Journal scan

This journal scan is based on a hand search of a number of clinical journals as well as others focusing on improvement and management for the period from March to May 2001.

Getting evidence based health care into practice

An implementation gap between evidence and practice seems to be a characteristic of all health systems. Strategies to close this gap are complex, time consuming, and may not always make much difference. Early results of educational programmes may be encouraging, but sustainability, long term change, and continued better care for patients must be the ultimate goals.

Eisenberg JM. What does evidence mean? Can the law and medicine be reconciled? *J Health Politics, Policy and Law* 2001;26:369–81.

Popular attention has focused of late on the role of evidence in health care. Physicians have been encouraged to practice evidence-based medicine so that their clinical decisions would be based upon a foundation of solid science, especially using research that has applied rigorous epidemiologic methods and has been published in peer-reviewed journals. Every participant in the healthcare system should care about how evidence is defined. Patients will receive services based upon how evidence is weighed, and clinicians will provide services based upon their conclusions about the evidence of effectiveness and risk. Healthcare managers, purchasers, and system leaders will make decisions based upon the evidence that certain services should be provided to the clientele that they serve, and policy makers, including judicial policy makers such as judges and juries, will weigh evidence to decide whether harm has been done because a service was or was not provided.

Ayanian JZ, Quinn TJ. Quality of care for coronary heart disease in two countries. *Health Aff* 2001;20:55–67.

Abstract reproduced from original.
Coronary heart disease is the leading cause of death in the US and England, and each country devotes substantial resources to its prevention and treatment. Recent strategies for improving quality of care for coronary heart disease in each country are reviewed, including clinical guidelines; national standards; performance reports; benchmarking, feedback, and professional leadership; and market-oriented approaches. These strategies highlight the importance of information systems, organizational culture, and incentives to improve the quality of care in both the decentralized health care system of the US and England's more centralized system.

Richardson J. Post-operative epidural analgesia: introducing evidence-based guidelines through an education and assessment process. *J Clin Nurs* 2001;10: 238–45.

The aim of this project was to re-introduce postoperative epidural analgesia onto two orthopaedic wards using an evidence based practice approach. This was achieved through the provision of appropriate staff education and information, assessment of staff competence, and the provision of relevant and appropriate staff support. An education programme was developed which included study days, ward based teaching, and the assessment of competence. The introduction of guidelines followed an audit cycle in order to measure the success of the education programme. All nursing staff involved in the project were asked to complete a questionnaire which assessed their knowledge of caring for patients with postoperative epidural analgesia. This was completed before and following the education programme. The outcome measures were: (i) successful completion of competence based assessment; (ii) levels of knowledge as assessed by the knowledge questionnaire; and (iii) participant perceptions of the project. The results of the questionnaire demonstrated significant improvements in knowledge following the education programme. Participants commented on the importance of ward based teaching. They also felt that pain was controlled more effectively using this method of analgesia.

Morrison J, Carroll L, Twaddle S, *et al.* Pragmatic randomised controlled trial to evaluate guidelines for the management of infertility across the primary care-secondary care interface. *BMJ* 2001;322:1282–4.

While previous research into clinical guidelines has focused on their development and implementation, relatively little is known about the outcomes and costs associated with the use of clinical guidelines. This study sought to investigate the effect of clinical guidelines on the management of infertility across the interface between primary and secondary care. 221 general practices in Glasgow took part in the study. Those in the intervention arm received clinical guidelines developed locally. Control practices received them one year later. The time from presentation to referral, investigations completed in

general practice, the number and content of visits as a hospital outpatient, the time to reach a management plan, and costs for referrals from the two groups were all measured. No significant difference was found in referral rates for infertility. Fewer than 1% of couples were referred inappropriately early. Patients referred from intervention practices were significantly more likely to have had all relevant investigations carried out. No difference was found in the proportion of referrals in which a management plan was reached within one year or in the mean duration between first appointment and date of management plan. NHS costs were not significantly affected. The authors conclude that guidelines aiming to improve the referral process need to be disseminated and implemented in order to lead to changes in both primary care and secondary care.

Organisational change

Reducing harm should be the top priority for all healthcare professionals—and perhaps it would be if professionals were aware in real time of errors and mistakes. The difficulty is that many errors go unnoticed unless or until revealed retrospectively. Linking organisational and professional learning may help to find ways of working that enable errors to be recognised before harm occurs. Perhaps the new community accountability offered by the PCGs in the UK will include safety and reduction of harm in their quality agendas.

A number of American journals report the publication of a new report from the Institute of Medicine, a follow up to "*To Err is Human*". The first report was thought radical, but as the introduction to its successor report, it only touched the tip of the iceberg on quality issues. The report calls for a £1 billion fund for a major redesign of the system based on multidisciplinary team and patient centred care. Another American idea, this time from the National Quality Forum, argues that hospitals should report adverse events to a state run database. Highlighting adverse events through an improved IT infrastructure is also the theme of other articles.

Lovern E. Holding hospitals accountable. *Modern Healthcare* 2001;22:6–7.

Abstract reproduced from original.
Hospitals should be required to report certain medical errors to publicly accessible, state-run databases to create a level of accountability now lacking in the healthcare system, the National Quality Forum recommended in a report released last week. The forum is a private, not-for-profit organization established by President Clinton to set a national agenda for healthcare quality.

Bindman AB, Weiner JP, Majeed A. Primary care groups in the United Kingdom: quality and accountability. *Health Aff* 2001;20:132–45.

Abstract reproduced from original.
With the introduction of primary care groups (PCGs), the British National Health Service has attempted to integrate delivery, finance, and quality improvement into a locally directed care system with a strong sense of community accountability. PCGs will eventually hold the budgets for primary care, specialist, hospital, and community-based services and have the flexibility to reapportion these budgets. Through clinical governance, PCGs are attempting to coordinate education, guidelines, audit and feedback, and other quality improvement approaches around health problems that are relevant to their patient panels and local communities. PCGs offer other nations attempting to improve the quality and accountability of health care an innovative approach that merits consideration.

Clarke CL, Wilcockson J. Professional and organizational learning: analysing the relationship with the development of practice. *J Advan Nurs* 2001;34:264–72.

Organisational and professional learning are interrelated processes that underpin the contemporary drive for a quality evidence based delivery of health care in the UK. A soft systems methodology was used to explore the pervasiveness of practice developments. Three case study sites were identified using matrix sampling and data collected through 29 individual interviews and two focus group interviews, with the interviews augmented with a tool designed to maximise analysis of the processes of developing practice. The resultant model of developing healthcare practice includes three processes: using and creating knowledge, understanding and practice of patient care, and effecting development. The whole model was underpinned by professional and organisational learning in which "expert thinkers" engaged in double loop learning to reconceptualise care rather than just perpetuate existing patterns of care delivery.

Hays JM, Hill AV. A preliminary investigation of the relationships between employee motivation/vision, service learning, and perceived service quality. *J Operations Manage* 2001;19:335–49.

Abstract reproduced from original.
Most experts agree that a learning organization whose employees have a clear vision of the importance of service quality and are motivated to provide that quality will achieve superior service quality. A theoretical framework is developed and a cross-sectional empirical study is conducted to investigate the interrelationships among these constructs. The results indicate that higher levels of both employees' motivation/vision and organizational learning positively affect perceived service quality. Additionally, employees' motivation/vision was found to mediate the relationship between organizational learning and perceived service quality. These results highlight the importance of employees' motivation/vision in both the service process and the learning process.

Aiken LH, Clarke SP, Sloane DM, *et al*. Nurses' reports on hospital care in five countries. *Health Aff* 2001;20:43–53.

Abstract reproduced from original.
The current nursing shortage, high hospital nurse job dissatisfaction, and reports of uneven quality of hospital care are not uniquely American phenomena. A paper presents reports from 43 000 nurses from more than 700 hospitals in the US, Canada, England, Scotland, and Germany in 1998–1999. Nurses in countries with distinctly different health care systems report similar shortcomings in their work environments and the quality of hospital care. While the competence of and relation between nurses and physicians appear satisfactory, core problems in work design and workforce management threaten the provision of care. Resolving these issues, which are amenable to managerial intervention, is essential to preserving patient safety and care of consistently high quality.

Becher EC, Chassin MR. Improving quality, minimizing error: making it happen. *Health Aff* 2001;20:68–81.

Abstract reproduced from original.
Medical errors and the quality problems to which they lead harm millions of Americans each year. To reduce errors and improve quality substantially, systems and care processes must be created that anticipate inevitable human errors and either prevent them or compensate for them before they cause harm. Formidable barriers now stand in the way of progress. Success will require a multifaceted strategy, including public education, government investment and regulation, payment system restructuring, and leadership from within the delivery system.

Born PH, Simon CJ. Patients and profits: the relationship between HMO financial performance and quality of care. *Health Aff* 2001;20:167–74.

Abstract reproduced from original.
This paper matches health plans' financial performance with information on quality ratings as measured by 1997 Health Plan Employer Data and Information Set (HEDIS) 3.0 data. Three policy questions are addressed: (1) Is the quality of care delivered by a plan influenced by the plan's financial performance? (2) Do for-profit plans behave differently than nonprofits do? (3) What other factors are associated with variation in plan performance? It is found, first, that more profitable plans achieve higher quality scores in subsequent years. Profits may enable a plan to pursue higher quality of care and invest in better management systems. Second, there is little systematic evidence that for-profit plans have different HEDIS scores than not-for-profits have.

Coile RC Jr. Quality pays: a case for improving clinical care and reducing medical errors. *J Healthcare Manage* 2001;46:156–60.

Abstract reproduced from original.
Shock waves are still rippling across the healthcare industry since the Institute of Medicine released its report "T*o Err is Human: Building a Safer Health System*" in November 1999. The report estimated that between 44 000 to 98 000 patients in US hospitals die each year due to medical errors. The issue of patient safety is more than a risk management or public relations problem. It could be the key to turning around the finances in more than 50% of all US hospitals that operate with less than a 3% profit margin. However, the science of care management is still not widely understood or implemented. Despite significant capital investments by hospitals in information technology and electronic medical record systems, quality management experts cite an analytic gap as a major reason that clinical care is not better managed and patterns of medical errors are missed.

Committee chaired by William C Richardson. Crossing the quality chasm: a new health system for the 21st century. Institute of Medicine, March 2001.

Abstracted from journal news stories and full report.
A number of American journals welcome a report from the Institute of Medicine which calls for immediate action to improve care over the next decade and describes a strategy to do so. The report includes a recommendation to create an "innovation fund" of $1 billion for use during the next 3–5 years to help subsidise promising projects and communicate the need for rapid and significant change throughout the health system. Just as a solid commitment of public funds and other resources supported the ultimately successful mapping of the human genome, a similar commitment is needed to redesign the health care delivery system so all Americans can benefit.
"*Americans should be able to count on receiving care that uses the best scientific knowledge to meet their needs, but there is strong evidence that this frequently is not the case*."
"*The system is failing because it is poorly designed. For even the most common conditions, such as breast cancer and diabetes, there are very few programs that use multidisciplinary teams to provide comprehensive services to patients. For too many patients, the health care system is a maze, and many do not receive the services from which they would likely benefit*."
The committee's previous report, "*To Err is Human: Building a Safer Health System*", found that more people die from medical mistakes each year than from highway accidents, breast cancer, or AIDS. But findings in that report amounted to only the tip of the iceberg in the larger story about quality care. America's health system is a tangled, highly fragmented web that often wastes resources by providing unnecessary services and duplicating efforts, leaving unaccountable gaps in care.

User perspective/patient expectations

Much effort is going into finding out what consumers want and engaging them in decision making processes, but moving beyond the rhetoric of investigation and intent is proving difficult. Practitioners and healthcare systems need to adapt and become more consumer friendly if consumers are to feel that they have the option of becoming involved in decision making.

Pretzer M. What patients don't know about the quality of their health care. ***Med Econ*** **2001;78:26–8.**

Abstract reproduced from original.
The National Committee for Quality Assurance, which evaluates managed care plans primarily for the benefit of corporations and other employers, recently announced that it would spend 21 months developing measures of physician quality based on input from consumers, purchasers, and health care organizations.

Walker E, Dewar BJ. How do we facilitate carers' involvement in decision making? ***J Advan Nurs*** **2001;34:329–37.**

Government health care policy urges service providers to involve service users in the decision-making process. Research studies have recommended changes to current healthcare practice to facilitate this involvement. However, carers' organisations continue to highlight a gap between policy and practice in relation to involvement. The aim of the study was to investigate involvement in a specific healthcare context with a view to identifying both opportunities for change and practical realistic ways of bringing about that change. This was a qualitative case study using a case study design. The field site selected was a respite and assessment (23 bedded) ward within the psychiatric unit of a hospital specialising in the care of older people. Informal carers (n=20) and members of the multidisciplinary team (n=29) were interviewed about their views and experiences. The interviews were audiorecorded and transcribed. Family meetings, multidisciplinary team meetings, and ward routines were the focus of non-participant observation. Field notes from these observations together with the interview data were analysed using a constant comparative method. The reported experiences of carers in this study highlighted four markers of satisfactory involvement: feeling that information is shared; feeling included in decision making; feeling that there is someone you can contact when you need to; and feeling that the service is responsive to your needs. The majority of carers felt dissatisfied with the level of involvement. This situation echoed that found in other studies, i.e. the majority of informal carers (henceforth "carers") interviewed were dissatisfied with the level of their involvement. However, this investigation, in which the views of healthcare professionals as well as those of carers were sought, provided an invaluable insight into why this might be the case. Two main sources of difficulty were found: hospital systems and processes, and the relationship between nursing staff and carers. The argument made is that practitioners themselves must notice and challenge these barriers if carer involvement is to be facilitated.

e-health and information management

Less is more! But this is surely not a unique characteristic of electronically supplied information. Even in the world where information is supplied on paper, the well crafted executive summary gets more attention than the hundreds of pages of the lengthy report.

Hansen MT, Haas MR. Competing for attention in knowledge markets: electronic document dissemination in a management consulting company. ***Admin Sci Quart*** **2001;46:1–2.**

Abstract reproduced from original.
The relative recent explosion of information available in electronic format makes attention, rather than information, the scarce resource in organizations. In this paper, theorized is how supplies of electronic information compete for this resource and use data in document data use in a management consulting company to show that document suppliers that occupied a crowded segment of the firm's internal knowledge market gained less attention from employees but were able to combat this negative competitive effect by being selective and concentrated in their document supply. This result reveals a paradox of information supply in competitive information markets: the less information a supplier offered, the more it was used, because the supplier developed a reputation for quality and focus. It is suggested that this view of competition for attention can also be applied to the competition among web sites in external information markets.

Berland GK, Elliott MN, Morales LS, ***et al.*** **Health information on the internet. Accessibility, quality, and readability in English and Spanish.** ***JAMA*** **2001;285:2612–21.**

Increasingly, health care consumers are using the internet to gather information and to aid their decisions about treatment. This study sought to evaluate health information on breast cancer, depression, obesity, and childhood asthma available through English and Spanish language search engines and web sites. Structured tools were used and interrater reliability measured to judge the proportion of links leading to relevant content. The quality, coverage and accuracy of key clinical elements and reading level of web sites was also measured. They found that less than a quarter of the search engine's first

pages of links led to relevant content. Coverage of key information on web sites was poor. Only half of the topics that the expert panels thought were important for consumers were covered more than minimally. Significant variation existed between web sites in the accuracy of information given. Most web based material also required quite a high reading level. While this study offers just a snapshot of a rapidly changing information source, it nonetheless offers a useful insight into the quality of an increasingly important resource for consumers. The authors make several suggestions for ways to improve web based information and ensure its potential for improving public information needs is realised.

Quality policy

Some of the best care in the world is found in the USA, but access to care is very patchy and dangerous poor quality care is found there as in other countries. More is spent on health care in the USA than anywhere else, which means, perhaps, that more is wasted. Despite this, there is concern that it may be difficult to keep quality and safety and reduction of harm high on the health policy agenda. This must be a concern for all of us. Care will not become better if we stop thinking about how to improve it.

McGlynn EA, Brook RH. Keeping quality on the policy agenda. *Health Aff* 2001;20:82–90.

Abstract reproduced from original.
Quality of care in the US and elsewhere consistently fails to meet established standards. These failures subject patients to premature death and needless suffering. Yet, unlike the experience with other threats to life (tire failures or airplane rudders), public and private policymakers have been unable to maintain sufficient interest in identifying and solving problems with quality to change the way in which care is delivered. A discussion of why it is hard to keep quality on the policy agenda is presented, and short-term steps are suggested that are necessary if quality is to improve in the US and in the rest of the world.

McKinley RK, Fraser RC, Baker R. Model for directly assessing and improving clinical competence and performance in revalidation of clinicians. *BMJ* 2001;322:712–5.

This paper explore the issues surrounding the process of assessing clinical competence and performance. It highlights pitfalls of the components of revalidation that exist in the UK which are mainly indirect or proxy and therefore not always a valid or reliable measure of competence. It is argued that the consultation is the single most important event in clinical practice and therefore the central focus of revalidation should be the assessment of consultation competence. Alternative methods based on direct observation of the consultation are discussed such as the use of real or simulated patients. This would be followed by an assessment of specific skills and regular performance review. The authors argue that other professional peers should perform assessment but with lay input to the process and joint overview of the outcome.

Education and training

Busy clinicians might feel that there is not enough time for reflection and any time away from patient care is time wasted. But missing out on reflection may in the end be a false economy. Continued competence and professional development may be dependent on reflective and critically reflective practice.

Paget T. Reflective practice and clinical outcomes: practitioners' views on how reflective practice has influenced their clinical practice. *J Clin Nurs* 2001;10:204–14.

There has been a recent increasing interest in reflective practice in nursing. There is a wealth of literature about its apparent advantages and benefits, but very little empirical research into clinical outcomes resulting from reflective practice. This study attempts an initial exploration into this area. A retrospective, three phase, multi-method study in a single department of nursing was conducted. The research sample comprised 200 students and former students of the department who had previously participated in an assessed reflective practice course or module. Years of experience, speciality, or academic level did not have a significant influence in terms of the impact of reflective practice on clinical practice, but the effectiveness of the facilitator was an important factor. The results suggest that reflective practice is regarded highly and that most respondents could identify significant long term changes to clinical practice resulting from it.

Williams B. Developing critical reflection for professional practice through problem-based learning. *J Advan Nurs* 2001;34:27–34.

This paper presents an integrative literature review which set out to explore the influence of current learning traditions in nursing on the development of reflection and critical reflection as professional practice skills and to offer suggestions for nursing education that could specifically facilitate the development of critical reflection. Published literature related to nursing, health science education, and professional education from 1983 to 2000 was included in the review. The findings suggest that professional education scholars concur that specialised knowledge is clearly essential for professional practice; however, they also suggest that self-consciousness (reflection) and continual self-critique (critical reflection) are crucial to continued competence. While strategies to facilitate reflection have been outlined in the literature, specific strategies to

facilitate the development of critical reflection and implications for nursing education are much less clear. Advocates of reflective and critically reflective practice suggest that the development of these abilities should be inextricably linked to professional development and can be developed through active repeated guided practice. In health care, problem based learning (PBL) based on constructivism has been identified as one way to facilitate the development of these skills. Nursing learners exposed to PBL develop the ability to be reflective and critically reflective in their learning, and acquire the knowledge and skill within the discipline of nursing by encountering key professional practice situations as the stimulus and focus of their classroom learning. The learners' ability to be both reflective and critically reflective in their learning is developed by critical questioning of the faculty tutor during situational analysis, learning need determination, application of knowledge, critique of resources and personal problem-solving processes, and summarisation of what was learned.

Fender GR, Prentice A, Nixon RM, *et al*. Management of menorrhagia: an audit of practices in the Anglia menorrhagia education study. *BMJ* 2001;322:523–4.

Menorrhagia is an important healthcare problem for women and places a considerable burden on health care resources. However, there is inconsistent use of the best available evidence by GPs in the management of menorrhagia. The Anglia menorrhagia education study was a randomised controlled trial designed to evaluate an educational package delivered in general practices. Notes of women who first attended the year before or after the trial were identified and audited by the study team. Comparisons in patterns of referral and treatment were compared between the intervention group of general practices (n=27) and the control group (n=25) and were adjusted to allow for assessment of previous management practice. Those practices receiving the intervention were twice as likely to prescribe the appropriate first line treatment as the intervention group. The data showed a positive change in behaviour among doctors as a result of education.

Van Eijk ME, Avorn J, Porsius AJ, de Boer A. Reducing prescribing of highly anticholinergic antidepressants for elderly people: randomised trial of group versus individual academic detailing. *BMJ* 2001;322:654–7.

The characteristics of effective interventions in improving prescribing practices have not all been identified. The purpose of this study was to compare the effect of individual educational visits versus group visits on the prescribing of highly anticholinergic antidepressants in elderly people. Other work has shown that a substantial portion of patients aged over 60 are prescribed highly anticholinergic antidepressants despite their greater susceptibility to hazardous side effects. The aim of the educational intervention was to decrease the prescribing of highly anticholinergic antidepressants in the elderly while encouraging the use of less anticholinergic antidepressants. 190 general practitioners in the Netherlands took part in the study and were randomised to the individual visit arm, the group visit intervention arm, or the control arm which received no intervention. An intention to treat analysis found a 26% reduction in the rate of starting highly anticholinergic antidepressants in the elderly people in the individual arm and 45% in the group intervention arm. The use of less anticholinergic antidepressants increased by 40% in the individual intervention arm and 29% in the group intervention arm. These effects were not seen in the control group. The study showed that both approaches can improve the clinical appropriateness of prescribing behaviour in an area of suboptimal prescribing.

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