Section 6
Chapter
19

A public health, strategic toolkit to implement these alternatives

Improving clinical decision making

Jean-Pierre Unger, I. Vargas and M. L. Vázquez

Part 1: Non-managed care techniques to improve clinical practice

Introduction

In recent years managed care became a promise of cost control and reduction of unnecessary services utilization, especially in countries with very limited resources. Most LMICs included it early in their reform packages (Tollman et al., 1990). In spite of scarce empirical evidence on the implementation of managed care techniques in this setting (Luck & Peabody, 2002) and intense debates surrounding their introduction in countries such as the USA (Christianson et al., 2005; Simonet, 2005), these techniques were increasingly exported to LMICs.

In this chapter we briefly analyze the results of the introduction of managed care techniques in different environments, explore issues related to the resulting loss of autonomy in clinical practice and offer alternative techniques to improve quality of health care.

What is managed care and what are its results?

The literature offers different approaches and definitions of managed care, probably because it does not convey one single, common concept, but a set of principles and interwoven practices (born in the 1980s in the USA to control costs).

Managed care techniques aim at providing incentives for productivity and efficiency while improving quality of services. They should be distinguished from the organizations which implement them. In this chapter we will attempt to focus on the former and address, in the first instance, clinical mechanisms designed to improve clinical decision making.

Clinical managed care techniques include (http://pohly.com): adjusted drug benefit lists; benchmarks (goals chosen by comparisons with other providers, by consulting statistical reports available, or drawn from the best practices within the organization or industry and used in quality improvement programmes to encourage improvement of care efficiency); standard case management and standard of care (diagnostic and treatment process that a clinician should follow for a certain type of patient, illness, or clinical circumstance); clinical or critical pathways (a 'map' of preferred treatment/intervention activities, which outlines the types of information needed to make decisions, the timelines for applying that information, and what action needs to be taken by whom, developed by clinicians for specific diseases or events); clinical practice guidelines (utilization and quality management mechanism designed to aid providers

in making decisions about the most appropriate course of treatment for a specific clinical case); disease management (a coordinated system of preventive, diagnostic, and therapeutic measures intended to provide cost-effective, quality health care for a patient population who have or are at risk for a specific chronic illness or medical condition); formulary (an approved list of selected pharmaceuticals and their appropriate dosages felt to be the most useful and cost-effective for patient care); step therapy (drug plans may require an enrollee to try one drug before the plan will pay for another drug. Step therapy aims to control costs by requiring that enrollees use more common drugs which are usually less expensive).

Besides clinical tools, managed care techniques also include economic incentives for physicians and patients (e.g., to select less costly forms of care); audits of medical necessity of specific services; controls on inpatient admissions and lengths of stay; and selective contracting with health care providers.

As far as typology is concerned, some managed care techniques directly act upon demand (such as authorization to pay), while others modify the supply (utilization review; limits to prescription, tests, examinations and references; risk sharing; clinical guidelines; per capita payments; and gate keeping) (Vargas Lorenzo, 2009). A study (Remler et al., 1997) suggests that the key determinant in selecting one or another type of mechanism is the degree of integration between insurance and provision of health care. Where purchaser and provider functions are vertically integrated, the dominant mechanism is control of health care utilization with restrictions on medical practice. Where there is a split between purchaser and provider, demand modifiers which are to prevent excessive usage and capitation are favoured.

The advantages and disadvantages of managed care techniques may be summarized as follows (Vargas Lorenzo, 2009). Some authors (Landon et al., 2004) argue that these techniques contribute to organizations' efficiency in lowering premiums and co-payments, solving problems of information asymmetry, and improving care quality, e.g., with:

- control over resources use (Peiró, 2003);
- reduction of inappropriate demand (audits and authorization of examination requests);
- risk transfer from insurer to provider;
- rationalization of expenditure and prevention (Vargas, 2002).

Other authors emphasize the downside of managed care with limited access being the main problem (Gold, 1998). A literature review of studies comparing US managed care organizations with traditional insurance models (Miller & Luft, 2002) has shown that the former has a poorer record than the latter in securing access, on indicators such as:

- the proportion of enrollees with a regular source of care;
- difficulties to contact the usual care provider;
- difficulties to get an appointment;
- unmet needs; and
- necessity to travel more extensively to access health care.

On the other hand, compared to traditional health insurances, HMOs offered a wider coverage as both premiums and co-payments were lower (Miller & Luft, 2002). Numerous reviews have also shown negative opinions amongst US health professionals and insurance contributors (Christianson et al., 2005; Simonet, 2005). Mentioned difficulties included halting or prevention of the reimbursement of prescribed drugs, tests, admissions, references and longer waiting lists to consult specialists (Christianson et al., 2005; Simonet, 2005).

Yet another, but little studied, problem with managed care techniques is the loss of professionals' control and autonomy of clinical decision making, which is linked to the standardization of clinical practice – creating a motive for dissatisfaction amongst professionals, who have been compelled to use them (Mechanic, 2001). It has been argued that this form of standardization may harm the quality of care, because it limits the professional's capacity to adjust to unexpected patients' needs, which is not uncommon in health services (Shortell et al., 2009). The organization's theory maintains that normalization of work processes, skills and outputs are not appropriate to those uncertain situations – mobilizing interwoven or reciprocal sequences of professionals' interventions and requiring to process a large amount of information (Galbraith, 1973; Mintzberg, 1988). In health care environments such scenarios are numerous – unexpected changes in a patient's condition, variable response to medical intervention, co-pathology (Young et al., 1998) – when health care cannot be planned and is more effectively delivered where and when the information is issued.

As a conclusion, one could say that the technique is not the problem in itself, but the goals that are set and the context in which it is used. GPs operating as gate-keepers, for instance, can be used to improve access to the health care system and continuity of relationship (Starfield, 1998), as well as network efficiency (Ortún & Gervás, 1996). However, private insurers and managed care organizations such as HMOs do not use them to improve access, but rather to control references to specialists, admissions, and medical procedures and thereby control costs (Ellsbury et al., 1990). With regard to the context, mechanisms such as capitation fees could incentivize efficiency and integration of prevention and curative care in environments where providers' payment was based on fees for services, and as such, inducing demand. But in developing countries with low services productivity, these mechanisms may reduce the provision of necessary services, and at the end of the day, provoke health status deterioration and increase disease-related costs – more than in industrialized countries where, acknowledgedly, these undesirable outputs may also occur even with social security systems.

Managed care techniques are not only met in private organizations but also in public systems, where they may constrain access as well – probably when their objectives are unbalanced. For instance gate keeping can result in waiting lists even in (MoH) public services, when its objective is to control references to specialists and not to secure utilization of the most appropriate health care facility. Authorizations to pay do not only prevail in (privately managed) HMOs but also in social insurance and national health systems. Commercial private and social insurance organizations would then differ by the degree of access to care permitted rather than by the techniques used to rationalize it.

Therefore, at first glance, managed care techniques appear not specific to one particular organizational context. Furthermore, they may convey positive or negative effects according to the purpose of their utilization – whether it is mainly cost control in health care delivery or not, which is probably *more often* the case in commercial than in MoH environments.

We contend that this conclusion holds for economic incentives and organization techniques meant to control costs – they are 'neutral' so to speak – but that clinical techniques designed to improve care effectiveness and efficiency can be placed on a continuum between antipodes which will make them more or less prone to commercial versus social use – even if they cannot be clearly dichotomized.

Is there a criterion to analyze the techniques designed to improve clinical decision making, a criterion which helps distinguish those merely prone to be used in publicly oriented medical practice and organizations?

We consider one example of such a criterion – therapeutic freedom versus standardization – and the gradient between these two poles. We then analyze how the choice for each of them depends on the rationale of health care organizations and their context – amongst an otherwise effective regulatory environment.

Standardization of clinical decision making (under the form of clinical guidelines for instance) has been advocated for improving the problem-solving capacity of health care providers and control costs. In first-line services this is specially needed in contexts where GPs' tasks are shifted to nurses and medical assistants, as is generally the case in sub-Saharan Africa. However, this *may* run against the flexibility required to tackle unexpected patient needs, in particular bio-psychosocial needs met in family medicine practice, and demands as detected when delivering patient-centred care (Section 6, Chapter 17).

Besides, rationalization of clinical decision making may impact negatively on providers' motivation. The more clinical decisions are standardized, the less the care provider's freedom. Such freedom is of special importance to professionals because their identity has been forged throughout lengthy and difficult studies. When decision making becomes over-standardized, they often feel that their skills and judgement are under-used and that a computer could do the job as well.

However, at the side of financial incentives, the health professional's existential commitment is pivotal to guarantee the delivery of CHC. This is so true that forging this commitment is the *raison d'ëtre* of medical ethics (be it Hippocratic or Ayurvedic) (Sharma & Dash, 2006) – while deontology looses relevance when clinical decisions are fully predictable.

While mainstream managed care techniques stress standardization as a tool of cost control, of contracting out, and ultimately of commodification, alternative techniques balancing rationalization of clinical decision making and therapeutic freedom are needed to secure a non-profit health care delivery and management (Section 5, Chapter 14). These are now examined.

Non-managed care techniques to improve clinical decision making: a practical guide

Clinical decision making

Problems with clinical decisions and their implementation in LMICs can be classified into two categories.

Firstly, manual skills of doctors and nurses are unevenly distributed in LMICs. For instance, some GPs can perform a caesarean section, while others do not even know how to insert an intra-uterine device, perform a nasal tamponage or incise a whitlow. In these regions few development projects have set out to improve the surgical skills of district hospital health professionals (Lett, 2000; Loutfi et al., 1995; Sohier et al., 1999) or to develop family practice (Atherton et al., 1999). In fact the vast majority of in-service training was restricted to disease-control interventions, usually building on agreed-upon standards. As in Europe (Grol et al., 1994) their common denominator has often been mechanistic, simple clinical criteria – as is often used in quality assurance (Björk et al., 1992; Forsberg et al., 2000; Omaswa et al., 1997).

Secondly, the signs, symptoms and tests that GPs and nurses use are more tailored to hospital settings than to first-line practice. However, the predictive values of the tests are a function of disease prevalence, which, for serious conditions, tends to be much lower in the GP's case mix than in the hospital.

To correct these weaknesses, some strategies are well established:

- In-service training supervision of junior doctors by experienced doctors via direct observation of consultations is pivotal to correcting individual weaknesses in clinical practice.
- Hospital rotations are useful to local know-how/do-how transfer. To maximize learning opportunities self-managed, 1-week spells in hospital wards can be structured as a list of manual techniques to be acquired versus learning progresses ('seen, done, known').
- Staff expected to use standards should be involved in the design of local adaptation of guidelines, algorithms and decision trees if they are to use them effectively.

There are also ad hoc techniques readily available such as:

- Intervision, which is a review of difficult cases management performed by peers to improve quality of care.
- The Internet now enables many district medical officers and hospital doctors to access evidence-based medical sites.
- An interactive training programme in tropical medicine exists on CD-ROM, which can be distributed to all doctors.[1]

Development of patient-centred care in first-line services

Strategies to improve patient–doctor interactions have proved effective in Europe (Liaw et al., 1996) as well as in developing countries (Henbest & Fehrsen, 1992). Here follows a summary of available techniques.

- GPs' biomedical approach to disease can be modified by sound theories on disease aetiology (to enlarge the scope of determinants beyond the biomedical) and by audit-oriented observations (to identify deficiencies in care) (Public Health Research and Training Unit of the ITM, 1989).
- One can teach GPs criteria for the quality of care, such as continuity,[2] the quest for patient autonomy, and the need to medicalize a problem (or not).
- In-service demonstration of patient-centred care should be offered to doctors in pilot facilities.
- Dialogue can become an intellectual challenge if relevant techniques are taught. Training in communication can rely on a psychiatrist with expertise in the doctor-patient relationship, and aide-mémoires of special patients' problems can be designed to systematically explore psychosocial and psychosomatic disorders (such as sexual problems, drug addiction, alcohol dependence). Personal experience of one of the authors in Ecuador (Section 6, Chapter 18), based on these strategies, showed changes in the care provider's willingness to deliver holistic care.

[1] This CD-Rom is distributed freely by the ITM to not-for-profit entities which demand it. Contact: Prof J. Van den Ende, Institute of Tropical Medicine, Department of Medicine, Nationalestraat 155, 2000 Antwerpen, Belgium.

[2] Tools to improve continuity of care for chronic patients include defaulters tracing systems (device for schedule of due dates, ad hoc home visits, improved doctor–patient communication, standardization of criteria to actively trace defaulters, communication lines with patients wherever they live), appropriate evaluation (e.g., with the Piot model); care free at the point of delivery or at least fee per sickness episode; ad hoc information system.

- Balint groups[3] permit the exchange of experiences and an analysis of how the doctor's feelings can interfere with case management. It remains to be seen whether these techniques are applicable to doctors in cultures that are not inclined to introspection, or whether other approaches, building upon traditional knowledge of social relationships, would be more relevant to the context of developing countries.
- Quantifiable methods of evaluating psychological care are achievable in general practice (Crossley et al., 1992).
- Problem-oriented medical records, such as the SOAP method,[4] can be used to structure the consultation (Weed, 1969).

Promotion of patient-centred care in hospital settings

Holistic nursing is the equivalent of patient-centred care in a hospital. Its promotion requires Taylorian organization – one specific task for each staff member – to be transformed in many hand-crafted workshops, similar to the work practices adopted by the Volvo Company in the 1980s. In each ward the most qualified residents (a nurse or an MD) can be responsible for a certain number of patients directly rather than for tasks. Their job involves making decisions in symptomatic (as opposed to aetiologic) treatments, psychological follow-up, coordinating with other professionals, planning hospital stays, monitoring clinical parameters and maintaining contact with families and first-line practitioners (Figure 19.1). Specialist doctors are then used as consultants to make diagnosis and treatment decisions. This model requires team-work, ad hoc training, supervision and evaluation to enable task delegation. It also requires enough nursing or resident staff and may therefore not be applicable

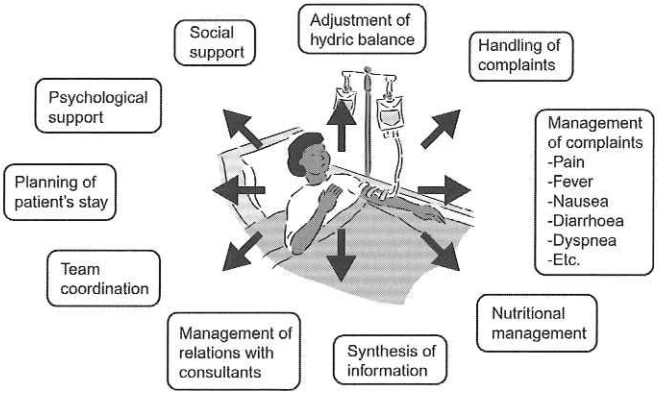

Figure 19.1. Tasks to be shifted to experimented nurses (and thus to be standardized, supervised and evaluated) in LMIC hospitals – to whom patients rather than tasks are delegated.

[3] A Balint group is a small group of caregivers who meet regularly for case discussion under the guidance of a qualified group leader, in order to better understand and make use of the caregiver–patient relationship in a therapeutic and professional way. The Balint method is called so in honour to the pioneering work of Michael and Enid Balint in the 1950s.

[4] SOAP is a problem-oriented method for making notes, whereby S stands for subjective data obtained from the care-seeker; O refers to objective data acquired by observation, inspection, or testing; A relates to the assessment of the patient's current situation and progress made throughout the course of treatment; and P represents the actual patient care plan.

in some rural hospitals. Holistic nursing schemes have succeeded in community nursing (Leedam, 1972; Simmons, 1975). AIDS programme managers and specialists were the first in the disease-control community to rediscover holistic, integrated nursing because of their staff needs (Bennett et al., 1995) and the specific bio-psychosocial care requirements of their patients (Pratt, 2003).

Coaching health professionals to secure continuing medical education and psychological support

Coaching health professionals adds to traditional continuing medical education (Sekerka & Chao, 2005):

- a possibility to assess individual and group learning needs, based on in-service observation and discussion of medical practice and health care;
- psychological support to professionals and teams; and
- organizational changes coordinated with in-service training.

Coaching relies on methodologies such as education-oriented supervision (which should not be understood as a control), intervision and action research (see Section 6, Chapter 18). Coaches are health professionals with lengthy experience of services organization who regularly visit a limited number of health centres and hospital wards and subtly attend clinical activities (with patient consent). Once they identify key problems, an agreement on a corrective approach is quested between supervisor and supervisee.

Conclusion

We suggested that the WHO concept of strengthening health systems with six building blocks lacks a commitment towards the delivery of CHC. The present chapter adds an array of techniques to improve related clinical skills as part and parcel of CHC.

These techniques depart from managed care practices (and indeed are, to our best knowledge, exceptionally used in commercial settings) by their preoccupation for a balance between rationalization of clinical decision making and doctors' therapeutic freedom. Such balance is needed because in many instances, standardization of clinical decision making will enhance the problem-solving capacity of doctors and nurses, while therapeutic freedom facilitates their professional identity and motivation to deliver care of good quality.

The existence of a gradient along this line between managed care and non-managed care techniques suggests that, in publicly oriented services, circumstances may justify the use of techniques which could be classed in the managed care category. For instance, dichotomous algorithms may be used to shift doctors' clinical responsibilities to nurses in African public services. They should be applied with flexibility, leaving room for bio-psychosocial care and negotiations with patients. Possibly, they could even be amended with the participation of their end users, namely doctors and nurses.

Although decent income, and possibly a mixture of incentives (fee for services, salary and capitation, as in the UK), are important to build professionals' motivation, the organization mission, the environment (in particular the national health policy and regulatory capacity), and non-managed care clinical techniques are central to secure access to CHC.

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Part 2: Interface flow process audit. The patient's career as tracer of quality of care and system: an experience from Belgium

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Introduction

The technique presented here is a reflexive, versatile method which produces several advantages from a public health perspective. It helps to improve the quality of care and rationalize the organization of local health services, especially the cooperation between primary and secondary care professionals. It enables clinicians to realize that they are working within a system and that many patients require a continuum of care. It helps them to be self-critical and reflective about their own decisions and to enter into a continuous process of improvement. Also it identifies local weaknesses in knowledge dissemination and in the general organization of health services.

Several drawbacks attached to tracer condition and selected procedure audits oblige clinicians to rely on external evaluators. Interface flow process audit is an alternative method enhancing integration of health care across institutions and is useful for regular in-service self-evaluation. Bridging the primary-secondary care gap, the interface flow process audit's focus on the patient's career combined with the broad scope of problems that can be analyzed are particularly powerful features.

The following paper presents this methodology, created to permanently improve health service organization through the identification of clinical deficiencies. In such audits the patient career serves as tracer of the weaknesses of the system.

In recent years, quality of care has become a top priority on the policy agenda in many countries. In the UK this concern resulted in the introduction of the clinical governance concept (Shekelle, 2002). Although audit has been firmly established as a key element of clinical governance in the National Health Service (NHS) and in various quality assurance initiatives in other countries, audits in which the audit loop is effectively closed remain rather rare (Gnanalingham et al., 2001). Indeed, despite the enthusiasm of policy makers for quality assurance and improvement, health professionals in all countries and across all types of health systems found it hard to support these efforts (Shekelle, 2002).

Background

The barriers to implementing effective audits have been well described: lack of resources, lack of expertise or support in audit design, problematic relationships between audit team members, and organization-related impediments (lack of cooperation between management and clinicians, lack of clarity about lines of authority and accountability, lack of time and organizational culture). Other factors include divergent views of the participants on the objectives of audit and their general attitude towards audit (Baker et al., 1995; Berger, 1998; Johnston et al., 2000;

Szecsenyi, 1996). Shekelle summarizes it well: resistance to quality improvement programmes is rooted in the professionals' distrust of the criteria by which quality is measured; the perception that audit and other quality improvement initiatives primarily aim at blaming health professionals and the fact that resources almost never follow responsibility to take on additional time-consuming duties (Shekelle, 2002). But as important, the author points to the fact that there are no role models on how to implement effective quality improvement programmes.

The manner and degree to which professionals of different levels are involved in audit may have an influence on the degree of ownership and usefulness of the results. Medical audit was conceived in the USA as an instrument to assist health professionals to analyze and evaluate clinical care. Initially, in one-way audit – an external form of audit – specialists of one group investigated the quality of care offered by another group (Baker, 1994). The literature offers numerous examples of one-way audits of general practice, led by specialists (for example in obstetrics [Bryce et al., 1990], diabetes [Singh et al., 1984], and hypertension [Bulpitt et al., 1982] and vice-versa). Clinical audit, where multidisciplinary teams of health professionals aim to improve the quality of care, may be more effective in bringing about change within organizations by surpassing the narrow borders of specific specialities.

Also, the focus and range of the audit design may have consequences for its relevance from a systems perspective. Clinical microsystems can be defined as small groups of health professionals and providers responsible for the care for a well-defined population. The structure and strategies of microsystems have an influence on health system performance and on patient outcomes. Despite this, management of health care human resources mostly focus on the individual level, or on the level of work units defined by professional occupation, when dealing with design of units or analysis of performance (Mohr & Batalden, 2002).

Specific features

The interface flow process audit (IFPA) integrates two models of audit. Creating links across the primary and secondary care interface is getting increasingly more attention in industrial countries, as it is recognized that improved streamlining of the patients' careers may have a positive impact both on quality of care and on cost containment (Kvamme et al., 2001; Szecsenyi, 1996). This concern is taken into account by the interface audit component, that has been defined as 'complete audit cycles conducted by professionals from both primary and secondary care working together as a team to improve quality' (Wright & Wilkinson, 1996). Any aspect of the interface between first line and second line can be the subject of audit: referral systems, coordinating chains of care and communication between hospitals and general practitioners (Eccles et al., 1996).

This type of audit may potentially strengthen the clinical microsystems, in that its health professionals analyze the journey of the patient through the system in order to improve quality of care.

The second component of interface flow process audit is based on the flow-process model, which is used to identify the hurdles a patient meets during his journey through the health system. As such it should add the patient's perspective to the auditing process. 'The stages in the patient's use of the service are broken down into steps. The problems a patient may encounter at each step are identified, studied and solutions looked for. This emphasis on the patient's perspective makes flow process audit particularly valuable' (WHO Working Group of Quality Assurance, 1994). We would, however, say it offers the patient's perspective rather indirectly, as the patient is usually not participating in person.

The IFPA uses critical incidents as an entry point for auditing local health systems. Critical incidents, sometimes referred to as significant events, are unforeseen, rare and not necessarily negative events occurring in the course of a case management (Kasongo Project Team, 1981; Westcott et al., 2000). Their detection and analysis may allow systematic failures of a process or an organization to be identified, similar to the principles underlying root cause analysis, a technique widely used in the US health care industry and non-health care industries to find and eliminate the cause of a quality problem in an effort to prevent its recurrence. The interface flow process audit has already been used to improve the quality of patient care in different settings (Kasongo Project Team, 1981), but to our knowledge not yet as a method to improve (local) health system organization.

The Belgian experience

In practice, the IFPA required the establishment of a team of hospital physicians of a general hospital in Brussels and general practitioners regularly referring patients to this hospital (Unger et al., 2003). This team greatly coincided with an existing clinical microsystem. The number of participants varied between 3 and 20 attendants per session. Initially, a public health specialist experienced in general health service organization would be the best person to lead the audits. Their role was to facilitate and introduce the audit methodology, to encourage critical questioning of the actual process and the integration of public health criteria in decision making, and finally to advise the team on organizational changes to improve quality of care and service organization.

A technical support and coordination team was established to follow up the proposed changes, to check their implementation, and to prepare the audit meetings. This team met monthly and included local general practitioners, some (referral hospital) specialists, and a public health coach. The patient's case analysis required from one to three 1-hour sessions. The following are the questions examined during the flow process audit.

First-line health and non-health services

Was there any delay in the patient getting a consultation? Was the care offered comprehensive, in particular bio-psychosocial? Was the care continuous? How has the independence of the patient been enhanced by the process? How was the suffering of the patient dealt with? Was the patient appropriately derived to the hospital? Was a proper differential diagnosis defined? Was the care effective and efficient? Was an appropriate team of professionals managing the case? Were non-medical (social and psychological) services adequately used? What services were used following discharge? How was prevention and promotion personalized for this patient?

Clinical decision making and diagnosis

Which tests were of doubtful usefulness? Which tests were forgotten? Are there reasons to believe that some tests were carried out badly (paradoxical results, for example). Were there any cheaper alternatives that should have been considered? Were the signs and symptoms strong enough to make a diagnosis? Were certain laboratory tests or medical imaging unnecessary? Was the use of tests during the course of the illness justified by the illness? Are there reasons to suspect false positives (for example, ineffective treatment) or false negatives (diagnosis delayed, unexplained death, repeated tests with conflicting results)? Considering the symptoms, were the important diseases eliminated (those dangerous, not spontaneously self-limiting diseases, causing considerable suffering or leading to death)? Were evidence-based medicine sites and the literature in general used?

Choice of treatment

What was the hypothetical diagnosis? What result was one hoping to achieve? Was there consistency between the treatment and the diagnosis? Was treatment up to the norms described in the literature? Did one forget to deal with the suffering and problems experienced by the patient by concentrating solely on the aetiology of suffering? How effective was the treatment (side effects – iatrogenic – avoidable?)? Did an avoidable complication, a sequel, or a death occur? Could the same result have been achieved more rapidly? What were the signs and symptoms used to evaluate this? Was there any scope for reducing medication (duplication and doubtful efficacy of certain drugs)? Were there cheaper alternatives to the drugs used?

Nursing

Were there any critical incidents that might suggest poor quality of nursing (treatment badly or incompletely administered, delay in the execution of orders, sterilization errors, and nosocomial infections)? Were there any known psychological problems that could have been avoided with better nursing care?

Type of hospital admission

Was admission delayed? Was the length of stay too short or too long? What could have been done to reduce the length of stay (better collaboration from the family, improving equipment at the primary care level, better work organization and earlier access to a specialist)? Was the choice of department (emergency ward, outpatient clinic, medical ward, surgical ward) appropriate? What measures were taken on discharge of the patient? How can the hospital contribute to strengthening primary care in order to improve the quality of the implementation of these measures?

Global evaluation of the results

How to assess the treatment results (outpatient follow-up, at primary care, or hospital level) in terms of the general state of the patient (deceased, cured, appropriate continuing care) and of the evolution of the dominant symptom (disappeared, improved, identical, increased)? With hindsight, was the treatment useful? (in other words does the hospital offer techniques also available to general practitioners or health centres?) With hindsight, what were the justifications for admission? Could a better result have been obtained had there been better collaboration from the family? Better equipment? Training for the doctor? Easier access to a specialist? Better work organization? Preliminary operational research? Technical supervision? Was the psychological distress properly addressed?

Examples of shortcomings identified by IFPA with one patient audit

These are some of the shortcomings identified at different levels during a particular audit led in Brussels in 2003. Considering quality of clinical care, it showed that in the clinical decision making process not enough attention was paid to the patient's complaints and symptoms. Non-relevant tests, with a long waiting list, contributed to an unacceptable length of stay. As to service organization, identified weaknesses include delays in delivering urgent results to general practitioners, inefficient use of diagnostic tests (automatic request of D-dimer test,

inappropriately used Leg Ultrasound Scan, uninformative ventilation/perfusion scan results), the use of an inappropriate laboratory technique (latex D-dimer test), and inadequate training of staff in the emergency unit. This analysis was followed by measures to improve quality of care: differentiating urgent from non-urgent tests regarding the results feedback sent by the hospital laboratory to the general practitioners, the introduction of enzyme-linked immunosorbent D-dimer tests, and the standardization of reporting of ventilation/perfusion scan results. The interface flow process audit enabled some gaps between actual medical practice and best practice to be filled by continuing medical education in areas such as clinical epidemiology, rationalization of disease control, and utilization of evaluation criteria (cost-efficiency, patient's viewpoint, and uncertainty).

Synthesis: How to assess the measures undertaken to correct or improve the system?

Conclusion

IFPA thus offers a number of theoretical advantages over traditional designs of audit. It enables a comprehensive evaluation of quality of care, allowing identification of a wide range of problems across organizational borders, as opposed to the tight focus of tracer condition audit. The interface flow process audit proved to be an initiative that 'usefully explores the possibilities of supporting development of guideline-retrieval systems customized for individual general practitioners or practices' (Langley et al., 1998). This too contrasts with tracer condition audit, which often results in an unmanageable amount (Hibble et al., 1998) of insufficiently used (Christakis & Rivara, 1998; Grol et al., 1998) guidelines, designed without the involvement of their users.

Participants generally confirm that the IFPA helps them to analyze the quality of case management both at primary and secondary care level. This suggests that the method avoids one category of professionals (for instance general practitioners) being judged by another (specialists) on the basis of standards that are not shared by both parties. Furthermore, improved contacts between general practitioners and hospital specialists help to strengthen local care structures. Bridging the primary-secondary care gap, its focus on the patient's career combined with the broad scope of problems that can be analyzed are powerful features.

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