideas. Should either party feel that the trainee is not suitable this can be aired, and the personnel department can be asked to find an alternative job.

In the field

A doctor has in effect a five year "introductory course" before starting work, and certainly he or she is expected to function as a houseman from the first day. Time served on the wards as a student will ease the transition, but apart from delivering a certain number of babies there is no requirement to perform various practical procedures or clerk a set number of different patients. The honeymoon period during which senior colleagues oversee a new doctor's work varies from brief to non-existent, depending on their own timetables. No allowance is made in the workload or routine for the arrival of a new doctor of whatever grade: a senior house officer may start with a clinic on the first day having no previous experience of the specialty.

Senior colleagues would soon be exasperated if called on for a second opinion every time treatment was started, especially at night. Being on call when senior colleagues are unavailable is said to provide good experience—but at whose expense? Junior doctors are often unsure what is expected of them and find relating to senior colleagues difficult. Combined with overwork this can lead to stress.³

Once systems engineers have been given customers they tackle problems in the field within their capabilities and experience. If they encounter technical problems beyond their knowledge they can refer to the manager or to the relevant department. Experts at regional and national level are also available for consultation at any time. Frequent meetings are held with colleagues to coordinate strategies for supplying customers' needs and defining and updating tasks for team members.

Junior doctors are virtually never invited to talk about their role in the department, their strengths and weaknesses, extra training they would like, or perceptions of their function as doctors. There is no formal feedback or assessment. Weekly meetings are usually clinical rather than concerned with the work of the department or unit. Areas which doctors find stressful, such as dealing with relatives, are not tackled.¹ Job descriptions are embellished, listing, for example, a department's subspecialties; this does not guarantee anything apart from the briefest attendance at erudite clinics, owing to the excessive workload. It may be possible to go to, say, only the weekly contact lens clinic once or twice in six months, which is hardly likely to lead to proficiency. Too often juniors are used as "service personnel" to staff clinics and wards rather than being trained.

Management of junior doctors is usually left to the registrar (or senior registrar), who organises rotas and timetables and sorts out day to day difficulties. Problems related to discipline, poor performance, or inefficiency are brought to the registrar's notice by other junior medical staff or nurses and are initially tackled by the registrar. Symptoms of stress can manifest themselves as poor performance, yet instead of engendering empathy and support they cause frustration and anger among colleagues and other health workers.⁴

No training is given on how to tackle such staff problems and the registrar's ability to do so will depend on personal characteristics as well as relationships with the juniors. Actions may vary from a friendly chat to attempts to "clear up" after the offending doctor or an explosive row with an ensuing breakdown in communication.⁵ The effect of criticism on the doctor will depend on its nature, motive, and the mode of delivery. Truth without love can be detrimental, especially to one who is already having difficulty coping.

A systems engineer's performance is gauged by the amount of business generated from customers, regular meetings, reports from

peers, and visits to customers. A yearly appraisal and counselling meeting is held with the manager at which progress over the previous year is discussed and goals for the next year set. Either manager or trainee may suggest areas that need strengthening and organisation of training. The manager has received training in assessing staff and in constructive criticism, and the systems engineer is used to being assessed and evaluated, so that going to the manager's office is not viewed as "What have I done now?"

Emphasis is put on praise and rewards for good work. These include "dinner for two" bonuses, mentions in the staff journal or on the branch noticeboard, and a monthly award for the best systems engineer. The annual pay award also reflects achievements. Should the systems engineer have a personality clash with the manager there are annual "leapfrog" interviews with the manager's manager, so that problems can be aired that the trainee thinks are not being dealt with satisfactorily.

In charge

A hospital consultant has a job with many different facets and must be all things to all men.⁶⁻¹¹ He or she has had little training in managing people, interviewing job applicants, organising a department, sitting on committees, and so on. The approach to such problems will vary according to personality, attitudes, demands on time, pressure of work, and enthusiasm for private practice. Personal problems among junior staff are usually given a low priority. A consultant's attitude to junior staff ranges from never being seen by them (the invisible consultant) to ignoring them on ward rounds (the invisible houseman) to taking an interest in their well being. With a six monthly turnover in the more junior grades the rewards of such interest must seem small.

The IBM manager has regular meetings with a senior manager at which his own performance is reviewed and goals set. His team is intentionally kept small so all members can keep in touch. Training has been influenced by the priority IBM places on personnel management: assertiveness, organisation, staff assessment, and so on. The manager's role encompasses concern for staff welfare (which will ultimately influence their effectiveness as workers).

Training has also emphasised the need to praise good work and to identify and tackle problems early by regular reviews, rather than waiting for a deterioration in performance and relationships. Time is allocated to the team for regular progress reports, and an open door policy allows staff to discuss any difficulties. Reviews are not optional or dependent on the manager's personality or inclination; one of the goals is to keep reviews with each systems engineer and trainee up to date. A manager has to be as sensitive to the people the firm employs as the people it sells to.¹² Top management spends 40-50% of its time educating and motivating staff.

The personnel department

The main function of the hospital personnel department is a logistic one: recruiting doctors for permanent or locum positions, noting holiday dates, arranging courses, and sorting out contracts. Junior doctors tend to be referred to their consultants if there are difficulties in the job.

The role of personnel officers in business is to support managers in fulfilling their responsibilities towards people. They are concerned with effective use of staff—recruiting, training, motivating, and placing them—and with recognising and rewarding their contributions and efforts. They are also responsible for formulating policy, monitoring employee relations, and administering programmes such as educational or updating programmes, throughout the company.

Lessons

Routine pre-employment medical examinations are generally regarded as a waste of time for doctors (unless there are special fitness requirements).⁴ Psychological testing to screen out vulner-

able people or to select those with the right personality can be valuable if used in addition to other selection procedures, both at the undergraduate stage and later in the doctor's career.

During clinical training students should be allocated to a named tutor with whom regular meetings would take place to discuss progress and to determine aspects that need strengthening. A record book might be kept in which practical procedures and functions (like breaking bad news to relatives) are listed and dates of achievements are recorded; comments and assessments by teachers could be added.

Medical students and house officers have found support and discussion groups helpful.¹³ Firth-Cozens found that nearly half of house officers agreed that "... a counselling service should be provided for medical staff. ..."¹³ Overwork is the most stressful aspect of being a junior doctor. Regional health authorities advertise part time posts for those who cannot pursue a full time career owing to domestic commitments, disability, or ill health. But ill health (even if it means leaving medicine) caused by the stress of being a full time junior house officer is not sufficient reason for creating a part time post (Yorkshire Health Authority, personal communication).

Doctors pursuing a career in hospital medicine need training in the personnel and management aspects of the job.¹⁴ Time should be set aside to discuss problems, to set achievable goals, and to review progress.¹⁵ Allowance must be made for such meetings in the timetables of both consultants and juniors. This may not be easy with present staffing levels in some acute specialties (the ones where stresses may be greatest).

Although a doctor will probably work for the National Health Service for life, mobility in training is such that moving to another hospital is like leaving the company. For this reason commitment by consultants to the welfare and training of juniors is often viewed as wasted effort. Junior doctors in turn feel unsettled and disjointed by short term contracts; relationships with consultants are viewed as

haphazard and arbitrary. An obvious solution would be rotations which last several years, as in psychiatry, general practice, and some medical and surgical schemes.

The attitude of doctors to the personnel aspects of their job reflects the low priority the NHS as a whole places on it. A change of emphasis need not be at the expense of patients. At IBM the customer is the number one priority,¹⁶ yet it is recognised that staff are the most valuable asset. When IBM was founded in 1914 the first principle was that the individual must be respected—and that still holds true today. Perhaps the most telling comments come from an IBM marketing executive. "The least that can be done for an employee who does something nice for a customer is to thank him. I almost deleted the preceding sentence because it seemed so obvious, but the truth is that many employers and managers take genuine contributions of their staff for granted and rarely express their appreciation."¹⁷

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Statistics in Medicine

Calculating confidence intervals for survival time analyses

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It is common in follow up studies to be concerned with the survival time between entry to the study and a subsequent event. The event may be death in a study of cancer, the disappearance of pain in a study comparing different steroids in arthritis, or the return of ovulation after stopping a long acting method of contraception. These studies often generate some so called "censored" observations of survival time. Such an observation would occur, for

example, on any patient who is still alive at the time of analysis in a trial where death is the end point. In this case the time from allocation to treatment to the latest follow up visit would be the patient's censored survival time.

The Kaplan-Meier product limit technique is the recognised approach for calculating survival curves in such studies.¹ An outline of this method is given here with details of how to calculate a confidence interval for the population value of the survival proportion at any time during the follow up. The situations of a single group of patients and of the difference in survival proportions between two groups are considered. For the latter case confidence interval calculations are also described for the hazard ratio between groups—for example, the relative death rate, relapse rate, etc.

A worked example is included for each method. The calculations have been carried out to full arithmetical precision, as is recommended practice,² although intermediate steps are shown as rounded results. The rationale behind the use of confidence intervals has been described previously.³ Confidence intervals

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