

The role of clinical governance as a strategy for quality improvement in primary care

Stephen M Campbell and Grace M Sweeney

S M Campbell, PhD, MA (Econ), research fellow, National Primary Care Research & Development Centre, University of Manchester. GM Sweeney, PhD, MPhil, DipCot, research fellow in clinical governance, Research & Development Support Unit, University of Exeter.

Address for correspondence

Dr Stephen M Campbell, National Primary Care Research & Development Centre, University of Manchester, Williamson Building, Oxford Road, Manchester M13 9PL. E-mail: stephen.campbell@man.ac.uk

Submitted: 19 February 2002; Editor's response: 26 June 2002; final acceptance: 1 July 2002.

©British Journal of General Practice, 2002, 52 (suppl), S12-S18

SUMMARY

This paper considers the process of implementing clinical governance in primary care and its impact on quality improvement. It discusses how clinical governance is being implemented both at the level of Primary Care Organisations and general practices, and the challenges to implementing clinical governance. It also suggests a model for promoting the factors that will help clinical governance improve quality of care. The experience of implementing clinical governance is broadly positive to date. However, the government needs to match its commitment to a ten-year programme of change with realistic timetables to secure the cultural and organisational changes needed to improve quality of care.

Keywords: clinical governance; quality improvement; primary care organisation; primary care team.

Introduction

A VARIETY of approaches have been used to improve the quality of health care in England and Wales, culminating in clinical governance, which is part of the Government's overall strategy for quality improvement in the National Health Service (NHS). Clinical governance is part of a ten-year 'framework through which NHS organisations are accountable for continually improving the quality of their services, safeguarding high standards by creating an environment in which excellence in clinical care will flourish'.¹ It places attention equally upon accountability for existing care and improving future care.^{2,3} The concept seeks to combine and codify previous approaches to measuring and improving quality of care.⁴⁻⁹ The framework is unique in that it represents the first coherent and compulsory strategy for improving quality within the NHS as a systems-based model.⁴

There is evidence to suggest that considerable progress has been made in terms of establishing the infrastructure for clinical governance in primary care.¹⁰⁻¹⁴ This progress has been influenced by Department of Health directives, Regional Office guidance, Primary Care Organisations' (PCOs') interpretations and guidelines, 'levers' from all levels, and a personal 'willingness'.^{8,10-11,15} Progress is important as there is a need to improve the efficiency, effectiveness, and safety of patient care; to enhance accountability; and because there is evidence of significant variation in care,¹⁶ medical errors,¹⁷⁻¹⁹ and poor care.²⁰

This paper considers the process of implementing clinical governance in primary care and its impact on quality improvement. It also suggests a model for promoting the factors that

will help clinical governance improve quality of care.

What are the most effective quality improvement strategies?

Much previous research concentrated on individual components of quality improvement, such as significant event auditing (SEA),²¹⁻²³ conventional auditing,²⁴⁻²⁵ and patient feedback.²⁶⁻²⁷ However, multi-level strategies for change that combine continuing education, audit, research, and clinical effectiveness in unified multi-professional educational strategies, lead to the changes in behaviour that enhance quality improvement.²⁸⁻³⁰ The developmental approaches currently being used by PCOs,^{12,13,31} which focus on team and corporate learning, are therefore founded on a sound basis. For example, successful team building and leadership/management have been found to be important catalysts for quality improvement in first-wave PMS sites.³²

Successful implementation of clinical governance will require an understanding of the need for multi-level approaches to change, at the individual (e.g. general practitioner), the group or team (e.g. primary health care team), the overall organisation (e.g. the PCO), and the larger system (e.g. the NHS), in which individuals and organisations are embedded.²⁸ While recognising the independence of each level, quality improvement strategies need also to consider the interdependence of various levels.

How is clinical governance being implemented at a PCO level?

A myriad of approaches have been used to implement clinical governance, including audit (the dominant approach to quality improvement in the last decade), SEA, team-based education and training events, sharing comparative data, personal and practice learning plans, the setting and monitoring of standards, and the use of quality indicators.¹¹⁻¹² In particular, facilitative, developmental, and supportive processes are being advocated by many PCO clinical governance teams, to nurture a sense of ownership, trust and voluntary engagement by practice staff (Box 1).^{10-13,15,33} Clinical governance is seen as requiring implementation on a long-term bottom-up 'softly-softly' basis, as opposed to 'quick fixes'.

Primary care organisations are advocating collaborative and corporate learning (all practices learning together) and team-

based learning (all staff within a practice learning together). Asking independent contractor primary care practitioners to work within a corporate philosophy is a significant departure from previous policy and cannot be simply imposed by government. Common approaches have included the RCGP Quality Team Development initiative, which encourages practices to identify their own priorities for improvement. Such strategies, highlighting the concept of learning organisations, are appropriate, as quality improvement requires fundamental changes in organisational and behavioural (professional) cultures, which are far from straightforward and take time to achieve.³⁴⁻³⁵

It is important to foster a sense of ownership and engagement among health staff, as many are wary that clinical governance will be used to monitor poor performance, rather than foster quality improvement,^{10,13} aggravated by fears relating to the introduction of GP revalidation and appraisal. Many health professionals are still not engaged with the quality improvement agenda,³⁶ partly because it is seen as being imposed and as 'policing' their performance, rather than supporting quality improvement.

Only 3% of clinical governance leads have employed the withdrawal of resources from poor performers and only 9% have established any formal disciplinary procedures.¹² As Primary Care Groups (PCGs) become Primary Care Teams (PCTs) — and with the recent abolition of health authorities — PCOs will have to deal with poor performers. Not surprisingly, therefore, given that clinical governance also incorporates systems to ensure minimum standards, PCOs are also engaged in developing mechanisms for dealing with poor performers, although these are, as yet, less well developed.¹³ Early in the process of developing clinical governance, PCO clinical governance staff were unsure of the 'carrots and sticks' at their disposal to monitor and improve quality of care, in terms of identifying and dealing with incidences of substandard care and in 'encouraging' resistant colleagues to develop the process on the ground. Many clinical governance leads lacked clarity about the levers (for example, financial incentives, publication of league tables) that they have the authority to use, but these have tended to become clearer as PCGs have moved to PCT status. Some have therefore relied on the goodwill of their 'independent contractor' colleagues to move the process forward.^{10-11,13,33} Facilitative and developmental approaches were often the only possible option available to the PCO leads themselves, as workload and shortage of protected time meant that they were unable to chase up practice members on a continuous basis.

Almost three years into the process, clinical governance in primary care is viewed predominantly as a positive and welcome process, but it remains under-resourced and a challenge to implement.¹⁰⁻¹³ The clinical governance leads who initially grappled with the relatively theoretical concept and definition of clinical governance have begun to grasp its inherent clinical and managerial challenges. At a PCO level, clinical governance is seen as a process that will grow and develop over several years, facilitated by reflection, access to information, and adequate resources.

How is clinical governance being implemented

A progressive, developmental and accumulative process of implementation:

Use of tools

Education
Audit
Information management
National and local guidelines

Use of strategies

Peer pressure and professional pride
Mentoring and supervision
Involving others
Sharing experiences and knowledge

Ethos/approach

Encouraging, facilitating, supporting, engaging,
Inspiring, reflecting
Arm-twisting!
Being a resource, an advocate

'Moving slowly — a step at a time'

Box 1. The process of implementing clinical governance being advocated by PCOs.¹¹

at practice level?

Evidence suggests that many staff at practice level have a good basic knowledge of clinical governance, although their focus tends to be slightly narrower (more practice-orientated) than that expressed by PCO-level clinical governance leads.³⁷⁻³⁸ At practice level, clinical governance is seen as being composed of three components: culture, accountability, and tools within an overall patient-focused, whole-team approach to quality improvement. It is beginning to become embedded in the day-to-day working lives of practice staff as a routine, positive, and shared multidisciplinary team activity.³⁷⁻³⁸ For example, many practices have made a start with National Service Frameworks-based audits, SEA, complaints systems, personal learning plans, practice development plans, appraisals, and practice 'awaydays'.

There are a number of difficulties with clinical governance at practice level;³⁷⁻³⁸ in particular, lack of time and support (administrative, information technology) and logistical difficulties. With the advent of large PCOs, some primary care staff reported feeling 'disconnected' from the organisation. Single-handed practices feel vulnerable and exposed at the comparison of their data to data generated by larger practices, feeling that there was room for distortion and exposure. Some practice staff feel that clinical governance had the potential to become 'a paper exercise', characterised by 'ticking boxes' and doing the minimum amount of work. Three components of clinical governance caused particular difficulties in practices: dealing with slight under-performance, GP appraisal, and meaningful patient participation.³⁷⁻³⁸

What challenges face clinical governance in primary care?

There are reasons to be hopeful that clinical governance will lead to meaningful improvements in primary care, including the dedication of staff, emerging clinical leadership, evidence-based developmental approaches by PCOs, the fact that national clinical priority areas (e.g. heart disease) are aligned to health professionals' own priorities, and the emphasis on a systems-based strategy. Moreover, real improvement comes

from changing systems,³⁹ which is the government's current approach to the NHS.

There are also significant barriers.¹¹⁻¹² These include concerns about the pace of change and volume of work involved, problems associated with moving from PCG to PCT, a perceived blame culture that undermines attempts to foster openness and shared learning, too few staff, limited dedicated resources to implement clinical governance, and the continued disengagement by some practices and staff.¹²⁻¹³ In addition, the fact that practices offer different levels of care and vary in terms of information technology skills and financial resources, can hinder corporate approaches. These barriers have left many clinical governance leads feeling beleaguered, already faced with a steep learning curve, long working hours, and lack of time to absorb and understand multiple initiatives. It has also had an impact on them personally, especially in terms of relationships at home and work (Box 2). It is important therefore that mechanisms are put in place that support clinical governance leads and their teams.

Clinical governance leads have experienced many difficulties during the development of their role; for example, they have not always been clear about their level of responsibility for the development of clinical governance within their own organisation.¹¹ Other concerns include ambiguity in the role of clinical governance leads, long-term uncertainty, and the emotional impact of the role.³³ In terms of emotional impact, some leads have felt 'powerless' and 'out of control' with the volume of work and shortage of resources. The early lack of direction and the paucity of volunteers for the role of clinical governance leads has served to create a sense of powerlessness among some clinical governance leads, forcing many to resign their positions.^{11,37}

In addition, despite PCO staff being committed to the involvement and influence of users in clinical governance priority setting and implementation, as stipulated in government directives,⁴⁰ so far there is little evidence that this has occurred in any meaningful way.⁴¹ Meaningful engagement of service users has been highlighted as a major difficulty for both practices and PCOs.¹⁰⁻¹¹ There is also, as yet, little evidence of improved outcomes for patients as the emphasis has been mostly on quality assessment.¹²

There are also a number of inherent contradictions within the

implementation of clinical governance that need to be reconciled. For example, transformational leadership and quality improvement focused on fostering change at the local (PCO) level may be incompatible with performance management and quality assurance at the national (government) level. It may generate hostility from above (e.g. government timetable) and hostility from below (perceived blame culture within practices). Moreover, different stakeholders (e.g. professionals and patients) have different perceptions about what constitutes quality improvement. For example, research has shown that some first-wave Personal Medical Services sites have advocated longitudinal continuity of care (delivered by teams), rather than personal continuity of care (delivered by individuals) as a catalyst for quality improvement, but that their patients do not value such a shift.³² In addition, high-profile media cases of medical error risk overshadowing improvements in care within the NHS in the perception of the general public.

What factors will make clinical governance improve quality of care?

There are three overlapping sets of issues, which, if addressed successfully, will enhance the successful implementation of clinical governance in primary care (Boxes 3, 4, and 5):

1. The architects of clinical governance and the context under which it is being implemented (the environment of change);
2. The people responsible for implementing clinical governance (the leaders of change), and
3. The people who will make clinical governance part of their daily routine (the implementers and users of change).

Not all healthcare staff can (or need to be) leaders of change and clinical governance. However, all staff must be users of clinical governance and all patients must be beneficiaries of the process. Finally, we must be patient and allow time for the process to become embedded and for the new culture to develop.

Clinical governance seeks to foster an environment under which excellence can flourish. However, standards and targets (for both organisations and individual practitioners) must be

<p>Practicalities of implementation</p> <ul style="list-style-type: none"> Speed and volume Lack of funding Lack of adequate direction Doctor-dominated Multiplicity of employers <p>Role of the lead</p> <ul style="list-style-type: none"> Appointed by 'accident/default' Steep learning curve — initial lack of confidence Lack of clarity about 'carrots and sticks' Time to 'absorb, understand, translate and convey' <p>Relationship</p> <ul style="list-style-type: none"> Consequences Partners/colleagues in practice Marriage/home/social Patients 'Rowing upstream...' 	<p>Emotional impact</p> <ul style="list-style-type: none"> Increased personal stress, decreased personal achievements Feeling exposed, vulnerable Feeling isolated (an 'outsider') Sense of powerlessness <p>Long-term uncertainty</p> <ul style="list-style-type: none"> Transition from PCG to PCT Succession and lack of continuity League tables/'Ofdoc' inspectors Accountability and responsibility Penalties <p>The wider agenda</p> <ul style="list-style-type: none"> Short-term (political) gains External scrutiny Loss of GP independent contractor status Clinical governance 'set up to fail' (external control)
--	--

Box 2. Concerns about clinical governance.¹¹

- Clarity of roles (e.g. PCO, health authority)
- Effective (clinical) leadership
- Multi-professional teamwork and team learning
- Power of sanction
- Power of reward
- Facilitation and developmental approaches to quality improvement
- Protected time for reflection and to undertake quality improvement
- Adequate resources and infrastructure
- No-blame culture
- Adequate resources and support at meso-level (PCG) and micro-level (practice), in terms of skills, advice, etc.
- Time-sensitive and realistic timetables/outcomes

Box 3. *The context of clinical governance: creating the environment of change.*

- Clarity of roles and responsibilities (e.g. clinical governance team, clinical governance lead, practice clinical governance lead)
- Clinical governance teams including joint leads (GP and non-GP)
- National guidelines on the 'carrots' and 'sticks' available to clinical governance teams
- Recompense to practices where clinical governance leads practice
- Dedicated and adequate clinical governance budgets at PCO level
- Adequate career structure for clinical governance leads/facilitators
- Making clinical governance part of the everyday routine of PCG/Ts: the 'glue' or 'oil'.
- Multi-professional team approach with managerial support

Box 4. *Leaders of clinical governance: facilitating effective leaders of change.*

realistic and practice-specific,⁴² showing that sustained improvement longitudinally (and laterally) is what counts year on year. Moreover, clinical governance, correctly, gives greatest emphasis to supportive and developmental quality improvement. Indeed, the tide has perhaps turned too far in the direction of checking on, and not trusting, health professionals.⁴³ Clinical governance leaders must recognise and deal accordingly with poor care and those who, despite adequate support, prove themselves incapable of quality improvement. The recipients of clinical governance (patients and carers), as well as all users of clinical governance in the health service, must not feel threatened by the use of penalties (including, where appropriate, suspension or termination of contracts); rather, they should support it where this is warranted. Continuous quality un-improvement must not be tolerated in the National Health Service. In addition, the system of payment within general practice that advocates financial reward based on capitation, needs replacing by a system that encourages and rewards high quality care. It is to be hoped that this will be facilitated by the introduction of the new core contract.

Conclusions

The vagueness of the initial definition of clinical governance serves both as a problem and an opportunity, in terms of its successful implementation. It encourages flexibility and local ownership as well as facilitating the organic growth of the process. However, it also provides limited criteria against which to judge the success or failure of clinical governance

- Protected time for reflection and to undertake quality improvement will encourage a sense of ownership and engagement with the process.
- Adequate funds and staff to implement initiatives (e.g. audit).
- Developmental and facilitative approaches based on the perceived needs of the practice, according to the staff (e.g. Quality Team Development).
- Multi-professional teamwork and team learning.
- Aligning national clinical governance agenda to local needs (e.g. heart disease).
- Practices would benefit by having half a day per month protected for clinical governance activities, in addition to half day a month for PCG/T multi-professional training events.

Box 5. *Users of clinical governance: developing a climate under which health staff will implement change.*

and has led to uncertainty within PCOs. Clinical governance is not a unitary phenomenon but a myriad of local and national initiatives. It is therefore unhelpful to consider whether 'clinical governance will work or fail'. It is likely that some components will work and some will fail. However, because clinical governance is a systems-based model it is likely to be judged as a single entity, which will mask examples of both success and failure.

The experience of implementing clinical governance is broadly positive to date. There have been no systems-based schemes of this size and scope in England and Wales before, backed up with Government commitment and substantial resources (e.g. NHS Clinical Governance Support Team). Considerable progress has been made in transforming the rhetoric of clinical governance into reality, and a recognisable (and more open and transparent) continuous quality improvement agenda is emerging as a result. Patients will benefit from these improvements and practitioners will improve the care they provide. In addition, practitioners will reap the benefits of working in a safer, more supportive system. However, to become genuinely embedded in our culture, it is necessary that the process meets the needs of professionals as well as patients. A considerable body of evidence suggests that there are real concerns about the time, effort, and personal sacrifices involved in developing the process at a local level. The government needs to match its commitment to a ten-year programme of change with realistic timetables to secure the cultural and organisational changes needed to improve quality of care. A focus on short-termism must not be allowed to deter from longer-term objectives.

References

1. Department of Health. *The new NHS: modern, dependable*. [Cm 3807.] London: The Stationery Office, 1998.
2. Secretary of State for Health. *The NHS Plan: a plan for investment, a plan for reform*. [Cm 4818-1.] London: The Stationery Office, 2000.
3. Allen P. Accountability for clinical governance: developing collective responsibility for quality in primary care. *BMJ* 2000; **321**: 608-611.
4. Scally G, Donaldson LJ. Clinical governance and the drive for quality improvement in the new NHS in England. *BMJ* 1998; **317**: 61-65.
5. Pietroni P. Clinical governance in primary care groups. [Address to clinical governance leads, RHA Conference, Dillington House, November 1998.] Cited in: M Lugon, J Secker-Walker (eds). *Advancing Clinical Governance*. London: The Royal Society of Medicine Press Ltd, 2001: 125-135.
6. Smith LFP, Harris D. Clinical governance: a new label for old ingredients: quality or quantity? *Br J Gen Pract* 1999; **49**: 339-340.
7. Baker R, Lakhani M, Fraser R, Cheater F. A model for clinical governance in primary care. *BMJ* 1999; **318**: 779-783.
8. Sheaff R. *Responsive Healthcare*. Buckingham: Open University

- Press, 2001.
9. Buetow SA, Roland MO. Clinical governance: bridging the gap between managerial and clinical approaches to quality of care. *Qual Health Care* 1999; **8**: 184-190.
 10. Sweeney G, Stead J, Sweeney K, Greco M. Exploring the implementation and development of clinical governance in primary care with the South West region: views from PCG clinical governance leads. (<http://wisdonmet.co.uk/cgmenu.html>), accessed February 2001.
 11. Sweeney GM, Sweeney KG, Greco MJ, Stead JW. Softly, softly, the way forward? A qualitative study of the first year of implementing clinical governance in primary care. *Prim Health Res Dev* 2002; **3**: 53-64.
 12. Campbell SM, Roland MO, Wilkin D. Improving the quality of care through clinical governance. *BMJ* 2001; **322**: 1580-1582.
 13. Campbell SM, Sheaff R, Sibbald B, et al. Implementing clinical governance in English Primary Care Groups/Trusts: reconciling quality improvement and quality assurance. *Qual Health Care* 2002; **11**: 9-14.
 14. Houghton G, Munday S, Sproston B. Grading governance: measuring and comparing clinical governance performance in primary care. *J Clin Gov* 2001; **9**: 193-200.
 15. Sweeney G, Sweeney K, Greco M, Stead J. Moving clinical governance forward: capturing the experiences of primary care group leads. *Clin Gov Bull* 2001b; **2**(1): 6-7.
 16. Seddon ME, Marshall MN, Campbell SM, Roland MO. Systematic review of studies of clinical care in general practice in the United Kingdom, Australia and New Zealand. *Qual Health Care* 2001; **10**: 152-158.
 17. Leape LL, Berwick DM. Safe health care: are we up to it? *BMJ* 2000; **320**: 725-726.
 18. Weingart SN, Wilson RM, Gibberd RW, Harrison B. Epidemiology of medical error. *BMJ* 2000; **320**: 774-777.
 19. Alberti KG. Medical errors: a common problem. Is it time to get serious about them? *BMJ* 2001; **322**: 501-502.
 20. Josebury H, Mathers N, Lane P. Supporting GPs whose performance gives cause for concern: the North Trent experience. *Fam Pract* 2001; **18**: 123-130.
 21. Sweeney GM, Stead JW. *Significant event audit: a focus for clinical governance*. Chichester: Kingswell Press, 2001.
 22. Westcott R, Sweeney G, Stead J. Significant event audit in practice: A preliminary study. *Fam Pract* 2000; **17**: 172-178.
 23. Sweeney G, Westcott R, Stead J. The benefits of significant event audit in primary care: a case study. *J Clin Gov* 2000; **8**: 128-134.
 24. Hopeyow K, Morley S. Putting confidence into audit: using confidence intervals to set objective standards in primary care audits. *J Clin Gov* 2001; **9**: 67-70.
 25. Jiwa M, Mathers N. Auditing the use of ACE inhibitors in hypertension, reflecting the cost of clinical governance? *J Clin Gov* 2000; **8**: 27-30.
 26. Greco M, Cavanagh M, Brownlea A, McGovern J. Validation studies of the Doctor's Interpersonal Skills Questionnaire. *Educ Gen Pract* 1999; **10**: 256-264.
 27. Greco M, Brownlea A, McGovern J, Cavanagh M. Consumers as educators: implementation of patient feedback in general practice training. *Health Commun* 2000; **12**: 173-193.
 28. Ferlie EB, Shortell SM. Improving the quality of health care in the United Kingdom and the United States: A framework for change. *Millbank Q* 2001; **79**: 281-315.
 29. Calman K. *A review of continuing professional development in general practice: a report by the Chief Medical Officer*. London: Department of Health, 1998.
 30. Cantillon P, Jones R. Does continuing medical education in general practice make a difference? *BMJ* 1999; **318**: 1276-1279.
 31. Wallace LM, Freeman T, Latham L, et al. Organisational strategies for changing clinical practice: how trusts are meeting the challenges of clinical governance. *Qual Health Care* 2001; **10**: 76-82.
 32. Steiner A, Campbell S, Robison J, et al. *Evaluation of first-wave PMS: effects on quality of care*. [Report to the Department of Health.] Southampton: Universities of Southampton and Manchester, November 2001.
 33. Sweeney G, Sweeney K, Greco M, Stead J. The experience of clinical governance leads: Briefing Paper 1. RDSU Website (<http://www.ex.ac.uk/pgms/rdsu/gsbrief.doc>), accessed August 2001.
 34. Davies HTO, Nutley SM, Mannion R. Organisational culture and quality of health care. *Qual Health Care* 2000; **9**: 111-119.
 35. Moss F, Garside P, Dawson S. Organisational change: the key to quality improvement. *Qual Health Care* 1998; **7** (suppl): S1-S2.
 36. Shekelle PG. Why don't physicians enthusiastically support quality improvement programmes? *Qual Saf Health Care* 2002; **11**: 6.
 37. Sweeney G, Sweeney K, Greco M, Stead J. Exploring the Implementation and Development of Clinical Governance within Primary Care in the South West: Briefing Paper 2. SWRO Website (<http://www.doh.gov.uk/research/swro/>), accessed February 2002.
 38. Sweeney G, Sweeney K, Greco M, Stead J. Primary care clinical governance: What's happening on the ground? *Clin Gov Bull* 2002; **3**(1): 10-12.
 39. Berwick DM. A primer on leading the improvement of systems. *BMJ* 1996; **312**: 619-622.
 40. Department of Health. *Health and social care research governance*. London: 2001
 41. Pickard S, Marshall M, Rogers A, et al. User involvement in clinical governance. *Health Expectations* (in press).
 42. Marshall M, Campbell SM. Introduction to quality assessment in general practice. In: Marshall M, Campbell SM, Hacker J, Roland MO (eds). *Quality indicators for general practice: A practical guide for health professionals and managers*. London: Royal Society of Medicine, 2002.
 43. Davies HTO, Mannion R. Clinical governance: striking the balance between checking and trusting. In: Smith P (ed). *Reforming markets in health care — an economic perspective*. Buckingham: Open University Press, 1999.

Acknowledgements

Grace Sweeney is the South West's Research Fellow in Primary Care Clinical Governance and her research is funded by the NHS Executive South West as a joint venture between the Departments of Public Health and Research & Development. Her work is supervised and influenced by Drs Jonathan Stead, Kieran Sweeney, and Michael Greco in Exeter. However, the views expressed in this paper are hers and not necessarily those of the NHS Executive South West or her supervisors.