The Clinical Support Systems Program: supporting system-wide improvement

Jenni A Leigh, Paul W Long and Bruce H Barraclough

ABSTRACT

- The Clinical Support Systems Program (CSSP) provided a mechanism for change from the existing entrenched structure and culture of patient care to one based on patient-centred, evidence-based care.
- The spectrum of change and improvement achieved by the CSSP was extensive, with support from government and active and enthusiastic involvement of clinical champions, practising clinicians, consumers and managers.
- The CSSP experience confirmed that responsibility for quality clinical care cannot be borne solely by clinicians, and highlighted key areas where improvement in the support clinicians receive is needed.
- Many barriers to improvement in our complex healthcare system can be removed by recognising the need for accurate data recording and data systems, teamwork, and high-level organisational buy-in, with collaboration between teams and organisations trying to improve the quality of patient care.
- System-wide improvement has been stimulated and facilitated by the CSSP experience, with mutual flow-on benefits for the activities of the Australian Council for Safety and Quality in Health Care and the National Institute of Clinical Studies.

MJA 2004; 180: S101–S103

THE AIM OF THE Clinical Support Systems Program (CSSP) was to embed the best available evidence routinely in clinical practice.

The Program's mechanism of change, the Clinical Support Systems (CSS) model, was based on a patient-centred systems approach to evidence-based care. It contained simple rules that multidisciplinary teams could adapt locally to their particular patient group. The simplicity of the model and its underlying principles accord with the systems approach to practice improvement that is gaining increasing credibility internationally.[1]

The improvements in systems of care achieved by the CSSP in a relatively short time were vast,[2] suggesting that major gains can be derived from programs of change to transform the entrenched structure and culture of providing patient care. While these programs may not always deliver the easily measurable or immediate gains sometimes evident in narrowly targeted projects, the legacies of the broad systemic approach to change are more likely to be sustained in the long term.

Local practice change was not the only outcome of the systems orientation of the CSSP. The Program also generated important messages for the wider healthcare system.

Better practice is not solely the responsibility of clinicians

Clinical practice improvement (CPI) initiatives usually focus on clinicians, who are assumed to be responsible for quality of care, and strategies to engage clinicians' commitment to better practice are a major part of the change agenda. However, creating a culture in which clinicians accept that "*quality is everyone's business*" is seen as a means of improving the safety and quality of clinical care.[3]

An analysis of the experiences of the clinicians involved in implementing the CSSP indicated that they were constrained by variables over which they had no direct control.[2] These variables were both locally specific (eg, features of their organisation) and more general healthcare system variables (eg, dual funding models or the lack of integrated electronic medical records).

The key message was that responsibility for quality clinical care cannot be borne solely by clinicians. The change agenda needs to involve people and systems beyond local clinical teams. It needs to permeate many different healthcare "systems" (eg, organisational or professional) that contribute, either directly or indirectly, to clinical practice.

The CSSP experience indicated that much can be done to improve the support clinicians receive in the following five key areas.

1. Educational preparation and training

The need to support clinicians with education and training to undertake CPI activity is not new and it is easy to assume that all this requires is the inclusion of one or more designated topics in professional education or development programs. The CSSP experience showed that this alone is insufficient. There were clear gaps in the knowledge base and skills necessary to equip clinicians to work effectively

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within teams or on committees. Examples of gaps identified in the CSSP included lack of effective leadership and teamwork, and problems with partnership formation, consensus building, facilitation, conflict resolution, change management and governance.

These gaps in knowledge and skills indicate the need for professional education systems to ensure that clinicians receive educational support for the full spectrum of clinical activity.

However, focusing solely on professional education programs overlooks an equally important component: on-the-job professional socialisation.[4,5] Much of what junior clinicians learn occurs within the work setting — it is partly based on observation of the behaviour of senior clinicians and partly the result of senior clinicians' expectations of junior clinicians' performances.[6]

The CSSP illustrated that senior clinicians can consciously ensure that this on-the-job socialisation routinely supports evidence-based practice. However, further work is needed to ensure that it does not replicate current practice, and thereby undermine the practice change agenda. This includes equipping senior clinicians with the skills and knowledge to support their mentoring roles in the work setting.[7]

2. The organisational structure within which clinicians practice

From the CSSP experience, it was clear that organisational structures may have a direct constraining influence on practice quality. Hospitals are highly fragmented environments, and opportunities for interaction between these fragments, whether they be structural divisions or professional groups, are limited or non-existent. Similarly, the divide between acute care and the community can present barriers for clinicians in either sector.

It is often at the points of intersection between structurally isolated segments of the healthcare system that evidence-based practice breaks down.[8] However, these same points may present the greatest opportunities for improvement. Further work is needed to ensure that mechanisms for practice dialogue and reflection across traditional boundaries are available for clinicians within the organisational structures of hospitals and between healthcare sectors.

Within acute care, the absence of wider forums, such as clinical governance committees, acts as a systems barrier to change.[1] While clinicians can work on change within their immediate areas, organisational issues beyond their control, but affecting their practice, also need to be addressed. Structures that span traditional organisational boundaries provide clinicians with forums to present these issues for resolution.

3. The management of resources

Across the CSSP projects, it was clear that the hectic work pace gave clinicians little time to reflect on practice, either as individuals or in teams. Sometimes this was further exacerbated by unfilled establishment positions, with existing staff or large numbers of agency staff covering these vacancies. There were also instances in which components of infrastructure required for evidence-based practice were not available (eg, access to CT scanning or exercise stress testing). While clinicians managed as best they could, the full potential of their efforts was constrained by resource limitations. The impact of local resourcing on clinicians routinely implementing EBM, as a systems issue, needs further examination.

The need to bridge the clinician–administrator divide within acute-care hospitals was also apparent. Mechanisms to support increased opportunities for these two groups to understand each other's perspective and to exercise joint responsibility for patient care, and the resources providing that care, were identified as important components of practice improvement.

4. The evidence base informing practice

The CSSP projects highlighted the fact that available evidence is often patchy and skewed towards certain aspects of practice, such as prescribing. The Austin Bowel Cancer Project "discovered" a wealth of psychosocial science research supporting care for their chosen patient group, yet this was not in the guidelines on which their project was based.

Further work is needed on the evidence base supporting the full spectrum of medical practice, as well as that supporting nursing and allied health practice.[1] Multidisciplinary teams struggled to determine the evidence base and performance measures for the whole team (rather than the individual disciplines within the team). A challenge for the healthcare system is whether, in the future, the focus will be on individual disciplines or multidisciplinary teams.[1]

5. Information systems to support practice

Despite heavy emphasis on data and documentation, clinicians do not have ready access to meaningful information about clinical practice. Yet, routine evidence-based practice relies on timely access to this information,[9] and clinicians are keen to have this access. The CSSP projects developed very different approaches to fulfil this need, ranging from paper-based to handheld personal digital assistants, and these experiences indicate that further debate and resolution of important inter-related issues are needed in developing information systems for evidence-based practice. These pertain to:

- whose practice should such systems inform;
- what governance structure do they need;
- how and to whom should responsibility for data collection and analysis be allocated;
- what technical support needs to be provided to maintain such systems; and
- how the necessary infrastructure and personnel are to be funded.

Privacy and legal privilege may also be issues that need to be addressed.

System-level developments

The system-wide implications of the CSSP, while not providing new information *per se*, illustrate the magnitude of changes required to support CPI. Some changes are already under way or are the focus of attention by organisations specifically established to support and promote safety and quality in healthcare, such as the Australian Council for Safety and Quality in Health Care. The specific outcomes and lessons from the CSSP contribute to this concerted national effort.

The original government intent for partnering with the Royal Australasian College of Physicians (RACP) was to increase interest among and engagement by doctors in the movement for quality of care. There is no doubt that the RACP's role in actively championing the CSSP has achieved this intent.[2] At the same time, there have been mutual flow-on benefits between the CSSP and other national activities sponsored through the Australian Council for Safety and Quality in Health Care and the National Institute of Clinical Studies.

The RACP is continuing to build on the experiences gained through its involvement in the CSSP. It has supported the uptake and roll-out of the CSS model itself, through funds attracted from the New South Wales, Western Australian, South Australian and New Zealand governments for CSS projects.[10] As an example: after initial piloting at the John Hunter and Nepean hospitals (NSW), and Townsville (QLD) and Frankston (VIC) hospitals, the NSW government, through the NSW Institute for Clinical Excellence, in collaboration with the RACP, has introduced the "Towards a Safer Culture" project (see *page 92*) to 29 hospitals in 12 area health services, enabling clinicians to embed best evidence-based practice routinely in clinical care with the aim of increasing survival from heart attack and stroke and improving functional results. This is the first time that integrated data, on this scale, have been systematically fed back to front-line clinicians for the purpose of CPI.[11]

At the same time, the College has formed a Better Practice Coordinating Committee, which is exploring a range of strategies to support College fellows and trainees in evidence-based practice improvement initiatives. The most tangible outcome to date has been the development of an online manual, linked to the RACP and based on implementation experiences from the CSSP,[12] which offers simple, practical support for clinicians.

There is now an established network of organisations coordinating a national quality and safety effort, each contributing to addressing the systems issues necessary to support clinicians in evidence-based practice. The growing momentum for change is evident by the inclusion, for the first time, of quality and safety within the Commonwealth–State Health Care Agreements (2003).[13] The CSSP has contributed to this momentum, and continues to do so, not only through the RACP and further projects based on the CSS model, but through the clinicians who participated in the CSSP and contributed to the lessons informing the wider healthcare system.

Acknowledgements

We gratefully acknowledge Robert Wells, First Assistant Secretary, Health Services Improvement Division, Australian Government Department of Health and Ageing, for his contribution to and support of the CSSP.

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