Asia Pacific Journal of Health Management

Volume 10 Issue 2 – 2015

The Journal of the Australasian College of Health Service Management

ACHSM

Features:

Competencies and skills

Staff burnout

Accreditation

Home based care

Transitioning roles

. . . and much more

Your voice for better networking, development, advocacy, recognition, innovation and excellence in health leadership

Network

We help you build sustainable networks with experienced managers and key industry players by accessing over 100 seminars and workshops a year, special interest groups and our annual Asia Pacific Congress.

Learn

Attain the key tools of professional development in health leadership, access free webcasts and webinars, the only dedicated library and information service for health managers and a prestigious, peer-reviewed industry journal.

Advance

Grow your professionalism and be inspired with a hand-picked mentor, undertake the prestigious fellowship program and gain exclusive access to job postings and career resource tools.

Influence

Get involved in influencing health policy, support the organisation that builds innovation in health service management, and use postnominals (MCHSM, AFCHSM and FCHSM) after your name.

ACHSM Australasian College of Health Service Management

Brilliant Leadership For Healthy Communities

achsm.org.au

CONTENTS

Cover picture: The cover of this issue has been designed to reflect the purpose and content of the Editorial for this issue titled 'The getting of wisdom'. The cover links the concept of philosophy through some of the well-known early philosophers to the role of health managers and currently accepted health management theory.

ASIA PACIFIC JOURNAL OF HEALTH MANAGEMENT

SUBMISSION OF ARTICLES

All articles, including letters to the editor, are to be submitted on-line through the scholar one portal. The web address is **http://mc04.manuscriptcentral.com/apjhm** you can log in here and set up an account if you are a new user. Guidelines for contributors are available on the ACHSM web site www.achsm.org.au or a hard copy can be obtained by calling the ACHSM National Office on 9878 5088 or emailing the editor at **journal@achsm.org.au**

MISSION STATEMENT

The mission of the Asia Pacific Journal of Health Management is to advance understanding of the management of health and aged care service organisations within the Asia Pacific region through the publication of empirical research, theoretical and conceptual developments and analysis and discussion of current management practices.

The objective of the Asia Pacific Journal of Health Management is to promote the discipline of health management throughout the region by:

- stimulating discussion and debate among practising managers, researchers and educators;
- facilitating transfer of knowledge among readers by widening the evidence base for management practice;
- contributing to the professional development of health and aged care managers; and
- promoting ACHSM and the discipline to the wider community.

MANAGEMENT PRACTICE ARTICLES

Management practice papers are practitioner oriented with a view to reporting lessons from current management practice.

RESEARCH ARTICLES

An article reporting original quantitative or qualitative research relevant to the advancement of the management of health and aged care service organisations.

RESEARCH NOTES

Shorter than a research article, a research note may report the outcomes of a pilot study or the first stages of a large complex study or address a theoretical or methodological issue etc. In all instances it is expected to make a substantive contribution to health management knowledge.

REVIEWS

A careful analysis of a management or policy issue of current interest to managers of health and aged care service organisations.

PEER REVIEW

The Journal publishes original articles and has a policy of blind review for all contributions. This means that authors and reviewers are not disclosed to each other during the review and publishing process.

VIEWPOINTS

A practitioner oriented viewpoint/commentary about a topical and/or controversial health management issue with a view to encouraging discussion and debate among readers.

LETTERS TO THE EDITOR

A positive or critical comment about the Journal or a particular article or perhaps some suggestions for future Journal themes or suggestions for improving reader interest in the Journal.

ADVERTISING

All booking and enquiries concerning advertising in the Journal should be directed to the Production Manager (Editorial Office) or email journal@achsm.org.au

COPYRIGHT

ARTICLE REPRINTS AND PERMISSIONS

Reprints are available in hard copy or as electronic downloads with permission to print. Reprint prices are as follows:

1 – 9 copies	$6.00 each
10 – 49	$5.50
50 – 79	$5.00
80 – 99	$4.50
100 – 499	$4.00

(Minimum order $10.00)

For an article reprint please email library@achsmnsw.org.au
All costs are in AUD.

FOR INFORMATION OR TO ORDER:

Health Planning and Management Library
PO Box 341
NORTH RYDE NSW 1670
Phone: 61 2 9805-0125
Fax: 61 2 9889 3099
Email: library@achsm.org.au

DISCLAIMER

All articles published in this Journal including editorials are the opinions and views of the authors and do not necessarily reflect those of the Australasian College of Health Service Management unless otherwise specified.

Australasian College of Health Service Management
PO Box 341 North Ryde NSW 1670 Australia
Telephone: +61 2 9878 5088
Facsimile: +61 2 9878 2272
Email: journal@achsm.org.au
ISSN 2204-3136

EDITORIAL

The Getting of Wisdom

In this Editorial I would like to traverse the important concept of gaining wisdom as a health manager. The challenges of managing complex systems, sometimes in the face of adverse contexts, cannot be easily incorporated within the normative, rational view of management practice or theory. The idea came from a series of Facebook discussions I had with my good friend and colleague Dr Geoffrey Lieu of Hong Kong, also an Assistant Editor of this Journal. We exchange health related articles and sometimes commentary as well.

Two recent articles caused us to think about what skills and attributes a health manager might really need. The first article focused on reducing workplace violence in American healthcare facilities. It described how healthcare facilities could improve workplace safety and protect staff from violent patients and visitors. The article discussed the increased level of violence and canvassed the use of armed security guards, the use of metal detectors and perhaps active shooter training and drills. [1]

A second article describes the violent intersection of delivering healthcare in Dhaka, Bangladesh and the dangerous consequences for health professionals trying to save lives in difficult settings! If you think your career and practice is difficult, read this article. [2] It was at this stage that Geoffrey and I added commentary to our Facebook postings.

We considered what sort of skills and attributes would be necessary to work in some of the contexts described above and I suggested a great degree of capability is required, along with resilience, sensemaking and wisdom. Work and travel requirements left our discussion there but we said we would come back to it. So with these thoughts in our minds Geoffrey signed off with a reminder to me that two thirds of humanity resides in the Asia Pacific where this Journal seeks to be relevant.

A further recent article focused my interest on the relevance of wisdom as an important and defining management capacity. This article was entitled 'Rethinking – put the "Ph" back in (the) PhD' and suggested that in the interest of humanity there needs to be a greater focus on philosophical thinking, logic, probability and ethics. [3]

Subsequently, I was listening to an academic commentator on the radio discussing global financial risks who made two relevant points. The first was that many of those charged with ensuring our fiscal and economic certainty lacked relevant experience and knowledge of the impact of interventions that had occurred before their life experience; and secondly, that in current economic academic programs the subject of economic history was no longer taught!

My immediate reaction to these comments was to wonder how a professionally trained person could act competently without knowledge of the context and the history within which they practise; to me understanding of context is very important.

On reflection I also realised that after five decades involved in the management of health services, it is evident that my younger colleagues of the current decade do not necessarily have the knowledge of what worked well in the past, nor is it adequately documented in research and curricula. So they are busily engaged in resolving complex issues and are often amazed when you suggest a potential solution from your historical repertoire. It is also evident from their approach that their education is strongly located in the rational, normative approach to management. In fact they are very much focused on the measurement of performance rather than the achievement of solutions or better and different ways of doing things.

This focus on measurement is often at the expense of being both strategic and achieving outcomes based on sound public policy, creating serious problems for us all. There has been a massive proliferation of measurement; extensive resources are consumed in examining measures without much evidence that dependence on this approach achieves effective change. [4] It is, of course an effective approach to controlling the status quo and ensuring both conformity and control of those within the system. It is also used to justify constant restructures without any rigorous evaluation of the success of the reform. While some focus within management on performance is understandable, it appears to be at the expense of any rigorous evaluative research, building on practices that work and consideration of future structures, agendas and strategy.

Measurement tells us that waiting times in emergency departments are unacceptable, but not why they occur or how easily or not they might be improved. We are told that

there are admissions to hospitals that are inappropriate or avoidable and we constantly hear that there are further efficiencies to be gained. Performance management answers the 'what' but rarely gives insight into the 'why' and 'how' to make use of the data. So in my view it reflects the fashions, tools, techniques and fads that populate much of contemporary management 'theory' that have seen 'performance' management replacing the concept that management is as much 'art' as 'science'. A rebalancing is required to embrace the concept that management theory is more to do with human endeavour in complex contexts and this requires different learning to that of the physical sciences. [5,6]

So if we are refining the health management curricula, education and training to the extent that we are taking the humanity out of PhDs and taking history and context out of economics to meet the market for rational, normative-focused managers, it begs the following questions. How are they going to acquire the skills to operate in complex and seemingly uncertain systems? And how can they gain the resilience and wisdom to lead and manage others? Naturally others have demonstrated similar concerns about modern management curricula where the emphasis is on being skilful in measurement rather than on skills in thinking and making judgement often with 'messy, incomplete, and inherent data'. [6, 7, p.529] This author emphasises 'the need for earlier and more widespread development of practical wisdom amongst managers'. [7, p.529]

The study by Gibson [7] provides definition to the term 'practical management wisdom' and recognises the importance of philosophy by including Aristotle's assertion that 'the person of good character perceives a situation rightly' and that management wisdom is a 'kind of knowledge' [7, p.530] and also a way of knowing, citing Halverson [8] as management wisdom being 'embodied in character and developed through habit'. [6, p.93] In an attempt to bring practical management wisdom to students and novice managers, Gibson develops a heuristic model for that purpose and concludes from the literature that wisdom is developed over time through reflection and experience, requires cognitive schemas but essentially involves character and vision and results from enabling elements operating as a whole. [7, p.531]

Some proponents of strategic management suggest that for it to be effective it requires distributed wisdom called 'phronesis' by Aristotle, the authors making an early connection between a management practice and underpinning philosophy. [8] Strategy is also worthy of being elevated to a level of some importance along with philosophy because like the philosophers, it emerged from those eras and is situated in the history of growth and decline of earlier Asian and European civilisations. It is important in management because it is about creating value for the organisation. It is created by humans and requires diversity of perceptions and insight. This supports the view of the authors under reference that strategy is dynamic and its practice is an art. So strategising requires insight, vision, and intuition and is reliant on experience. [10] In my view this approach is distinct from the normal practice of developing a strategic plan where the value of the plan is often completed before the ink is dry.

Aristotle's 'phronesis' considers contextual circumstances and is described as 'prudence, ethics, practical wisdom or practical rationality' all meant to be used 'to serve the common good'. [8] In recent work with Thai community hospital directors we were discussing the importance of value-based management and leadership and the importance of managing self, resilience, etc, when one of the participants asked if I was of Buddhist persuasion because the language used in the management context resonated with her Buddhism. So this similarity in the language reinforces to me that in the getting of wisdom and in being a skilful manager or leader a spiritual, not necessarily religious element is also required. Confucius maintains that 'wisdom entails righteousness and that the wise person studies and knows the Way (Tao)'. [11, p.602] This view is consistent with the view of philosophers over time focusing on goodness and humanity and clearly puts the attainment of wisdom in the context of doing what is right. [11]

The pursuit of wisdom by health managers requires experience, spirituality and passion. Wisdom is said to require action and passion and 'reflects the drive and the courage to overcome personal, social and institutional barriers in the name of implementing the 'right strategy'. [11, p.608] According to Mahatma Gandhi 'one must know what is right and to have the strength to do it.' [11, p. 608] Strong motivation provides the passion for an individual to take action and to realise value for the organisation. It is further suggested that individual wisdom becomes organisational through transformational leadership, culture and structure and the transfer of knowledge throughout the organisation. [11]

So do you agree with Professor Casadevall [3] that we need to reinforce the philosophy and humanity of the PhD? Do you agree with Professor Ghoshal who suggests that the offerings of business schools were in part culpable

in delivering bad management theory that denied the importance of morality and ethics? Ghoshal claimed that adopting the scientific approach and denying the importance of human intentionality led to a number of corporate disasters some time ago. The current paradigm will not be easily changed and Ghoshal warns against a foundation unit in philosophy and humanity as a solution. [6] It will require a deeper rethink of curricula by academics and also recognition by organisations that rational, one size fits all approach to developing managers is not working and that critical inquiry and an appreciation of diversity in experience and thinking is valuable.

So to conclude this discussion on the getting of wisdom perhaps we can return to Aristotle who says:

> *Hence, the virtuous person sees truly and judges rightly, since beautiful things appear as they truly are only to a person of good character. [12]*

Perhaps you might like to deliver a rejoinder to this editorial. If there are enough of you out there who share my interest in this area we could develop a special interest issue!

DS Briggs BHA(NSW), MHM(Hons), PhD(UNE), DrPH (NU-Hon), FCHSM, CHE, FHKCHSE
Editor

Acknowledgement: I would like to acknowledge and thank colleagues for the contribution they provided to me on an earlier draft of this published version.

References

1. Smith TA. Reducing workplace violence incidents. Health Facilities Management. American Hospitals Association; 2015. Available from: file:///E:/david%20files/Documents/MHAPJHM/MHAPJHM/Editorials%20&%20In%20this%20Issue%20etc/Wisdom/Hospital%20security%20_%20workplace%20violence%20reduction%20strategies.html.
2. Agrawal R. Showdown in Dhaka: health care in an extreme world. Global Health Now. John Hopkins Bloomberg School of Public Health; 2015. Available from: http://www.globalhealthnow.org/news/showdown-in-dhaka-health-care-in-an-extreme-world.
3. Casadevall A. Rethinking-Put the "Ph" back in PhD. John Hopkins Public Health Magazine. 2015; Summer. Available from: http://magazine.jhsph.edu/2015/summer/forum/rethinking-put-the-ph-back-in-phd/.
4. Blumenthal D, McGinnis JM. Measuring Vital Signs: An IOM report on core metrics for health and health care progress. J Am Med Assoc Viewpoint; published online April 28, 2015. Available from: http://www.commonwealthfund.org/publications/in-brief/2015/apr/iom-report-on-core-metrics .
5. Moynihan DP. The dynamics of performance management: constructing information and reform. Washington, DC: Georgetown University Press; 2008.
6. Ghoshal S. Bad management theories are destroying good management practices. Academy of Management Learning and Education. 2005;4(1):75-91.
7. Gibson PS. Developing practical management wisdom. Journal of Management Development. 2008;27(5):528-536.
8. Halverson R. Accessing, documenting, and communicating practical wisdom: the phronesis of school leadership practice. American Journal of Education. 2004;111(1):90-120.
9. Nonaka I, Toyama R. Strategic management as distributed practical wisdom (phronesis). Industrial and Corporate Change: 2007;16(3): 371-394.doi:10.1093/icc/dtm014.
10. Mintzberg H. Managers not MBAs: a hard look at the soft practice of managing and management development. San Francisco: Berrett-Koehler; 2004.
11. Bierly PE, Kessler EH, Christensen EW. Organisational learning, knowledge and wisdom. Journal of Organizational Change. 2000; 13(6):595-618.
12. Sachs J. Aristotle: Ethics. Internet Encyclopaedia of Philosophy. A peer-Reviewed Academic Resource available from http://www.iep.utm.edu/aris-eth/. ISSN 2161-0002 [cited 15 June 2015].

IN THIS ISSUE

The cover of this issue has been designed to reflect the Editorial's theme: 'The getting of wisdom'. The cover links the concept of philosophy, through some of the well-known early philosophers, to the role of health managers and currently accepted health management theory.

The Editorial makes the point that management is as much a practice of art as it is of science and that the links to philosophy present an important underpinning of contemporary management theory. It makes the important link between philosophy, humanity, wisdom, strategy, passion and spirituality that seemed to have been surpassed by a preoccupation with performance measurement and the production of the normative rational manager. It is meant to challenge us all to consider if this is an adequate response to what is demanded of managers and if some grounding in the humanities and critical inquiry might produce a better, well rounded health manager.

We are also fortunate to have in this issue a number of articles that focus on the health management role in terms of competencies and skills, tasks and characteristics, illustrating the fact that this Journal is building a sound knowledge base around health management practice and theory.

In the first article Isouard and Martins build on their previous contributions in a research article that presents an evidence-based framework for competencies and skills for managers in Australian health services. This article will no doubt add to the current knowledge base and other contemporary Australian and New Zealand health management competency research.

The second article again builds on perspectives of management in a review article by Coates and Howe describing key management and leadership tasks that are fundamental to staff wellbeing and retention in the context of combatting staff burnout in mental health contexts. In our third article Vaswani and colleagues provide a research article that analyses data from a 2008-2012 Medicine in Australia: Balancing Employment and Life (MABEL) longitudinal, population–based survey. This article focuses on medical doctors making the transition from a clinical role to a non-clinical role, predominantly managerial.

William (Bill) Lawrence AM, a life member of the College has provided us with a review of a new book and text with Day and Leggat as editors and an extensive list of author chapters, published by Cambridge Universal Press, entitled *Leading and Managing in Health Services – An Australian Perspective*. Bill describes the text as a 'how to' book and one that was ambitious in its scope and structure and suggests that it delivers much to the reader.

The next two articles make the link between good management, patient care, education and leadership. Wanaratwichit and colleagues in a research article describe an integrated network model of home-based care for people with disability in rural Thailand. It describes a model of care where community and other stakeholders are empowered in the provision, coordination and management of care. Ervin and Jeffrey provide a research article that looks at the self-management of chronic care and the implications for primary healthcare clinicians in supporting patients with that management.

McPhail and colleagues in their research article examine the changing face of healthcare accreditation in Australia in respect to the NSQHS standards development and the perspectives of some accredited providers in this space. Peterson and colleagues, in an analysis of management practice article, remind us about the often taken for granted clinical and economic value of health libraries in-patient care. They indicate that there is a substantial and growing body of evidence that health libraries are vital to the delivery of healthcare.

Our colleague Ayra provides a review article on the worth and wisdom of traditional discharge summaries given the rapid move to electronic records and how we might consider different approaches to that traditionally used. Finally our Librarian Burt provides another comprehensive offering of relevant readings.

RESEARCH ARTICLE

An Evidence-Based Framework: Competencies and Skills for Managers in Australian Health Services

J Martins and G Isouard

Abstract

This paper is concerned with competencies and skills that enhance the capacity of health service managers to handle changes that medical technology and other factors have brought about. The paper takes a strategic rather than an all encompassing approach to identify the systemic changes that have taken place in the last decade. Statistical analysis and other information available were used in this process. One of the reasons for this approach is to take a real-world perspective of contemporary health management issues as the underpinning of the research. The salient systemic changes identified are classified under three major categories: practice evolution, service capacity and inputs and structural changes in public sector administration. The methodology involves a framework that led from systemic changes to related management issues and thence to competencies and skills of relevance. The latter relied on the inventory of health service management competencies and skills identified by academic research.

The framework structure took into account the competence/skill domain and context. It led to groups of predisposing, enabling and transforming competencies and skills related to the management issues arising from the systemic changes identified. The findings will help examine strengths of current post-graduate courses in health service management. They also provide an agenda and opportunities for continuing education by relevant professional organisations.

Abbreviations: CBET – Competency Based Education and Training; HLA – Health Leadership Alliance; HLCM – Health Leadership Competency Model

Key words: Health service managers; competencies and skills; evidence-based framework; systemic changes.

Jo M Martins
Centre for Health Policy and Management
Macquarie University
Sydney, New South Wales, Australia

Godfrey Isouard
School of Health
University of New England
Armidale, New South Wales, Australia

Correspondence:
gisouard@une.edu.au

Introduction

Australian health services have experienced considerable changes over the last decade. These arise from the way services are delivered, from growth in use well above the rise in population and ageing, and the nature and quantity of input resources. Accordingly, health service managers face additional challenges to those usually dealt with.

The authors produced the first comprehensive inventory of health service managers in Australia and their characteristics as at 2006. [1-4] They have since updated this work with reference to 2011. [5] Although health service managers have higher education qualifications than managers on average in all industries in Australia, questions still remained about how their training and experience prepared them for the challenges posed by the substantial systemic changes taking place in the Australian health system.

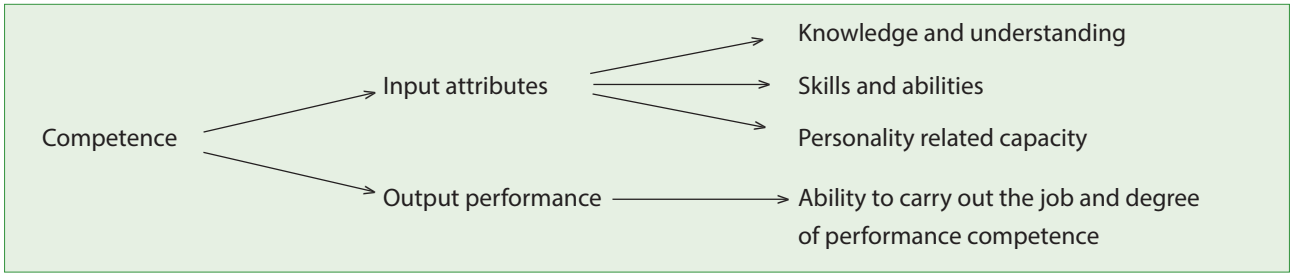
There is an abundant literature on health service management. Harris et al provided a comprehensive review of the wide range of views on management and managers' attributes in health services. [6] Among other things, they made reference to concerns expressed in the 1995 Karpin report that Australian managers needed to improve their people and strategic skills, to be broadened beyond technical specifications, to develop relationship-building skills across organisations, and encourage utilisation of diverse human resources. Over time, there has been a continuous effort to identify relevant skills to improve the management of health services and related training. The concern has been with skill attributes related to practical ability and proficiency of relevance to management. Some have been concerned with a specific aspect of management or skill while others searched for a set or sets of skills required. Eventually, the search extended beyond skills to management competencies that encompass not only skills but also knowledge, attitudes, values and abilities. This has been designated as the competency-based education and training (CBET) movement. [7] Crawford has addressed the reconciliation of the competence model (attributes-based) with the competence standards approach based on performance standards, and proposed an integrated model with input and output components as summarised in Figure 1. [9]

A review of the literature indicates there is no single process to identify the unique set of health service management competencies/skills. However, there are common traits in many of the approaches followed in the identification of sets of the perceived competencies/skills required and also considerable commonality in the identified sets or clusters. The identification process usually involves panels of experts and practitioners who identify a wide set of competencies/skills perceived to be relevant to the management of health services. The process might use Delphi and or focus groups type of consultation, as well as interviews. Then, a large group of competencies/skills may be given to a substantial group of practitioners for them to rank in order of the perceived importance to their work. Statistical analysis may be used to select a given set of the perceived most important competencies/skills. Further review and analysis may take place to group these competencies in clusters or domains in an overall framework. [9-15] The Health Leadership Competency Model (HLCM) and Directory of the United States Health Leadership Alliance (HLA) has been given wide exposure. [12,13] Five major competency domains were identified by HLA: communication and relationship management; leadership; professionalism; knowledge of the healthcare environment; and business skills and knowledge. These domains are made up of 300 competencies. The business domain contains 205 competencies concerned with financial management, human resources management, organisational dynamics and governance, strategic planning and marketing, information management, risk management, quality improvement, and other business skills and knowledge. The remaining competencies are more or less equally divided among the other four domains. [13]

A number of issues and cautions have been raised regarding the methods used and the fit of the sets of competencies at different times and circumstances. A recurring theme is that rapid changes that take place in health services require periodic review of the competencies/skills needed by managers and that the set of competencies/skills identified must be related to the real world. [16,17] Another issue is the need to have an overall and organic framework to organise the competencies/skills identified. Yet another important concern is that the competencies identified rely on the opinions of experts and or perceptions of relative importance of practitioners that can lead to systematic biases. [17]

In brief, the literature indicates that there are sets of competencies/skills that are capable of being learned and taught to enhance the performance of health service managers. The benefits of developing and using a framework to organise competencies is also apparent. The literature shows that there are considerable commonalities in the varied sets of competencies perceived to enhance

Figure 1: Input and performance competencies



the performance of health service managers; and that there are also differences in the relative importance given to them by senior and younger managers and academics. It suggests that there is need to relate the identification of competencies/skills to the real world and that those selected should be reviewed periodically in face of the rapid changes in health services and the environment in which they operate. It also demonstrates that there is no unique set of competencies agreed by all or a single approach in the identification of competencies required. Further, regardless of the sophistication of the survey techniques, metrics and statistical analyses used, the identification and selection of competencies involves perceptions and judgment.

The purpose of this paper is to review changes that have taken place in health services in the last decade in Australian and related management issues. It aims to provide evidence from the real world to identify competencies/skills that will enhance the performance of health service managers. This evidence-based approach is a departure from the usual pathway but follows recommendations that competencies/skills should be identified in a real world in a contemporary context. It will take advantage of the directory of competencies/skills identified in the literature to select competencies/skills of direct relevance to the management issues arising from systemic changes in Australian health services. These will be organised in a framework that reflects the operational attributes of the competencies/skills identified. This framework can be used to review current training programs in academic, on-job-training and continuing education settings to identify gaps and opportunities to enhance health service managers' capacity to handle the challenges they face.

Salient systemic changes

System and changes

To give an evidence underpinning and real world foundation, an examination has been made of systemic changes that have taken place in Australian health services in the last decade. The approach is based on the analysis of health services and their statistical manifestation in terms of resource use and outputs. The identification of health service practices selected follows a system approach. The system structure classifies providers of services as components of the whole system, as per the Australian Institute of Health and Welfare classification (Table 1). The selection of major providers relies on statistical analyses of resource use. Each of the components selected used more than 10% of all resource applied and together constituted 73% of the total in 2011: hospitals, medical services and pharmaceuticals.

Table 1: Service resource value as proportion of all recurrent resource use, Australia, 2010-11

HEALTH SERVICE	% TOTAL RECURRENT RESOURCES
Hospitals	40.2
Medical	18.2
Medicines	14.9
Dental	6.4
Community and other	5.1
Research	3.5
Other health practitioners	3.3
Aids and appliances	2.9
Administration	1.7
Public health	1.6
All services	100.0

Source: Australian Institute of Health and Welfare [17]

While in the ten-year period 2001-2011 the whole system resource use rose by 68% in real terms, the use by these three major components increased by 76%. [18] In other words, they grew relatively more than the system as a whole. This is followed by the analysis of changes in outputs of various providers in each individual major component for which there are statistical measures.

Major systemic changes

The analysis of resource allocation indicates that certain health services capture disproportionate shares of the resources used but also that the rates of growth of components vary. These features have been accompanied by developments in service delivery and administration. They have led to systemic changes that pose increasing challenges in health service management and demand for related competencies and skills. They have taken varied forms that could be classified under three major categories:

- Practice evolution
- Capacity and inputs
- Structural changes in the public sector

The characterisation of these systemic changes and related evidence are documented as follows.

Practice evolution

There have been major developments in medical services rendered in the last decade:

- Case-finding/screening
- Therapies
- Surgery

This has included greater efforts in case-finding and secondary prevention related to such conditions as cholesterolemia, diabetes, and breast, bowl, cervix and prostate cancer. [19-27] There has also been an increasing concern with undiagnosed depression. [20,28] The screening activity has had an impact on the use of diagnostic pathology and imaging services [19,21, 22, 23, 24] as well as examinations such as colonoscopy. [19] Another aspect of this practice has been the impact on therapies such as drug and radiation therapy. [22,28,29] Yet another major evolution in practice has been the result of changes in surgical technology that allow for day-only surgery, [30,31] such as lens procedures, some key-hole surgery and other procedures. Official statistics show the reflections of these salient changes.

The Australian population in the ten-year period 2001-2011 grew by about 15%. [32,33] Over that period, the volume of pathology services funded under Medicare for the resident population increased by 75%, diagnostic imaging by 55% and radiation therapy by 128%. [34]

In the case of prescription drugs subsidised by the Federal government (Pharmaceutical Benefits Scheme), the volume of lipid modifying agents rose by 92%, of psycho analeptics by 21%, and the number of people on the diabetic therapy scheme grew by 141%. [35,36]

During that ten-year period, the number of free-standing facilities in the private sector for day-only procedures increased by 45% and the number of their admissions by 143%. The volume of day-only admissions in the public and private sector grew by 64%. They constituted 58% of all admissions to public and private hospitals and free-standing, day-only facilities by 2011. [37-39] In the five-year period 2007-2012, population rose by about 8%, [40] admissions for renal dialyses grew by 224%, same-day lens procedures by 24%, and colonoscopies by 16%. [39, 41]

Capacity and inputs

Other major factors in the evolution of health services in Australia during the decade 2001-2011 have been changes in:

- Inpatient hospital capacity
- Personnel
- Labour and drugs costs

Although the number of beds in the public and private hospitals rose during the 10-year period, it did not keep pace with population growth. Over the decade, the number of hospital beds declined from 4.1/1,000 people in 2001 to 3.9/1,000 in 2011. [38,39]

During the same period (2001-2011) the number of medical practitioners grew by about 44% and the number of nurses by 35%. [42] This led to an increase from 2.5 medical practitioners per thousand people in 2001 to 3.1/1,000 in 2011. The number of nurses per thousand people also rose from 9.8/1,000 to 11.5/1,000. [32,33,42]

Another feature has been the rising costs of labour in hospitals that has been accompanied by the use of nursing agencies' temporary personnel to complement personnel employed on a more permanent basis. [43] The introduction of new and expensive drugs since 2003 has also been an issue as they represented about 20% of drug expenditures in 2010. [44]

Structural changes in public sector

Yet another factor that has affected the Australian health system is the frequent structural changes in the administration and regulatory mechanisms of health services at state government level:

- Frequent boundary changes of administrative health districts/areas [45, 46]
- Shifting responsibilities: central and peripheral [47, 48]
- New agencies and shifting responsibilities [49, 50]
- Changes in organisation structures [51]

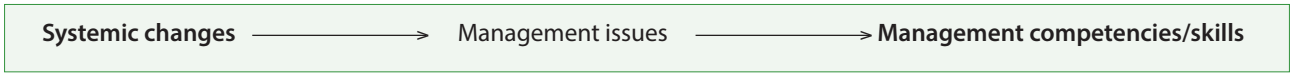
To these, another potential development might be added, with the possible change in Federal government funding of public hospitals using a case-funding approach. [52]

Method

The analysis of the salient systemic changes experienced in Australian health services in the past decade provides the premise for an evidence-based approach in the identification of relevant management competencies/skills to handle management issues arising from the systemic changes experienced.

The method involves a progression from system changes identified to management issues arising from them and thence to relevant management competencies/skills as described in Figure 2. This process leads to the identification of recurrent management competencies/skills in three major domains concerned with organisational design, process

Figure 2: Systemic changes, management issues and competencies/skills



management, and human resources management and communication. Ultimately, the identified competencies/skills are organised in a predisposing, enabling and transforming framework in accordance with the context of their operational attributes. The method follows a strategic rather than comprehensive approach to identify salient system changes, issues and focus on competencies/skills that are of importance in meeting current and emerging management challenges.

Framework

Competencies/skill framework: domain and context

The substantial evolution of the Australian health system arising from systemic changes documented previously raises considerable management issues. These are in addition to those that are the usual functions of health service management. They lead to the competencies/skills that should be given emphasis in the training of health service managers in the Australian context. A strategic rather than a comprehensive approach has been adopted to focus on the more salient features of the evolution.

The procedure clusters these competencies and skills into domains or fields of management activity and then placing them in the context of their operational purpose in the whole situation and environment (Figure 3).

The domains are concerned with three fields of management activity:

- organisational design
- process management
- human resources management and communication

These fields of management activity are carried out in contexts that contribute to the overall performance and require related competencies and skills.

There are some competencies and related skills that are relevant to create a management environment with characteristics that have been found to lead to enhanced management practices and outcomes. These could be described as predisposing competencies in that context.

Other competencies and skills are needed that evolve learning and development of management tools that are relevant to the implementation of practices that address given management issues. These could be described as enabling competencies in that context.

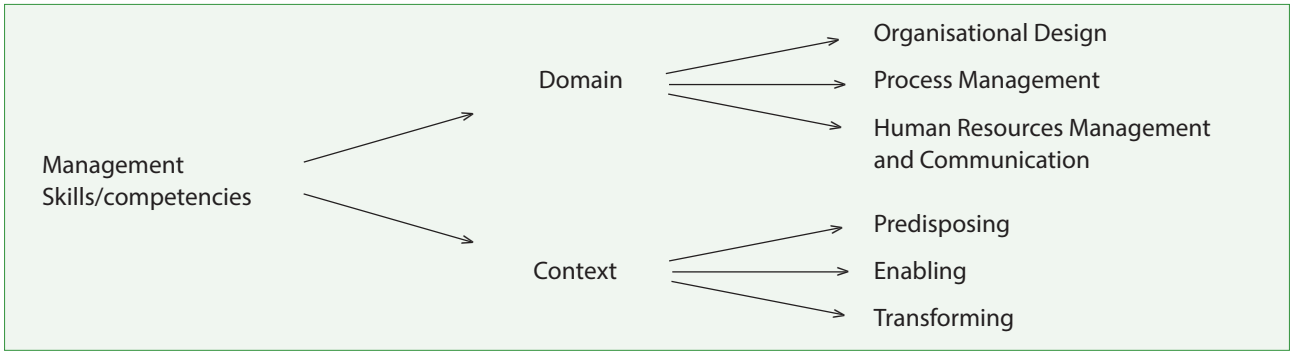
Predisposing and enabling competencies and related skills may be seen as necessary but not sufficient competencies to address identified management issues and require additional ones that complement and actually transform management objectives into outcomes. These could be described as transforming competencies in that context.

Figure 3 shows the framework structure in terms of the clustering of the competencies and skills into domains and their placement in the context of the operational purpose.

The authors have borrowed concepts and language from Calhoun et al and Stefl, [12,13] and also from Andersen's model. [53] However, the concepts have been changed and adapted to evolve an organisational framework for the identified management competencies/skills in contemporary Australian circumstances.

The identified competencies/skills should pass tests of the relevance of their application in addressing the identified management issues. However, they should not be considered to be the only pertinent but rather the salient ones. The classification of competencies/skills according to management context as predisposing, enabling and transforming must pass relevant tests. The first dichotomy is between transforming and predisposing and enabling competencies/skills. Predisposing and enabling competencies/skills are pertinent but would not by themselves lead to relevant management decisions and action that affect the actual resolution of the identified

Figure 3: Framework structure: domain and context



management issues. The application of these competencies/skills would fall short of the required action and may even be of little practical value unless they are associated with the action arising from the application of transforming competencies/skills. The second dichotomy is between predisposing and enabling. Predisposing competencies are aimed at building a managerial environment that the evaluation of management practices has shown to lead to effective management practices. They could be considered of a generic nature with a health services penchant. The enabling competencies/skills involve the creation or strengthening of managerial knowledge/information or tools of relevance to the identified management issues but fall short of those required in the actual resolution of the issues involved. There is a sequential and reciprocal relationship. Accordingly, predisposing and enabling are necessary but not sufficient competencies/skills, however, they are instrumental in the efficacy of the transforming competencies/skills.

Systemic changes, management issues and competency/skill domains

Management has often been described as the planning, organising, leading and controlling of business activities to achieve business goals. This might be seen as a sequential process, but these managerial functions may need to be exercised in a concurrent manner that adds to the complexity of management. They also take place in an environment that is going through continuous change with varying degrees of uncertainty due to exogenous and/or endogenous factors. Accordingly, to be effective in their functions, managers need sets of interdependent skills and competencies.

Following the evidence-based approach, present-day management issues have been identified. The identification of management issues from systemic changes depends to some extent on knowledge of the services involved, but the management issues identified should fit the salient features of those services concerned with their effectiveness and efficiency. The approach taken here has used the known operational aims and characteristics of particular services to lead to the salient management issues involved. The inventory of competencies/skills for the management of health services available from the vast literature on the subject provided a source of perceived competencies/skills of relevance to deal with the identified management issues.

The sequential process is presented in the form of a matrix that relates systemic changes to management issues, and in turn management issues to competencies/skills in the stated three domains (Appendix).

Figure 4: Organisational design domain: recurring competencies/skills

Recurring competencies/skills

The sequential approach followed resulted in the identification of competencies/skills to deal with management issues presented. Some of them recur in response to individual management issues. They can be grouped in accordance with the given domain of organisational design, process management and human resources management and communication (Figures 4, 5 and 6).

Figure 5: Process management domain: recurring competencies/skills

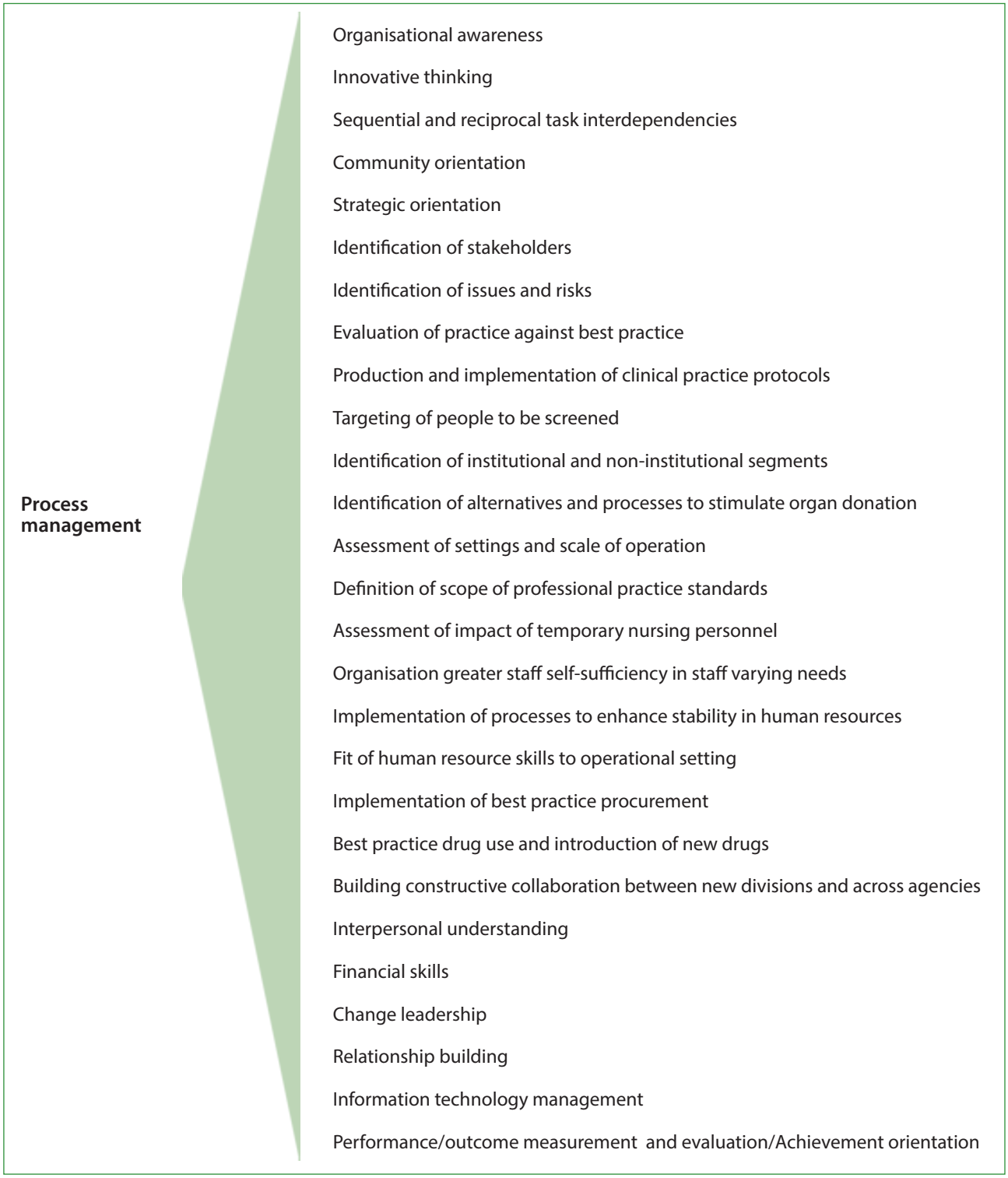


Figure 6: Human resources management and communication: recurring competencies/skills

Context: competencies and skills

These sets of competencies and skills in the relevant domains can in turn be classified according to the context in which they are applied following the criteria previously discussed. They are presented in the following matrix format that matches domain and context in a predisposing, enabling and transforming framework (Table 2).

Table 2: Predisposing, enabling and transforming framework of management competencies/skills, Australian health services

DOMAIN		CONTEXT	
	PREDISPOSING	ENABLING	TRANSFORMING
	ORGANISATIONAL DESIGN	*ORGANISATIONAL DESIGN*	*ORGANISATIONAL DESIGN*
Organisational design	• Organisational awareness • Innovative thinking • Sequential and reciprocal task interdependencies • Strategic orientation • Community orientation	• Evaluation of practice against best practice • Identification of stakeholders • Planning of processes to be followed and settings • Evaluation of organisation features leading to oscillation in staff needs	• Organisation of effective practice – protocols • Organisation design to accommodate inevitable varying staff levels • Organisation access and use assess – cost effectiveness • Organisation of remedial action

Table 2: Predisposing, enabling and transforming framework of management competencies/skills, Australian health services *continued*

DOMAIN		CONTEXT	
	PREDISPOSING	ENABLING	TRANSFORMING
	PROCESS MANAGEMENT	*PROCESS MANAGEMENT*	*PROCESS MANAGEMENT*
Process management	• Organisational awareness • Innovative thinking • Sequential and reciprocal task interdependencies • Strategic orientation • Community orientation • Interpersonal under-standing	• Evaluation of practice against best practice • Identification of issues and risks • Identifications institutional and noninst segments • Relationship building • Identification of alternatives and processes to stimulate organ donation organ donation • Assessment of settings and scale of operation • Assess impact of temporary nursing personnel • Definition scope professional practice standards • Financial skills • Change leadership	• Production of clinical practice protocols • Targeting of people to be screened • Organisation greater staff self-sufficiency in staff varying needs • Implementation of processes to enhance stability in human resources • Implementation of best practice procurement • Best practice drug use and introduction of new drugs • Building constructive collaboration between new divisions and across agencies • Performance/outcome measurement and evaluation/achievement orientation • Information technology management
	HUMAN RESOURCES MANAGEMENT AND COMMUNICATION SKILLS	*HUMAN RESOURCES MANAGEMENT AND COMMUNICATION SKILLS*	*HUMAN RESOURCES MANAGEMENT AND COMMUNICATION SKILLS*
Human resources management and communication skills	• Organisational awareness • Innovative thinking • Sequential and reciprocal task interdependencies • Strategic orientation • Community orientation • Interpersonal understanding	• Strategic thinking in personnel organisation • Relationship building • Talent development	• Mobilisation of appropriate specialists • Fitting of human resources to scale of operation and setting • Communication best practice and remedial action • Fit, adequacy of human resources to changing organisation structures

Limitations of the study

The strength of the study is that it uses a real-world approach to identify competencies/skills through the review of actual changes that have taken place in health services in the last decade. Although it uses an evidence-based approach, the study does have a number of limitations as it follows a strategic rather than a comprehensive approach. This tends to limit the number of management issues identified and related competencies/skills. The strategic approach may also limit the bounds of the service areas considered. The analysis relied on information available and may have not encompassed systemic changes and management issues of importance but not manifested in information in the public domain.

The sequential approach adopted provides understandable and unambiguous pathways, but the linear approach followed does not rank possible differences in the relative importance of the various competencies/skills identified. Also, it does not assess the relative value of the given competency/skill to managers at different stages of their career.

As in the case of most research in the literature on competencies/skills in health service management, it relies on perceptions and judgment of the relevance of the competencies/skills identified to the management issues presented.

The competencies/skills were identified in an Australian context and consequently they may not have global application. In addition, in a dynamic environment there will be changes taking place that will lead to the need to revise the salient competencies/skills identified periodically.

Discussion and conclusion

Perspective and focus

The predisposing, enabling and transforming framework of management competencies/skills identified provides an organic structure of complementary competencies/skills in different management domains and contexts. It does not profess to include all the basic competencies that managers need regardless of the field of endeavour. It focuses on salient competencies/skills of importance in the management of health services in the contemporary Australian context. Nevertheless, the approach has relevance to the identification of management competencies/skills based on real-world management issues in other environments and time frames.

Academic enhancement of management competencies/skills

The management competencies/skills identified arose from the examination of management issues stemming from systemic changes in Australian health services, in the last decade. A pertinent issue is whether these competencies/skills can be enhanced through academic training or need to rely on-the-job training. The areas concerned with innovative thinking, managerial behaviour style and practice, and the management of clinical services (beyond those competencies/skills in risk management and quality enhancement) are of obvious importance and are capable of academic training for health service managers.

Availability of didactic/training material

The lack of relevant material specific to health services to be used in academic training could be the subject of future research. A cursory examination of academic courses in Australia and overseas indicates that most competencies/skills identified are taught in other management courses, including, among others, sequential and reciprocal interdependencies and interpersonal understanding of importance in health services.

Relative value and crowding

Constraints on time and the wide range of issues in health service management pose yet another challenge, given the already extensive syllabuses. What is the added value of academic training in the competencies/skills identified to manage the issues arising from the systemic changes in the past decade? Is it a question of inertia or a real challenge to find time and resources to include them in academic training programs? These questions also raise issues of how learning processes might be organised in related competencies/skills modules or how they might be added to existing program units. This offers an agenda for future research and action.

Predisposing competencies and skills

The predisposing management competencies/skills identified need to be explained in terms of the related management issues. Accordingly, organisational awareness involves the identification of issues and practices with the purpose of the organisation. It is also concerned with current issues and their impact and pertinence to the structure of the organisation and its policies. Innovative thinking is the practical application of creative ideas and problem solutions that are new, useful and feasible. It also means the creation of an environment where risk taking is acceptable and new ideas are welcome. The competence/skill in managing sequential

and reciprocal task interdependencies is awareness of the importance of both internal and external interdependencies on health service outcomes, the development of formal and informal arrangements to enhance the sharing of relevant information, and coordination of tasks to ensure efficient and effective cooperation. Strategic orientation is the development of future direction (long term) and attention to the strengths and weaknesses of the organisation and to opportunities offered. Community orientation includes the identification of community characteristics, assessment of its needs and resources, and outreach and involvement with the community and other related resources. Interpersonal understanding means emotional intelligence and engagement, persuasive communication and managing workplace conflict.

Enabling competencies and skills

The enabling competencies/skills have a more apparent specific content. However, financial skills in this case relates to the measurement and assessment of the relationship between output service units and resources used and its implications to financial outlays.

Transforming competencies and skills

Most transforming competencies/skills also have a more specific content. Competencies/skills in performance/outcome measurement and evaluation, as well as achievement orientation involve the initiation and maintenance of systematic quantitative and qualitative analysis of outputs and outcomes of services in relation to goals set. In addition, competence/skill in information technology management is the alignment of information needs and strategies with information technology development and maintenance, assessment of what information technology adds to the effectiveness and efficiency of the organisation, enhancement of information technology usefulness through compatibility with external linkages including health service users, suppliers and other health service providers and interests.

Conclusion and transforming challenges

The evolved framework of predisposing, enabling and transforming competencies and skills deals with organic relationships of interdependent management competencies. It contains implicit feedback loops in management practices that are characteristic of learning organisations striving to enhance their performance. The features of the framework help identify the strengths of current post-graduate courses of health service management to support managers to respond to management issues they face in Australia. The framework also provides an agenda and opportunities for continuing education by relevant professional organisations.

Competing interests

The authors declare that they have no competing interests.

Appendix: Systemic changes, management issues and competencies/skills, Australian health services

SYSTEMIC CHANGES *(salient rather than comprehensive)*	MANAGEMENT ISSUES *(salient rather than comprehensive)*	MANAGEMENT COMPETENCIES/SKILLS *(salient rather than comprehensive)*
A. PRACTICE EVOLUTION	**A. PRACTICE EVOLUTION**	**A. PRACTICE EVOLUTION**
A.1 Case-finding/screening • Diagnostic pathology • Diagnostic imaging • Examinations	**A.1 Case-finding/screening** • Evidence of effectiveness of screening • People who benefit • Scale of operations • Organisation of operations • Effective and efficient practice • Remedial action	**A.1 Case-finding/screening** ***Organisational design*** • Sequential and reciprocal task interdependencies • Planning of processes to be followed and settings • Organisational awareness • Evaluation of practice against best practice • Organisation of effective practice • Organisation of remedial action ***Process management*** • Identification of issues • Production of clinical practice protocols • Targeting of people to be screened • Community orientation • Performance/outcome measurement and evaluation/achievement orientation ***Human resources management and communication skills*** • Mobilisation of appropriate specialists • Fitting of human resources to scale of operation • Interpersonal understanding • Communication best practice and remedial action • Relationship building • Community orientation
A.2 Therapies • Dialyses • Radiotherapy • Drug therapy	**A.2 Therapies** • Scale of operation and alternative settings • Equipment selection and maintenance • Personnel mix and training • Securing of organs for transplant • Coordination of radiotherapy and other therapies • Appropriateness and dosage adequacy overtime • Brand and alternative generic w/equivalence • Side effects due to interactions	**A.2 Therapies** ***Organisational design*** • Sequential and reciprocal task interdependencies • Planning of processes to be followed and settings ***Process management*** • Innovative thinking • Identifications institutional and non-inst. segments • Assessment of settings and scale of operation • Community orientation • Identification of alternatives and processes to stimulate organ donation • Performance/outcome measurement and evaluation/achievement orientation • Evaluation against best practice ***Human resources management and communication skills*** • Strategic orientation • Fit, adequacy of hum. resources to scale operation • Relationship building • Communication of best practice and remedial action

Appendix: Systemic changes, management issues and competencies/skills, Australian health services *continued*

SYSTEMIC CHANGES *(salient rather than comprehensive)*	MANAGEMENT ISSUES *(salient rather than comprehensive)*	MANAGEMENT COMPETENCIES/SKILLS *(salient rather than comprehensive)*
A. PRACTICE EVOLUTION	**A. PRACTICE EVOLUTION**	**A. PRACTICE EVOLUTION**
A.3 Surgery • Day-only procedures	**A.3 Surgery** • Scale of operations • Pre-op, Op. and Post-op. multiple settings • High-volume services and turnover • Multiple services and actors • Evaluation of outcomes affected by multiactors and settings	**A.3 Surgery** ***Organisational design*** • Sequential and reciprocal task interdependencies • Innovative thinking • Identification of stakeholders ***Process Management*** • Assess, appropriate settings and scale of operation • Change leadership • Information technology management • Performance/outcome measurement and evaluation/achievement orientation ***Human resources management and communication skills*** • Strategic orientation • Relationship building • Innovative thinking • Effective communication of best practice and remedial action
B. CHANGES IN CAPACITY AND INPUTS	**B. CHANGES IN CAPACITY AND INPUTS**	**B. CHANGES IN CAPACITY AND INPUTS**
B.1 Inpatient capacity • Actual reduction in beds per capita	**B.1 Inpatient capacity** • Alternatives to inpatient care • Admission/discharge practices	**B.1 Inpatient capacity** ***Organisational Design*** • Organisational awareness • Innovative thinking • Strategic orientation • Evaluation of practice against best practice ***Process Management*** • Identification of issues • Change leadership • Information technology management • Performance/outcome measurement and evaluation/achievement orientation ***Human resources management and communication skills*** • Strategic orientation • Effective communication of best practice and remedial action

Appendix: Systemic changes, management issues and competencies/skills, Australian health services *continued*

SYSTEMIC CHANGES *(salient rather than comprehensive)*	MANAGEMENT ISSUES *(salient rather than comprehensive)*	MANAGEMENT COMPETENCIES/SKILLS *(salient rather than comprehensive)*
B. CHANGES IN CAPACITY AND INPUTS	**B. CHANGES IN CAPACITY AND INPUTS**	**B. CHANGES IN CAPACITY AND INPUTS**
B.2 Personnel • Increase in number per capita and turnover	**B.2 Personnel** • Credentialing of professionals from other countries • High-volume induction of personnel in setting practices • Adequacy of skills for setting practices – including risk assessment	**B.2 Personnel** ***Organisational design*** • Innovative thinking • Planning of processes to be followed ***Process Management*** • Definition scope professional practice standards • Identification of issues and risks • Information technology management • Fit human resources skills to operational setting ***Human resources management and communication skills*** • Organisational awareness • Sequential and reciprocal task interdependencies • Strategic orientation • Effective communication of best practice and remedial action
B.3 Cost rises • Labour (eg, use of nursing agencies) • Drugs (new drugs)	**B.3 Cost rises** • Stability in stock of human resources • Assessment of cost-effectiveness of new drugs	**B.3 Cost rises** ***Organisational Design*** • Evaluation of organisation features leading to oscillation in staff needs • Innovative thinking in organisation design to accommodate inevitable varying staff levels • Organise access and use assess. cost-effectiveness ***Process Management*** • Assess. impact of temporary nursing personnel • Organisation greater staff self-sufficiency – in staff varying needs • Implementation of processes to enhance – stability in human resources • Implementation of best practice procurement • Best practice drug use and introduction of new drugs • Financial skills • Performance/outcome measurement and evaluation/achievement orientation ***Human Resources Management and communication skills*** • Strategic thinking in personnel organisation • Effective communication of best practice and remedial action

Appendix: Systemic changes, management issues and competencies/skills, Australian health services *continued*

SYSTEMIC CHANGES *(salient rather than comprehensive)*	MANAGEMENT ISSUES *(salient rather than comprehensive)*	MANAGEMENT COMPETENCIES/SKILLS *(salient rather than comprehensive)*
C. STRUCTURAL CHANGES IN PUBLIC SECTOR	**C. STRUCTURAL CHANGES IN PUBLIC SECTOR**	**C. STRUCTURAL CHANGES IN PUBLIC SECTOR**
• Frequent boundary changes in health districts (areas) • Shifting responsibilities: central and peripheral • New agencies and shifting responsibilities • Changes in organisation structures • Potential - new funding mechanism (case-funding)	• Transference and receiving of new responsibilities • Adaptation to changing relationships • Changing roles and skill fitting • Adoption to changing relationships • Changing roles and skill fitting • Matching service capacity and standard case-funding • Assessment of revenue enhancing and services provision	***Organisational design*** • Community orientation • Organisational awareness • Identification of stakeholders • Strategic orientation • Innovative thinking in re-arrangement of organisation design ***Process Management*** • Sequential and reciprocal interdependencies • Organisational awareness • Relationship building • Building constructive collaboration – between new divisions and across agencies • Performance/outcome measurement /achievement orientation • Financial skills • Interpersonal understanding ***Human resources management and communication skills*** • Strategic thinking in personnel organisation • Fitting adequacy of human resources – to changing organisation structures organisation • Effective communication of best practice and remedial action

References

1. Martins JM, Isouard G. Health Service Managers in Australia, Part 1: service, geographical and category distribution. A Pac J Health Manag. 2012a;7(2):16-28.
2. Martins JM, Isouard G. Health Service Managers in Australia, Part 2: age and sex characteristics. A Pac J Health Manag. 2012b;7(2):29-42.
3. Martins JM, Isouard G. Health Service Managers in Australia, Part 3: field of study, level of education and income. A Pac J Health Manag. 2012c;7(2): 43-58.
4. Martins JM, Isouard G. Health Service Managers in Australia, Part 3: hours worked, marital status, country of birth and Indigenous status. A Pac J Health Manag. 2012d;7(2): 59-70.
5. Martins JM, Isouard G. Health Service Managers in Australia, progression and evolution. A Pac J Health Manag. 2014; 9(2): 35-52.
6. Harris MG & Associates. Managing health services: concepts and practice. Sydney: Mosby Elsevier; 2006.
7. Calhoun JG, Davidson PL, Sinioris ME, Vincent ET, Griffith JR. Towards an Understanding of Competency Identification and Assessment in Healthcare Management. Qual Manag Healthcare. 2002; 11(1):14-38.
8. Crawford, L. Senior management perceptions of project management competence. International Journal of Project Management. 2005;23:7-16.
9. Wallick WG. Healthcare Managers' Roles, Competencies, and Outputs in Organisational Performance Improvement. J Healthc Manag. 2002;47(6):390-401.
10. White KR, Clement DG, Nayar P. Evidence-based healthcare management competence evaluation: alumni perceptions. J Health Adm Edu. 2006;23(4):335-349.
11. Leggat SG. Teaching and learning teamwork: competency requirements for healthcare managers. J Health Adm Edu. 2007; 24(2):135-149.
12. Calhoun JG, Dollett L, Sinioris ME, Wainio JA, Butler PW, Griffith JR, Pattullo A, Warden GL. Development of an interprofessional competence model of healthcare leadership. J Healthc Manag. 2008;53(6):375-389.
13. Stefl ME. Common competencies for all healthcare managers: the Healthcare Leadership Alliance Model. J Healthc Manag. 2008;53(6):360-373.
14. Lockhart W, Backman A. Healthcare management competencies: identifying the GAPs. Healthc Manag Forum. 2009:30-37.
15. Liang Z, Leggat SF, Howard PF and Koh L. What makes a hospital manager competent at the middle and senior levels? Aust Health Rev. 2013;37:566-573.

16. Griffith JR, Warden GL, Neighbors K, Shim B. A new approach to assessing skill needs of senior managers. J Health Adm Educ. 2002;20(1):75-98.
17. Schewchuk RM, O'Connor SJ, Fine DJ. Bridging the gap: academic and practitioner perspectives to identify early career competencies needed in healthcare management. J Health Adm Edu. 2006 23(4):367-392.
18. Australian Institute of Health and Welfare (AIHW). Health Expenditure Australia 2010-11. Canberra: AIHW; 2012a.
19. Australian Institute of Health and Welfare (AIHW). National Bowel Cancer Screening Program monitoring report 2008. Canberra: AIHW; 2008.
20. Australian Institute of Health and Welfare (AIHW). Key indicators of progress for chronic disease and associated determinants – Data Report. Canberra: AIHW; 2011.
21. Australian Institute of Health and Welfare (AIHW). Cancer in Australia – an overview 2012. Canberra: AIHW; 2012b.
22. Australian Institute of Health and Welfare (AIHW). Prostrate cancer in Australia. Canberra: AIHW; 2013a.
23. Australian Institute of Health and Welfare (AIHW). Cervical screening in Australia 2010-2011. Canberra:AIHW;2013b.
24. Australian Institute of Health and Welfare (AIHW). BreastScreen Australia monitoring report 2011-2012 Canberra: AIHW; 2014.
25. Hall DV, Cobcroft M, Ketelby JW. High levels of confusion for cholesterol awareness campaigns. Med J Aust. 2008;189(6):326-328.
26. Kirke A, Watts GF, Emery J. Detecting familial hypercholesterolaemia in general practice. Aust Fam Physician. 2012;41(12):965-8.
27. Gan SK, Chisholm DJ. The type 2 diabetes epidemic: a hidden menace. Med J Aust. 2001;175(2):65-6.
28. Australian Institute of Health and Welfare (AIHW). Mental health services in Australia 2001-02. Canberra: AIHW; 2004a.
29. Cancer Council Australia (CCA). Cancer treatment. 2015. Available from: www.cancercouncil.com.au. 2015. [Accessed 17/01/15].
30. Cleary M, Lloyd S, Maguire A. A national day only surgery benchmarking basket. Aust Health Rev. 1999;22(1):122-132.
31. New South Wales Department of Health (NSW). Interim Report of the Review of the Private Hospitals and Day Procedures Centres Act 1988. North Sydney: NSWDoH; 2002.
32. Australian Bureau of Statistics (ABS). Australian historical population statistics – 3. Population age-sex structure table 19. Canberra; ABS; 2004. Available from: www.abs.gov.au/ausstats/abs@.nsf/lookupresponses (Accessed 9/08/2005).
33. Australian Bureau of Statistics (ABS). Australian demographic statistics – June quarter 2013. Canberra: ABS; 2013a.
34. Department of Health and Ageing (DHA). Medicare statistics – June Quarter 2011. Canberra: DHA; 2011. Available from: www.health.gov.au (Accessed 3/05/13).
35. Department of Health and Ageing (DHA). Australian Statistics on Medicines 2001-2002. Canberra: DHA; 2004. Available from: www.health.gov.au (Accessed 2/03/14).
36. Department of Health and Ageing (DHA). Expenditure and prescriptions twelve months to 30 June 2012. Canberra: DHA; 2012. Undated. Available from: www.health.gov.au (Accessed 3/05/13).
37. Australian Institute of Health and Welfare (AIHW). Australian hospital statistics 2000-01. Canberra: AIHW; 2002.
38. Australian Institute of Health and Welfare (AIHW). Australian hospital statistics 2002-03. Canberra: AIHW; 2004b.
39. Australian Institute of Health and Welfare (AIHW). Australian hospital statistics 2011-12. Canberra: AIHW; 2013c.
40. Australian Bureau of Statistics (ABS). Australian demographic statistics – December quarter 2011. Canberra: ABS; 2012.
41. Australian Institute of Health and Welfare (AIHW). Australian hospital statistics 2006-07. Canberra: AIHW; 2008.
42. Australian Bureau of Statistics (ABS). Australian social trends, April 2013, doctors and nurses. Canberra: ABS; 2013b. Available from: www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features 20 April+2013 (Accessed: 3/05/13).
43. Auditor General for Western Australia (AG). A critical resource: nursing shortages and the use of agency nurses. Perth. 2002.
44. Treasury. Australia to 2050: future challenges. Circulated by the Hon. Wayne Swan MP, Treasurer of the Commonwealth of Australia, January 2010.
45. Boyce RA. Organisational governance structures in allied health services: a decade of change. Aust Health Rev. 2001;24(1):22-36.
46. Braithwaite J, Westbrook J, Iedema R. Restructuring as gratification. J R Soc Med. 2005;98:542-544.
47. Arya DK,. Shared Services Arrangement in a Decentralising Healthcare Environment - Will It Work? Aust Health Rev. 2011; 35(3):290-293.
48. Dwyer J. Australian health system restructuring- what problem is being solved? Aust New Zealand Health Policy. 2004;1:1-6. Available from: http://www.anzhealthpolicy.com/content/1/1/6 (Accessed: 11/05/13).
49. Foley M. Future Arrangements for Governance of NSW Health. NSW Government. Report of the Director- General Health. 2011. Available from: http://www0.health.nsw.gov.au/govreview/ (Accessed: 11/05/13).
50. Haas M. Continuing reform in NSW. Sydney: Australia Partner Institute: Centre for Health, Economics Research and Evaluation (CHERE), University of Technology; 2010. Available from: http://hpm.org/en/Surveys/CHERE_Australia/15/Continuing_reform_in_NSW.html (Accessed: 12/05/13).
51. Braithwaite J, Westbrook MT, Hindle D, Iedema RA, Black DA. Does restructuring hospitals result in greater efficiency? An empirical test using diachronic data. Health Service Manage Res. 2006; 19(1):1-12.
52. Health Policy Solutions. Activity based funding for Australian public hospitals: Towards a Pricing Framework. 2011. Available from: http://www.google.com.au/url?sa=t&rct=j&q=activity%20based%20funding%2C%20australia&source=web&cd=3&ved=0CD8QFjAC&url=http%3A%2F%2Fwww.ihpa.gov.au%2Finternet%2Fihpa%2Fpublishing.nsf%2FContent%2FEB8EFD07DF85BC70CA25798300033BE1%2F%24File%2FIHPA%2520Draft%2520Pricing%2520Framework_long%2520version.pdf&ei=V66VUbGSIKX-iAfOvoCYDg&usg=AFQjCNGK_o_hyjNvJfmLz2dITVUY2JlkAA&bvm=bv.46471029,d.aGc (Accessed 11/05/13).
53. Andersen RM. Revisiting the behavioural model and access to health care: does it matter. J Health Soc Behav. 1995;36 (1):1-58.

REVIEW ARTICLE

Combatting Staff Burnout in Mental Health: Key Managerial and Leadership Tasks that are Fundamental to Staff Wellbeing and Retention

D Coates and D Howe

Abstract

Mental health services in Australia are struggling to recruit and retain adequately qualified and experienced staff. High turnover rates and understaffing is a significant problem faced by mental health services around the world and the most common reason for this is high levels of stress and staff burnout in this field. Mental health workers are at high risk of burnout, and this not only impacts negatively on the employee, but also on the quality of the service for clients and the functioning of organisations. While staff stress and burnout can be, at least in part, attributed to the emotional demands of mental health work, organisational management and leadership style plays a critical role in protecting staff against burnout and creating workplace environments that buffer against it. This paper outlines a range of key managerial and leadership tasks that are important to staff wellbeing and retention. A discussion of these tasks is the focus of this paper.

Key words: **mental health services; staff retention; leadership tasks; burnout; staff wellbeing.**

Dr Dominiek Coates PhD
Children and Young People's Mental Health
Gosford, New South Wales, Australia

Deborah Howe
Children and Young People's Mental Health
Gosford, New South Wales, Australia

Correspondence:
Dominiek.Coates@health.nsw.gov.au

Introduction

Mental health services in Australia are struggling to recruit and retain adequately qualified and experienced staff. [1-3] There is a current and projected nationwide skills shortage in the mental health sector due to the undersupply of mental health professionals and a pressing need to update practice in the mental health workforce. [3] A mental health workforce study conducted by the Victorian Government Department of Human Services [2] found that annual staff turnover is up to 22 per cent for some occupational groups. This study concluded that turnover, rather than service growth, is anticipated to be the primary driver of the projected mental health workforce shortage.

High turnover rates and understaffing is a significant problem faced by mental health services around the world. [4] The most common reason for this is high levels of stress and staff burnout in this field. [5-9] Mental health workers have poorer mental health than other health workers and employees in general. [6,8,10] A significant body of literature makes sense of the high levels of staff burnout in human services because of the emotionally demanding nature of the work. Research consistently shows that employees in emotionally demanding roles have higher staff turnover and report significantly higher levels of stress and burnout than do other workers. [11-17] While the emotionally demanding nature of the work is a significant cause of stress, organisational stressors such as working in a bureaucratic environment are also important to understanding staff wellbeing. [18,19] The increased level of complexity in structure and work evident in contemporary mental health settings also play a critical role in understanding staff burnout. [20]

Staff burnout does not only impact on employee wellbeing, but also the quality of the service for clients and the functioning of organisations. [9,21] The creation of workplace environments that enhance staff wellbeing and staff retention is critical to the development of a sustainable mental health workforce. [22-26] A strong body of evidence suggests that effective leadership is crucial in combatting staff burnout and turnover; and, in turn,

increasing productivity and client satisfaction. [9,22,27-32] For example, a recent study by Green [9] found that organisational climate and leadership accounted for the greatest amount of variance in burnout among child and adolescent mental health workers.

While it is clear that staff burnout in mental health is a significant problem, and that management and leadership plays an important role in overcoming this, which managerial or leadership tasks and styles are associated with wellbeing is less understood. To identify managerial and leadership tasks that protect staff against burnout in mental health settings, the authors conducted a review of the literature. The purpose of the literature review was to identify ways in which to better protect clinical staff against burnout in a youth mental health setting. A narrative or traditional approach to the literature search was employed as described by Cronin, et al. [33] While the process was iterative, in first instance a range of databases including Medline, PsychLit, CINAHL, Evidence based Practice (including Cochrane Library) and PubMed were searched using the key words 'mental health' and 'leadership'. Following this, the reference lists of articles specific to leadership/management in mental health settings were examined for further suitable articles. The current paper outlines those management and leadership tasks that the authors find most pertinent and helpful to inform their practice as mental health managers.

Hire the right people for the right roles

To create work environments that facilitate staff wellbeing, it is important to hire the right people for the right roles. [26,34] While the importance of hiring the right people is evident, how to do so is less obvious. In first instance, the issue of staff shortages and staff supply needs to be addressed. [3] Staff shortages in mental health can partly be attributed to the continuing stigma associated with mental illness. Mental illness continues to be negatively portrayed by the media and this impacts negatively on individuals' willingness to work in mental health. [35] In addition, even though efforts have been made to address this in recent years, undergraduate and postgraduate courses do not adequately prepare and motivate students to work in mental health. [35] Possible strategies to improve supply are to liaise more closely with universities to better inform course development; to accept student placements to influence the preparedness of students for mental health work; to actively combat stigma associated with mental health work through marketing campaigns; and to promote the many positives associated with mental health work.

In terms of recruitment, it is important to look for candidates who are motivated by a desire to help others. While people leave mental health work for variety of reasons, one of the key reasons for staying reported in the literature is the meaningful nature of mental health work. [4] Workers who are passionate about mental health work and believe they can make a difference in people's lives are more likely to stay in their roles. [36,37] Personal commitment to the work and a belief that mental health work can make a positive difference to people's lives can allow workers to remain satisfied with their job even when the emotional demand of the work is high. [36,37] While it is important to recruit people who are passionate about mental health work, it is equally important that they understand the challenges involved. [34,35] It is crucial that applicants are not kept in the dark about the real nature of the work, and have a realistic understanding of the emotional demand of mental health work.

It is also important to consider the possibility that applicants may have pre-existing vulnerabilities, and how this can be best managed or supported. Some evidence suggests that high staff turnover in human services may be exacerbated by workers' emotional vulnerabilities. [6,19,38] A number of studies have found that mental health workers have high levels of anxiety, depression and stress compared to normative populations and workers in other professions. [6,7,39] However, it is difficult to determine whether psychiatric symptomatology is already present or whether this results from the emotionally demanding nature of mental health work. [6,7] Nonetheless, some evidence of pre-existing mental health problems comes from Firth-Cozens [40] who found that students who later became psychiatrists were significantly more depressed than those who become surgeons. It is possible that people who are vulnerable to mental illness are more likely to choose mental health work rather than another occupation because, unconsciously, they wish to work through personal problems by helping others. [7] Given that predispositions to mental illness, personality and socioeconomic resources are strong predictors of stress and burnout, [41,42] it is important to consider applicants' capacity to manage the emotional demands of mental health work, and how the organisation can best support the individual in managing the emotional impact of the work. While we do not argue that individuals with vulnerabilities should not be employed – to the contrary, these individuals offer a depth of understanding that individuals without such vulnerabilities may not – the way in which the organisation can best support these employees should be carefully considered and openly discussed. For example, while not

always practicable from an organisational or employee perspective, for some individuals being offered part time work may be an effective strategy to help protect against burnout.

Other recruitment strategies include identifying the nature of the workforce problem by interviewing supervisors and conducting exit interviews; taking a proactive approach when recruiting recent graduates; to provide flexible working environments with the possibility of part-time work; and ensuring human resource professionals are educated about the ethos of mental health services. [34,35]

Be 'engaging'

The leadership model with the strongest-evidence base of recent times is that of 'engaging leadership' developed by Professor Alimo-Metcalfe. [20] Building on her work published in 2001, a wealth of evidence now shows that an engaging leadership approach, modelled from the top of an organisation, provides the greatest opportunity for maximising potential at individual and collective levels, in particular in mental health settings. [20] Engaging leadership is based on integrity, openness and transparency, and genuinely valuing others and their contributions. [43] Leaders that adopt this leadership style relinquish their position of 'expert' and work with employees in a coaching and collaborative style. [20] Evidence shows that this style of leadership is significantly more effective than one focused on systems management, goals and processes. For example, a longitudinal study by Alimo-Metcalfe, et al [43] identified 'engaging leadership' to be positively related to wellbeing indicators such as fulfilment, self-esteem, self-confidence, and reduced levels of stress and emotional exhaustion. Furthermore, this research found that the extent to which the team had an 'engaging' culture differentiated those teams that were successful in meeting government targets from those that did not. [43]

While it is recognised that a range of different leadership styles impact positively on culture, the authors identified engaging leadership as particularly useful in mental health settings because of its similarity to recovery-oriented principles in mental health. [20] The term recovery refers to a significant shift away from a paternal approach to a more collaborative approach where people with a mental illness are encouraged and supported to make their own decisions when possible. [20,44] The recovery approach to mental healthcare is supported by a strong body of evidence that shows that it is key to 'success' and lies at the heart of most national and international reform agendas. [45,46] The national framework for recovery-oriented mental health services launched in 2013 provides a vital new policy direction to enhance and improve mental health service delivery in Australia. [44] Key characteristics of both engaging leadership and the recovery approach to mental healthcare are to consider the employee/client an expert of their own experiences/ context; to treat the employee/client as a 'whole person'; to have positive expectations of what the employee/client can achieve; to attend to and enquire about personal aspirations and to invite co-creation of vision of success and how it can be achieved. [20]

Even though adopting an 'engaging' leadership style may impact positively on work culture in many mental health settings, it is important to consider that mental health services sometimes have unfavourable leadership environments. Mental health services can have high levels of ambiguity and a lack of task clarity as well as high levels of cynicism or low morale. It is sometimes argued that these characteristics can benefit from a task-oriented leadership approach, or even in some circumstances from a degree of benevolent authoritarianism for a period in order to achieve change. [35] The point that is important here is that in terms of leadership there is no 'one size fits all'; the style of leadership needs to match the local need. It is unlikely that simply importing someone's idea of what constitutes good leadership into each and every mental health setting will be productive.

Regardless of the leadership 'style' as such, it is well established that getting to know staff individually is essential to effective leadership, and leaders need to make time to do so. [43] Supervisor behaviour, in particular an employee's relationship with his or her direct manager, is critical to staff wellbeing. Some scholars go as far as to argue that supervisor behaviour has a greater effect on employee wellbeing than other factors such as stress, life and work events. [47]

Offer direction and order while encouraging autonomy and initiative

Another important leadership task is to provide enough order to protect the organisation without undermining creativity and innovation. This means that effective leaders should provide employees with a sense of control over their work and freedom to manage their work in their own way while at the same time providing enough guidance and clarity on what is expected. [48]

Staff wellbeing is strongly associated with autonomy and the freedom to take initiatives [22,48,49] as well as job clarity and clear direction. [7,19,22,50] It is well established that role ambiguity and a lack of job clarity is a common source

of stress for mental health workers, and it is important that this is avoided. [7,19] At the same time, however, it is well recognised that people's ability to cope is affected by their perception of whether they have control over a given situation. When the individual feels the control lies elsewhere, he or she is more likely to be affected by stress. [50] While job clarity is important, clarity should not come at the expense of the freedom to take initiatives and work in innovative ways. It is crucial that leaders support staff to take initiatives and try new innovative ways of working. Allowing and supporting people to manage, rather than avoid, risk within acceptable parameters is an essential component of leading innovations. [51]

Providing both order and direction, while at the same time supporting staff to take control over their own work and take initiatives can be challenging. Managing the tension between staff autonomy and clear direction is particularly challenging in mental health settings given the complexity of mental health work and the tendency to work in multidisciplinary teams.

While it is commonly considered best practice for mental health services to employ multidisciplinary teams, this can make leadership particularly challenging. Those in multidisciplinary teams have to cope with differences in worldview, professional identity, pay, educational background, status and attitudes. [52] The different disciplines are trained separately and rarely encounter each other until they are expected to come together and work as a multidisciplinary team. [52] This issue needs strong leadership and careful management. It can be challenging for leaders and managers to support workers' commitment to their discipline and personal philosophies while at the same time building team cohesion and ensuring duties are performed in accordance with ever changing and sometimes contentious, best practice guidelines.

A common way to enhance multidisciplinary team working is by employing workers under generic positions with the expectation that they perform the same duties. While this can be helpful by creating a sense of 'order' and clear direction, it may signify a loss of professional autonomy for some staff. They find the blurring of professional boundaries stressful and disorienting and they may withdraw from team working in order to protect professional autonomy. [52] While in-depth strategies specific to managing multidisciplinary teams are outlined elsewhere [52] one strategy that can be used is to reassure staff that the perceived loss of professional autonomy will be balanced by other benefits (such as team cohesion) and that role clarity can be founded on the specific competencies and expectations associated with the role, rather than informed by the discipline.

Create an organisational culture of authenticity

The creation of positive workplace environments is another essential leadership task. Organisational culture is central to staff wellbeing. There is consistent evidence that overall organisational culture is significantly correlated with job satisfaction, motivation, performance and staff burnout. [53-55] Furthermore, evidence shows that organisational climate does not only impact on workers but extends to clients. [55, 56]

A study by Montgomery et al [55] identified burnout as the important link between organisational climate and client care. They found that workplace culture influences clinicians' stress, dissatisfaction and burnout, and that stressed, dissatisfied, and burned out clinicians deliver poorer quality of care.

One way to alleviate, or at least reduce, staff burnout is by creating workplaces that encourage the open expression of emotion. A study by Grandey et al [17] found that environments where workers do not have to regulate their emotions with co-workers and can express freely, buffer against the burnout experience from regulating emotions with clients. This study shows that the perceived acceptance of, and respect for, workers expressing felt emotions, especially when negative, has a positive impact on staff wellbeing. They call such environments 'climates of authenticity' and argue that such environments are a unique form of social support. Emotional support from supervisors and colleagues increases job satisfaction and buffers against burnout. [7,22,49,57]

This conflicts with the perception that burnout may be 'caught' from co-workers or supervisors on the job through negative communication. [58] It is important not to pathologise emotional expression by workers. Allowing, even encouraging, workers to share emotional responses helps minimise the effects of emotional labour, and in the long run, allowing employees to express their true emotions will be positive for both clients and organisations. [8,17,59] This challenges the argument that only positive emotional expression is healthy for group dynamics, [60] and the common expectation in health care of 'professional detachment'. [61]

It is important for leaders to establish a climate of trust or psychological safety where workers feel free to speak-up, to say what needs to be heard and not just what is wanted to be heard.

Inspire positive emotions

Another important leadership task is to facilitate positive emotions in staff. [31] While eliminating negative emotions is not possible, research suggests that increasing positive emotions in the workplace has positive effects on staff wellbeing. [62,63]

Positive emotions or 'fun at work' has been linked to increased productivity, creativity and both employee and patient/client satisfaction. [62,64,65] A study by Karl et al [64] found that those who experience greater levels of workplace fun have significantly lower emotional exhaustion as well as higher job satisfaction.

As noted, positive emotions can be nurtured by developing a workplace climate of trust or psychological safety. In addition, employees experience positive emotions when they are 'in flow' [62] and find meaning in their work. [29] It is important for leaders to ensure employees are 'in flow' or have a sense of feeling in the moment as much as possible. This can be facilitated by ensuring staff find their work meaningful and are given clear goals and regular feedback. The importance of meaningful work for staff wellbeing is well established. [29] As noted, while people leave mental health work for variety of reasons, one of the key reasons they stay is because of its meaningful nature. [4]

Leaders' positivity (hope, optimism, resilience, self-esteem) also impacts on employees' positivity or positive emotions, and has been found to be associated with employee performance and wellbeing. [31,66-68] Another way to promote positive emotions in employees is by promoting healthy lifestyles and daily exercise. Regular exercise, sufficient sleep and healthy diets promote positive emotions and protect against burnout. [50,69,70]

Encourage reflective practice though clinical supervision

Another important leadership task that improves staff wellbeing and protects staff against burnout is the promotion of self-reflective practice through regular clinical supervision. [7,36,50,71] In particular, supervision that encourages self-reflection and addresses issues around emotion management, and facilitates increased self awareness and emotional intelligence is fundamental to preventing burnout. [36,50,71,72] Central to combatting burnout are emotional resources such as self awareness and emotional intelligence. [50,71]

Achieve flexible working arrangements with regular time outs and job variety

It is also important for leaders to achieve flexible working arrangements where possible. Significant evidence underscores the importance of workplace policies and practices that support flexible working arrangements. [73] The relationship between flexible work environments and improved wellbeing is well established. [10,73] The provision of flexible working arrangements is part of a necessary strategy for improving work-life balance, and in turn, staff retention. [1]

Staff should also be able to manage their own time and workload so they can organise client contact when they feel emotionally available, and do paperwork or other tasks when they are feeling the strain of the work. [8] To facilitate this, in some cases it is helpful for mental health workers to have workloads that consists of both clinical and non-clinical roles such as research or teaching. [35] Even though this is not always possible, opportunities for interesting non-clinical work are powerful contributors to motivation and reduce burnout.

When there is limited desire or capacity for non-clinical work, it is important to ensure workers can get some distance from work that is emotionally demanding through regular breaks to 'time outs' to replenish emotional resources. [8,17,74,75] While talking to peers may be emotionally supportive to some, or may be an effective strategy at times, sometimes taking a short break is more effective. A five minute brisk walk can be helpful to restore emotional equilibrium.

In addition to improving wellbeing, it is well established that taking a break from emotionally demanding work improves subsequent performance. [76] Leaders need to balance workers' autonomy to manage personal workloads and time against service demand; this can be challenging when managing a busy mental health service with high client loads.

Support professional and career development

It is important for staff to remain intellectually engaged and challenged. [77,78] To encourage ongoing learning, mental health providers should provide appropriate professional development opportunities. [1] Staff should have regular access to professional development opportunities and be encouraged and supported to attend these. Lack of opportunities for training and development slows down the rate at which staff are being educated in more flexible ways of working. This is important for developing services, but it also has a strong effect on how positive staff feel about their jobs and their careers, and impacts on staff retention.

Similarly, ensuring staff have opportunities for career progression is also important as this encourages ongoing

learning and is associated with staff motivation. It needs to be easy for trained professionals to have career change options that will keep them in the health system. [51] It also needs to be easy to return to the health system after periods away, or to move into or across the health workforce from related fields. The health system needs to offer opportunities to acquire new skills and to work and train in new settings to maximise job satisfaction. [51]

It is crucial that managers understand the importance of professional development as a motivational tool. Personal development plans are a means of identifying and recording an individual's development needs. In some situations, redesigning jobs to capitalise on what is rewarding to employees may be an effective way to maintain staff motivation.

Offer rewards and staff recognition

Staff recognition and appreciation is another important protective factor against burnout. [38,77] The size of the reward should be carefully considered. [79] Grandey et al [79] argue that reward should be small in order to symbolise value and achievement, rather than economic gain because larger rewards may be seen as controlling as they create greater dependence on employers. Rewards that are seen as empowering or supportive are likely to enhance motivation and satisfaction, whereas those perceived as controlling may decrease motivation. [79,80]

The context around the reward also needs to be considered. Rewards in an autonomy supportive environment can motivate and satisfy employees, [80,81] while in a controlling environment the rewards may be met with resistance. [82] In addition, how the financial reward is distributed can modify its enhancing effect on satisfaction. [79,83] The reward should be presented to only a few employees by the leader of the organisation in a public ceremony to symbolise the value of the behaviour to the organisation. [79] Non-monetary forms of recognition include flowers, cards, candy, chocolate, movie tickets or tickets to sporting events, lunch out with colleagues, gift certificates for local stores or restaurants or public praise in a meeting, conference or newsletter. A monitoring system is needed to determine who earned the rewards, but performance monitoring by supervisors can increase work pressure, [84] and may make the reward appear controlling. [79] Using client feedback forms may be an effective way to identify who to reward.

Closely connected to staff recognition is the concept of organisational gratitude. Organisational gratitude fosters employee wellbeing. [85,86] Gratitude enacted in organisations is done so by members giving thanks to each other. [86] Leaders can institutionalise gratitude by publically expressing gratitude in team meetings, through company reward policies, and by creating thankful relationships amongst employees. [86] Furthermore, leaders who adopt a deeper life orientation of appreciation and move away from a deficit or complaint focus will be the leaders who truly inspire a culture of gratitude. [86]

Conclusion

Mental health workers are at high risk of burnout and this not only impacts negatively on employees, but also on the quality of client care and the functioning of organisations. Even though considerable evidence highlights the need to create work environments that protect workers from burnout, in particular in human services, how this is best achieved is not well understood, and this paper contributes to this literature.

Leadership style plays a significant role in staff wellbeing, and the leadership styles from the past are no longer effective in contemporary society. [20] The leadership style of the past – of management, control, protection of power, largely one-way communication or instruction, and the leader as 'expert' – don't cut it in today's workplace environments. [20] This paper outlines a number of managerial and leadership tasks that may assist towards the development of workplace environments that better protect against burnout and retain clinicians to provide continuity of care to clients. By attending to leadership tasks, mental health services may be able to improve organisational functioning, employee wellbeing, and client outcomes.

The management and leadership style of a mental health service does not only impact on the employee, but influences the style of the care that is provided to patients and their carers. [20] The treatment mental health workers receive from their leaders has a strong impact on how they treat their clients. [20] For example, by relinquishing their status as 'expert' and working collaboratively with employees, effective mental health leaders inspire and motivate clinicians to relinquish their own status of 'expert clinician' and adopt a recovery approach in their work. [20]

Competing interests

The authors declare that they have no competing interests.

References

1. Australian Health Workforce Advisory Committee. Australian Mental Health Nurse Supply, Recruitment and Retention. A joint project of the National Mental Health Working Group, Australian Health Workforce Officials' Committee and the Australian Health Workforce Advisory Committee. 2003.
2. Victorian Government Department of Human Services. Victoria's direct care mental health workers: the public mental health workforce study. Melbourne: Victorian Government Department of Human Services; 2005.
3. Freijser L, Brooks P. Addressing workforce challenges for youth mental health reform. Prepared for Orygen Youth Health Research Centre. The Australian Health Workforce Institute and The University of Melbourne; 2013.
4. Scanlan JN, Still M, Stewart K, Croaker J. Recruitment and retention issues for occupational therapists in mental health: Balancing the pull and the push. Aust Occup Ther J. 2010;57:102-10.
5. Barak MEM, Nissly JA, Levin A. Antecedents to retention and turnover among Child Welfare, Social Work, and other Human Service employees: what can we learn from past research? A review and metanalysis. Soc Serv Rev. 2001;75(4):625-61.
6. Walsh B, Walsh S. Is mental health work psychologically hazardous for staff? A critical review of the literature. J Ment Health. 2001; 10(2):121-9. PubMed PMID:4342380.
7. Lloyd C, King R, Chenoweth L. Social work, stress and burnout: a review. J Ment Health. 2002;11(3):255-65.
8. Mann S. 'People-work': emotion management, stress and coping. British Journal of Guidance and Counselling. 2004;32(2):205-21. PubMed PMID: 13121438.
9. Green A, Albanese B, Shapiro N, Aarons G. The roles of individuals and organisational factors in burnout among community-based mental health service providers. Psychol Serv. 2014;11(1):41-9.
10. Black Dog Institute. Workplace wellbeing: Fact Sheet. Black Dog Institute; 2012.
11. Brotheridge CM, Grandey A. Emotional labor and burnout: comparing two perspectives of 'poeple work'. Journal of Vocational Behavior. 2002;60:17-39.
12. Prosser D, Johnson S, Kuipers E, Dunn G, Szmukler G, Reid Y, et al. Mental health, 'burnout' and job satisfaction in a longitudinal study of mental health staff. Soc Psychiatry Psychiatr Epidemiol. 1999; 34:295-300.
13. Audit Commission. Recruitment and retention: a public service workforce for the twenty-first century. London: Audit Commission; 2002.
14. Naring G, Vlerick P, Van de Ven B. Emotion work and emotional exhaustion in teachers: the job and individual perspective. Educational Studies. 2012;38(1).
15. Bono J, Vey M. Toward understanding emotional management at work: A quantitative review of emotional labour research. In: Hartel CE, Zerbe WJ, editors. Emotions in organizational behavior. Mahwah, NJ: Erlbaum; 2005. p. 213-33.
16. Naring G, Briet M, Brouwers A. Beyond demand- control: emotional labor and symptoms of burnout in teachers. Work and Stress. 2006;20(4):303-15.
17. Grandey AA, Foo SC, Groth M, Goodwin RE. Free to be you and me: a climate of authenticity alleviates burnout from emotional labor. J Occup Health Psych. 2012;17(1):1-14.
18. Coates D, Howe D. The design and development of staff wellbeing initiatives: staff stressors, burnout and emotional exhaustion at children and young people's mental health in Australia. Administration and Policy in Mental Health and Mental Health Services Research. 2014.
19. Lewandowski CA. Organizational factors contributing to worker frustration: the precursor to burnout. J Socio Soc Welf. 2003; 30(4):175-85. PubMed PMID:12597809.
20. Alban-Metcalfe J, Black J. Making leaders of staff and patients. The Health Service Journal. 2013;123(6351).
21. Morse G, Salyers MP, Rollins AL, Monroe-DeVita M, Pfahler C. Burnout in mental health services: a review of the porblems and its remediation Administration and Policy and Mental Health Services Research. 2012;39:341-52.
22. Dollard MF, Dormann C, Boyd CM, Winefield HR, Winefield AH. Unique aspects of stress in human service work. Aust Psychol. 2003;38(2):84-91. PubMed PMID: 13936882.
23. Drach-Zahavy A. How does service workers' behaviour affect their health? Service climate as a moderator in the service behavior-health relationships. J Occup Health Psychol. 2010;15:105-19.
24. Le Blanc PM, Hox JJ, Schaufeli WB, Taris TW. Take care! The evaluation of a team-based burnout intervention program for oncology care providers. J Appl Psychol. 2007;92:213-27.
25. Diestel S, Schmidt K-H. The moderating role of cognitive control deficits in the link from emotional dissonance to burnout symptoms and absenteeism. J Occup Health Psychol. 2011; 16(3):313-30. English.
26. Liu Y, Prati LM, Perrewé PL, Ferris GR. The relationship between emotional resources and emotional labor: an exploratory study. J Appl Soc Psychol. 2008;38(10):2410-39.
27. Green A, Miller EA, Aarons G. Transformational leadership moderates the relationship between emotional exhaustion and turnover intention among community mental health providers. Community Ment Health J. 2013;49:373-9.
28. Kelloway EK, Turner N, Barling J, Loughlin C. Transformational leadership and employee psychological well-being. Work and Stress. 2012;26:39-55.
29. Arnold KA, McKee MC. Transformational leadership and psychological wellbeing: the mediating role of meaningful work. J Occup Health Psychol. 2007;12(3):193-203.
30. Kelloway EK, Barling J. Leadership development as an intervention in occupational health psychology. Work and Stress. 2010; 24:260-79.
31. Kelloway EK, Weigand H, McKee MC, Das H. Positive Leadership and Employee Well-Being. Journal of Leadership and Organizational Studies. 2013;20(1):107-17.
32. Kuappala L, Lamminpaa A, Liira J, Vainio H. Leadership, job well-being, and health effects: a systematic review and meta-analysis. J Occup Environ Med. 2008;60:904-15.
33. Cronin P, Ryan F, Coughan M. Undertaking a literature review: a step-by-step approach. British Journal of Nursing. 2008;17(1).
34. Kadis J. Workforce planning: how to recruit and retain mental health workers. Ilru Exchange and Human Services Research Institute; 2003. Contract No: 1.
35. The Sainsbury Centre for Mental Health. Finding and keeping: review of recruitment and retention in the mental health workforce. London: The Sainsbury Centre for Mental Health; 2000.
36. Mandell D, Stalker C, de Zeeuw Wright M, Frensch K, Harvey C. Sinking, swimming and sailing: experiences of job satisfaction and emotional exhaustion in child welfare employees. Child Fam Soc Work. 2013;18:383-93.
37. Ellett AJ, Ellis JI, Westbrook TM, Dews D. A qualitative study of 369 child welfare professionals' perspectives about factors contributing to employee retention and turnover. Child Youth Serv Rev. 2007; 29(2):264-81.
38. McLean J, Andrew T. Commitment, satisfaction, stress and control among social services managers and social workers in the UK. Administration in Social Work. 2000;23:93-117.

39. Balloch S, Pahl J, McLean J. Working in the social services: Job satisfaction, stress and violence. Br J Soc Work. 1998;28:213-31.
40. Firth-Cozens JA. The psychological problem of doctors In: Firth-Cozens JA, Payne RL, editors. Stress in health professionals. Chichester: Wiley; 1999.
41. Hakanen JJ, Bakker AB, Jokisaari M. A 35-year follow-up study on burnout among Finnish employees. J Occup Health Psychol. 2011;16(3):345-60. English.
42. Cotton P. Special Issue on Occupational Stress and Wellbeing. Aust Psychol. 2003;38(2):79-80. PubMed PMID: 13936873.
43. Alimo-Metcalfe B, Alban-Metcalfe J, Bradley M, Mariathasan J, Samele C. The impact of engaging leadership on performance, attitudes to work and wellbeing at work: a longitudinal study. J Health Organ Manag. 2008;22(6):586-98.
44. Department of Health and Ageing. A national framework for recovery- oriented mental health services: guide for practitioners and providers. 2013. Available from: http://www.health.gov.au/internet/main/publishing.nsf/Content/67D17065514CF8E8CA257C1D00017A90/$File/recovgde.pdf
45. Australian Health Ministers' Advisory Council. A national framework for recovery-oriented mental health services: policy and theory. Australian Health Ministers' Advisory Council; 2013.
46. Victorian Government Department of Health. Framework for recovery-oriented practice: literature review. Mental Health Drugs and Regions Division, Victorian Government Department of Health; 2012.
47. Gilbreath B, Benson PG. The contribution of supervisor behaviour to employee psychological well-being. Work and Stress. 2004; 18(3):255-66.
48. Morrison DL, Payne RL. Multilevel Approaches to Stress Management. Aust Psychol. 2003;38(2):128-37. PubMed PMID: 13936903.
49. Noblet A. Building health promotion work settings: Identifying the relationship between work characteristics and occupational stress in Australia. Health Promot Int. 2003;18(4):351-9.
50. Fearon C, Nicol M. Strategies to assist prevention of burnout in nursing staff. Nursing Standard. 2011;26(14):35-9.
51. Health Workforce. National Health Workforce Innovation and Reform Startegic Framework for Action 2011-2015. Health Workforce Australia; 2011.
52. Mental Health Commission. Multidisciplinary team working: from theory to practice. Discussion Paper. . Dublin: Mental Health Commission; 2006.
53. Parker CP, Baltes BB, Young SA, Huff JW, Altman RA, Lacost HA, et al. Relationship between psychological climate perceptions and work outcomes: A meta analytic review. J Organ Behav. 2003; 24(4):389-416.
54. Patterson M, Warr P, West M. Organizational climate and company productivity: the role of employee affect and employee level. J Occup Organ Psychol. 2004;77(2):193-216.
55. Montgomery A, Panagopoulou E, Kehoe I, Valkanos E. Connecting organisational culture and quality of care in the hospital: is job burnout the missing link? J Health Organ Manag. 2011; 25(1):108-23. PubMed PMID: 859633612;21542465. English.
56. Wakefield BJ, Blegen MA, Uden-Holman T, Vaughn T, Chrischilles E, Wakefield DS. Organizational culture, continuous quality imporvement and medication administration error reporting. Am J Med Qual. 2001;16(4):128-34.
57. de Jonge J, Le Bland PM, Peeters MCW, Noordam H. Emotional job demands and the role of matching job resources: a cross-sectional survey study among health care workers. Int J Nurs Stud. 2008; 45:1460-9.
58. Bakker A, Schaufeli WB. Burnout contagion process among teachers. J Appl Soc Psychol. 2000;56:2289-308.
59. Bakker A, Heuven E. Emotional dissonance, burnout, and in-role performance among nurses and police officers. International Journal of Stress Management. 2006;13:423-40.
60. Fineman S. On being positive: concerns and counterpoints. Acad Manage Rev. 2006;31:270-91.
61. Lewis P. Suppression or expression: An exploration of emotion management in a special care baby unit. Work, Employment and Society. 2005;19:565-81.
62. Fullagar C, Kelloway EK. 'Flow' at work: an experience sampling approach. J Occup Organ Psychol. 2012;82:595-615.
63. Fredrickson BL, Branigan C. Positive emotions broaden the scope of attention and thought-action repertoires. Cognition and Emotion. 2005;19:313-32.
64. Karl KA, Peluchette JV, Harland L. Is fun for everyone? Personality differences in healthcare providers' attitudes toward fun. J Health Hum Serv Admin. 2007;29(4):409-47. PubMed PMID: 25555195.
65. Lundin SC, Paul H, Christensen J. Fish!: A proven way to boost morale and improve results. 2003.
66. Norman SM, Avolio BJ, Luthans F. The impact of positivity and transparency on trust in leaders and their perceived effectiveness. Leadership Quarterly. 2010;21:350-64.
67. Avey JB, Avolio BJ, Luthans F. Experimentally analysing the impact of leadsership positivity on follower positivity and performance. Leadership Quarterly. 2010;22:282-94.
68. Avey JB, Hughes LW, Norman SM, Luthans F. Using positivity, transformational leadership and empowerment to combat employee negativity. Leadership and Organisation Development Journal. 2008;29:110-26.
69. Espeland KE. Overcoming burnout: How to revitalize your career. J Contin Educ Nurs. 2006;37(4):178-84.
70. Soderstrom M, Jeding K, Ekstedt M, Perski A, Akerstedt T. Insufficient sleep predicts clinical burnout. J Occup Health Psychol. 2012;17(2):175-83. English.
71. Blomberg K, Sahlberg-Blom E. Closeness and distance: A way of handling situations in daily care. J Clin Nurs. 2007;2:244-54.
72. Jack K, Miller E. Exploring self-awareness in mental health practice. Mental Health Practice. 2007;12(3):31-5.
73. Moen P, Kelly EL, Lam J. Healthy Work Revisited: Do Changes in Time Strain Predict Well-Being? J Occup Health Psychol. 2013; 18(2):157-72. English.
74. Queensland Government. Workplace Health and Safety Queensland: Work demands. Department of Justice and Attorney-General.
75. Muraven M, Shmueli D, Burkley E. Conserving self-control strength. J Pers Soc Psychol. 2006;91:524-37.
76. Trougakos JP, Beal DJ, Green SG, Weiss HM. Making the break count: an episodic examination of recovery activities, emotional experiences, and positive affective dispalys Acad Manage Rev. 2008;51:131-46.
77. McCarthy G, Almeida S, Ahrens J. Understanding employee well-being practices in Australian organisations. Int J Health Wellness Soc. 2011;1(1):181-98.
78. O'Donnell M. Definition of health promotion 2.0: embracing passion, enhancing motivation, recognizing dynamic balance, and creating opportunities. Am J Health Promo. 2009;24(1).
79. Grandey AA, Chi N-W, Diamond JA. Show me the money! Do financial rewards for performance enhance or undermine the satisfaction from emotional labor? Personnel Psychology. 2013; forthcoming:1-43.

80. Gagne M, Deci EL. Self-determination and work motivation. J Organ Behav. 2005;26:331-62.
81. Gagne M, Forest J. The study of compensation systems through the lens of self-determination theory: Reconciling 35 years of debate. Can Psychol. 2008;49(3):225-32.
82. Grandey AA. 'The show must go on': surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. Acad Manage J. 2003;46(1):86-96.
83. Mickel AE, Barron LA. Getting 'more bang for the buck': symbolic value of monetary reward in organizations. Journal of Management Inquiry. 2008;17(4):329-38.
84. Eisenberger R, Aselage J. Incremental effects of reward on experienced performance pressure: positive outcomes for intrinsic interest and creativity. J Organ Behav. 2009;30:95-117.
85. Cameron K. Effects of virtuous leadership of organizational performance. In: Donaldson SI, Csikszentmihlyi M, Nakamura J, editors. Applied positive psychology: Improving everyday life, health, schools and society. East Sussex: Routledge; 2012.p.171-83.
86. Waters L. Predicting Job Satisfaction: Contributions of individual gratitude and institutionalised gratitude. Psychology. 2012; 3(12A):1174-6.

RESEARCH ARTICLE

Characteristics of Doctors Transitioning to a Non-Clinical Role in the MABEL Study

N Vaswani, H Eyre, W C Wang and C Joyce

Abstract

Objective: To investigate the characteristics and satisfaction of medical doctors transitioning from a clinical into an entirely non-clinical role

Design and setting: Wave 1 to Wave 5 data from 2008-2012 in the Medicine in Australia: Balancing Employment and Life (MABEL) longitudinal, population-based survey were analysed.

Participants: Medical doctors including general practitioners (GPs), specialists, specialists in training (SIT) and hospital non-specialists (HNS). Hospital non-specialists represent doctors working in a hospital who were not enrolled in a specialty training program. The total number of participants surveyed across the 5 waves was 15,195 doctors.

Main outcome measures: The number of medical doctors making the transition from a clinical role to a non-clinical role from one wave of data to the subsequent wave of data. Individuals who responded 'Yes' to the question 'Are you currently doing any clinical medical work in Australia?' were defined as working in a clinical role. Individuals who stated that they were 'Doing medical work in Australia that is non-clinical' were defined as working in a completely non-clinical role. Each doctor's characteristics while partaking in clinical work prior to making the change to a non-clinical role were noted.

Results: Over 5 years, there were a total of 498 individuals who made the transition from a clinical role to a completely non-clinical role out of a possible 15,195 doctors. Increasing age was the strongest predictor for transition to a non-clinical role. With regards to doctor type, specialists, hospital non-specialists and specialists-in-training were more likely to make the transition to a totally non-clinical role compared to GPs. There was minimal evidence of a relationship between lower job satisfaction and making a transition, and also between higher life satisfaction and making a transition.

Conclusions: Understanding the characteristics of, and reasons for non-clinical career transition are important for workforce training, planning and development.

Key words: Non-clinical; workforce; medicine; transition; MABEL; doctors.

Nitin Vaswani*
Harris Eyre
Psychiatry
University of Adelaide
Adelaide, South Australia, Australia.
Semel Institute of Neuroscience and Human Behavior
University of California
Los Angeles, California, United States.
Wei Chung Wang*
Catherine Joyce*

Correspondence:
nit33v@gmail.com

* School of Public Health and Preventive Medicine
Monash University
Melbourne, Victoria, Australia.

Introduction

National health workforce modelling indicates that there is currently an oversupply of doctors with a concomitant shortage of advanced training positions, and this trend will continue for the foreseeable future. [1] According to Health Workforce Australia (HWA), in 2025 there will be an oversupply of 2,812 doctors and a shortage of 1,265 vocational medical training positions. [1] Despite the significance of these findings, HWA's workforce projections fail to depict the totality of current market trends in the medical workforce. Indeed, their projections do not consider the non-clinical duties of medical doctors in the workforce. Non-clinical roles fall into two categories with common/traditional roles including teaching, staff appraisal, financial management, continuing professional development and research, [2]

while uncommon/non-traditional roles may involve health economics, business consulting, bioengineering, law, journalism and entrepreneurship. [3] We believe current and future non-clinical roles signify a major factor in the Australian medical workforce and these factors need to be better explored and detailed. Indeed, recent published data indicate that non-clinical activities make up about 16% of the average Australian doctor's work week. [4]

Market pressures may be increasingly compelling doctors to increase their time spent in non-clinical career endeavours and decrease their time in clinical work. Doctors working in completely non-clinical sectors perform duties outside their area of principal clinical expertise. [5] Anecdotally, these types of careers are becoming more common and publicised not only among senior clinicians who commonly adopt teaching and research positions at major institutions, but also among young residents and registrars. [6] Recently, there has been a concerted effort to attract more doctors into non-clinical roles, specifically medical research and innovation, because these fields have been highlighted as a vital component toward the modernisation of healthcare systems. [7] Residents and registrars make up a large part of the medical workforce and deliver a large proportion of patient care, especially in the nation's large public hospitals. These young doctors have the lowest job satisfaction and highest working hours compared to other doctors in a clinical setting, [8] and this may influence a shift toward complete non-clinical duties. This transformation of traditional clinical roles will have significant implications on the Australian healthcare system, specifically when it comes to meeting the clinical needs of the society.

Modern medical schools are now encouraging doctors to enhance their skills in non-clinical areas. Recent studies indicated that medical leadership roles do not appeal to a lot of doctors and are sometimes viewed to be in direct competition with their principle interests. [9-11] This has led medical schools to develop leadership programs in conjunction with other faculties such as business schools and engineering schools to enable medical students to excel in a wider range of fields upon graduation. [12] Medical curricula have also expanded to include bio-entrepreneurship classes and have begun to encourage medical graduates to accept internship positions in the field of biotechnology and development. [13] In the United States, the number of medical schools offering combined Doctor of Medicine (MD)/Master of Business Administration (MBA) degrees has increased dramatically over the past 20 years with a majority of these graduates settling into non-clinical roles as their careers progress. [14] Furthermore, medical schools are also teaching health policy to medical students in order to facilitate their participation in the political process. [15] These leadership and non-clinical skills will serve students well as they attempt to develop a diversified medical career. Medical careers can follow a lateral course and non-clinical activities are part of a framework which enables a doctor to branch out his/her career. Indeed, general practitioners may immerse themselves in policy development, harness their entrepreneurial spirit by creating several practices or adopt a completely non-clinical role when faced with the predictability of exclusively clinical work. [16] These non-clinical activities may enhance a specific general practitioner's job satisfaction [17] and it is worth exploring the reasons why these individuals choose to transition into non-clinical roles. From a population-based perspective, it is currently not known how many medical doctors transition from clinical to outright non-clinical roles and it is worthwhile to identify the factors that drive these doctors to make the transition. Furthermore, in order to meet the clinical demands of the community, we need to ascertain whether these medical doctors are being forced to diversify their work profile due to market pressures or whether it is a transition they select freely.

National medical labour force data shows that, in 2012, 6% of registered medical practitioners work in a primarily non-clinical role. [18] This includes 1.5% of registered doctors who did not identify as belonging to one of the four clinical groups, 2.7% of those in the GP group, 2.4% of hospital non-specialists, 7.5% of specialists and 3.6% of specialists-in-training. [18] Those in the clinician groups are likely to be combining their primary non-clinical role with a small amount of clinical work.

There is currently no information on what drives doctors to participate in non-clinical work or switch careers to adopt a completely non-clinical role. It may be due to higher rates of mental distress associated with clinical work compared to non-clinical work. [19] Another reason could be that once doctors reach the peak of the medical 'corporate ladder', as in they complete their fellowship and become consultants, they would like to pursue interests that are more in line with their personal values. [20] This line of thought is highlighted by a 2005 Productivity Commission report stating that there continues to be serious issues in the recruitment and retention of healthcare professionals as clinical work simply does not allow them to continue to improve and utilise their wide variety of skills. [21] Although market competition among GPs and specialists remains moderate and low

respectively, [22,23] the competition for advanced training positions will rise significantly in the coming years due to a shortage of positions. The competition trends among specialists are artificially suppressed, as medical colleges reduce competition by limiting the number of new registrars allowed to enter into a training program. [24] These market trends may perhaps be paving the way for more and more doctors to transition into non-clinical posts, and there has been a clear rise in interest among medical students to pursue non-clinical careers. [25]

This paper aims to chart the characteristics of doctors transitioning into a completely non-clinical role, study transition trends among doctors from clinical to non-clinical roles across several years, and to determine any specific drivers, which influence doctors to transition into a solely non-clinical position. Utilising data collected in the MABEL longitudinal survey, the paper aims to identify whether overall job and life satisfaction as a clinician, age, gender and/or doctor type affect whether doctors make the transition. At present, there are limited data on the characteristics of doctors that engage strictly in non-clinical work, and what factors have influenced them to pursue this career path. Furthermore, it would be prudent to determine whether dissatisfaction as clinicians is driving these individuals to pursue other career options.

Methods

This study analysed data from Wave 1 (2008) to Wave 5 (2012) of the Medicine in Australia: Balancing Employment and Life (MABEL) longitudinal survey of doctors. These doctors included GPs, specialists-in-training, hospital non-specialists and specialists registered with the Medical Board of Australia and participating in the Australian medical workforce who received the survey via mail. The Faculty of Economics and Commerce Human Ethics Advisory Group, University of Melbourne and the Monash University Standing Committee on Ethics in Research Involving Humans approved the data collection method of the study. These methods were discussed and published in several earlier papers. [26,27] Each wave generated a similar number of respondents with wave 1 data including 10,498 doctors, wave 2 (n = 10,381 doctors), wave 3 (n = 10,078 doctors), wave 4 (n = 9973 doctors), and wave 5 (n = 10,916 doctors). The study has a longitudinal design which includes a panel of doctors responding at each wave, combined with 'top-up' samples of new doctors added at each wave. [27] The total number of doctors surveyed across waves 1 to 5 equalled 15,195 individuals.

Measures

The outcome of a transition to non-clinical work was measured from one wave to the subsequent wave, with four potential transition points across the five waves of data. By design, all doctors in wave 1 of the MABEL survey were in clinical practice at that time. In waves 2 to 5, clinical practice status was indicated by a positive response to the following question: Are you currently doing clinical work within Australia? Those responding in the negative to this question were directed to further options to describe their current working status, and the outcome variable of transition to non-clinical work was measured with a positive response to the question: Current situation: Doing medical work in Australia that is non-clinical. A doctor who responded that their current situation was: Doing medical work in Australia that is non-clinical and had reported being in clinical practice the previous wave was recorded as making a transition to a non-clinical role.

Variables included to investigate their association with doctors' career change were: age, gender (male=0, female=1), co-habitation status (Are you currently living with a partner or spouse? no=0, yes=1), overall job satisfaction, with a 5-point Likert scale (from very dissatisfied=0, to moderately dissatisfied=1, not sure=2, moderately satisfied=3, very satisfied=4), life satisfaction, with a 10-point response options (from completely dissatisfied=1 to completely satisfied=10), and doctor type (GP=1, specialist=2, specialist in training=3, hospital non specialist=4), which was dummy coded for the current analysis. All covariates were measured at wave 1, or at the entry-point to the survey for those in top-up samples.

Analysis

In order to investigate whether career transition occurs, when it is most likely to occur, and how transition occurrences vary over time, discrete time survival analysis was used. The data were prepared as outlined by Muthén and Masyn. [28] A score of 0 reflected no transition (ie, continued clinical practice) and a score of 1 designated a transition occurrence (to a non-clinical role), with the subsequent years being treated as missing due to having experienced the event. In the discrete time survival analysis model, the four binary time-specific event indicators (ie, each pair of consecutive waves) were regressed on the set of covariates.

Discrete time survival analysis was carried out with Mplus version 7.2, [29] using the MLR (Robust Maximum Likelihood) estimation method, with results reported as Odds Ratios.

Results

Respondent characteristics are summarised in Table 1. The data included over one third (34%) of specialists and 30.9% of GPs, followed by 23.7% of hospital non-specialists and 10.8% of specialists in training. Over 30% of the doctors are aged younger than 35 years, 10%-14% aged between 35 to 54 years and 3%-8% aged between 55 to 70+ years. The majority were male doctors (55%) and 74% of doctors lived with a partner or spouse. Nearly 84% of doctors reported overall job satisfaction as moderately or very satisfied. Lastly, the mean score of life satisfaction was 7.36 with a standard deviation of 1.65.

Table 1: Respondent profile across all waves

	CATEGORY	n (%)
Doctor type	GP	5099 (30.9)
	Specialist	5605 (34)
	Hospital non-specialist	3906 (23.7)
	Specialist in training	1780 (10.8)
Age (yrs)	Under 35	5058 (30.7)
	35-39	2281 (13.8)
	40-44	1986 (12)
	45-49	1872 (11.4)
	50-54	1727 (10.5)
	55-59	1317 (8)
	60-64	942 (5.7)
	65-69	556 (3.4)
	70+	481 (2.9)
Gender	Male	9062 (55)
	Female	7417 (45)
Living with partner/spouse	No	3685 (22.4)
	Yes	12151 (73.7)
Overall job satisfaction	Very dissatisfied	199 (1.2)
	Moderately dissatisfied	1022 (6.2)
	Not sure	768 (4.7)
	Moderately satisfied	8583 (52.1)
	Very satisfied	5236 (31.8)
Life satisfaction		*Mean (sd)*
	Scaled 1-10	7.36 (1.65)

NOTE: sd = standard deviation

The number of transitions from a clinical role to a non-clinical role in consecutive waves is tabulated in addition to the proportion of transitions. The bulk of these transitions occurred between wave 1 to wave 2 and wave 2 to wave 3 as depicted in Table 2. Descriptive information for the 498 individuals that made the transition to a completely non-clinical role is provided in Table 3.

Table 2 : Transitions from clinical to non-clinical roles

WAVE	n	RATE
1 to 2	138	1.3%
2 to 3	180	1.8%
3 to 4	87	0.9%
4 to 5	93	1.0%
Cumulative 1-5		3.3%

NOTE: The cumulative rate reflects the total percentage of transitions among all respondents, whereas the rate within each wave transition only takes into account the respondents within that specific wave.

Table 3: Characteristics of doctors who made the transition

	CATEGORY	n (%)
Doctor type	GP	119 (2.3)
	Specialist	301 (5.4)
	Hospital non-specialist	36 (0.9)
	Specialist in training	42 (2.4)
Age (yrs)	Under 50	190 (1.7)
	50 and above	306 (6.1)
Gender	Male	320 (3.5)
	Female	178 (2.4)

The association between doctors' background characteristics and career transition at each year is shown in Table 4. Table 4 suggests that age was significantly related to career transition in all the waves. As age increased, doctors were 33%, 18%, 25%, and 36% more likely to make a career change in 2009 (OR=1.33), 2010 (OR=1.18), 2011 (OR=1.25), and (OR=1.36), respectively.

Job satisfaction was negatively associated with career transition in 2010. Doctors who reported higher job satisfaction were 17% (OR= .83) less likely than doctors who reported lower job satisfaction to make a career change. However, findings also suggest that doctors who reported higher life satisfaction were more likely to make career changes in 2012 (OR=1.26).

Table 4 : Associations of non-clinical transitions across all waves with personal and professional factors

	OR (95% CI)			
	2009	2010	2011	2012
Age	1.33** (1.20, 1.48)	1.18** (1.09, 1.28)	1.25** (1.08, 1.46)	1.36** (1.19, 1.54)
Gender	1.07 (.69, 1.67)	1.12 (.81, 1.55)	.78 (.43, 1.41)	1.61 (.96, 2.70)
Currently living with a partner	1.20 (0.63, 2.25)	.90 (.59, 1.38)	1.11 (.50, 2.46)	.98 (.49, 1.96)
Overall job satisfaction	1.04 (.77, 1.42)	.83* (.70, .97)	.93 (.67, 1.29)	.75 (.56, 1.00)
Life satisfaction	1.15 (.97, 1.37)	1.01 (.91, 1.12)	.99 (0.81, 1.20)	1.26* (1.03, 1.54)
GP vs HNS	.21** (0.08, .54)	1.01 (.53, 1.95)	.44 (.15, 1.31)	.37* (.15, .89)
Specialist vs HNS	.86 (.39, 1.89)	1.33 (.71, 2.51)	.64 (.25, 1.66)	.79 (.36, 1.70)
SIT vs HNS	2.07 (.86, 5.03)	1.27 (.60, 2.73)	1.28 (.40, 4.11)	1.17 (.39, 3.49)
GP vs SIT	.10** (.04, .24)	.80 (.40, 1.57)	.34 (.11, 1.12)	.32* (.11, .95)
Specialist vs SIT	.41* (.21, .83)	1.05 (.54, 2.02)	.50 (.18, 1.38)	.67 (.25, 1.79)
GP vs Specialist	.24** (.13, .44)	.76 (.55, 1.06)	.69 (.35, 1.33)	.47* (.26, .86)

*p < .05; ** p < .01

Doctor type was a predictor of career changes in 2009 and 2012. GPs were 79% and 63% less likely to change their careers in 2009 (OR= .21) and 2012 (OR= .37), respectively compared to hospital non-specialists. Moreover, GPs were 90% and 68% less likely to change careers in 2009 (OR= .10) and in 2012 (OR= .32), respectively compared to specialists in training. However, specialists were 59% less likely to change careers in 2009 (OR= .41) compared to specialists in training. Finally, GPs were 76% and 53% less likely to change careers in 2009 (OR= .24) and in 2012 (OR= .47), respectively compared to specialists.

No differences were found between specialists and hospital non-specialists, or between specialists in training and hospital non-specialists in likelihood of transition across the study periods. Career transition was also not associated with gender or co-habitation.

Discussion

Principal Findings

This is a novel study in that there has not been any previous empirical data to determine what drives medical doctors to transition to non-clinical work. It is vital to document non-clinical transition data as it helps determine whether medical workforce participation rates will meet the clinical needs of a community. Non-clinical work isn't currently factored into national workforce supply and demand projections. There already is a significant shortage of doctors globally and more doctors continue to devote a large proportion of their time to non-clinical duties. [30-34] The findings illustrate that, as doctors continued to age, they were more likely to transition to a non-clinical role, and the impact of seasoned clinicians leaving clinical work will be significant to the community. GPs were less likely to transition to non-clinical roles compared to specialists, hospital non-specialists and specialists in training. The study also found that job satisfaction and life satisfaction are not key drivers for doctors to transition into exclusively non-clinical roles. Previous studies emphasised that job dissatisfaction is a driver for doctors to leave clinical work [35,36] and this finding was seen in one out of the four wave transitions. Our study also showed that there was a minimal association between life satisfaction and moving to a non-clinical role, with higher life satisfaction associated with transitions in one out of the four waves. Although medicine is increasingly becoming feminised especially in the fields of general practice and paediatrics [37] and female physicians have been shown to work fewer clinical hours than their male counterparts, [38,39] our study shows no gender bias when it comes to making the transition into a non-clinical role. This is a surprising finding given we might assume female doctors are more likely to engage non-clinical roles which are more adaptable to raising a family. However, it may be that working conditions in clinical medicine are becoming increasingly favourable to flexible rostering and we are also aware of vocational training becoming more amenable to part-time completion. [40,41]

Early Career Doctors (Hospital Non-Specialists and Specialists in Training)

The results from the paper show Specialists in Training and Hospital Non-Specialists are more likely to transition to perform only non-clinical work compared to GPs. Given that

the personal and attitudinal characteristics investigated in this study did not show strong associations, we therefore need to consider other contributing factors for this finding. The key drivers for these groups may be related to the different labour market conditions they are experiencing compared to their older colleagues, or may be due to different interests, aptitudes and expectations associated with more heterogeneous pathways into medicine, and a broader range of training experiences. Young medical graduates have more opportunity now to transition to non-clinical occupations than in the past. [3] Graduate entry into medical school is the standard model in the United States while it is steadily becoming the norm in Australia. [42] The skillset that these students possess prior to entry into medicine will serve them well in their attempt to diversify their careers. For example, a recent study in Ireland revealed that graduate entry medical students outperformed their counterparts in research development and execution. [43] Major firms outside of medical practice including Mckinsey & Co, Boston Consulting Group and Bain & Co have realised this demographic dividend and hold wide-ranging recruitment drives to attract doctors to their companies. [44]

There is clear growth among junior doctors intending to pursue non-clinical work. Medical graduates desire more control over their career. As a recent survey indicated, they highlighted the importance of work schedule flexibility and time away from clinical work as a determining factor in specialty selection. [45] This desire for control over one's career progression has led to more medical graduates selecting non-clinical careers and roles as they advance in their careers. [25] More importantly, this trend of planning a career including non-clinical work begins when these individuals are in medical school. A recent United States study of 108,408 medical graduates indicated a reduction in students gearing towards full-time clinical practice, [46] and an Australian study discovered that a large proportion of young hospital doctors continue to call for a reduction in clinical hours. [47] Despite young doctors expressing an interest in fewer clinical hours, it is also important to consider that these young doctors may only transition into complete non-clinical work temporarily, as research, teaching and management experience boost their chances of securing a spot in a more competitive specialty training program. [48]

The current apprenticeship system within Australian hospitals cannot keep up with the demand, creating a void which could be filled by innovative non-clinical positions offered by both public and private institutions. These institutions have to incorporate flexible work hours, self-determined career paths, and a rich learning environment to attract these young doctors and medical graduates to their workplaces. The recruitment of doctors into non-clinical professions may become more substantial given the increasing number of medical students in Australia. [49] As the likelihood of early career doctors transitioning to non-clinical roles becomes more commonplace, it is important to consider the impact on the clinical demands of the community.

Middle to Late Career Doctors (Specialists and GPs)

Specialists and older doctors are overwhelmingly making the transition to strictly non-clinical work compared to other doctors in this study. This finding reflects previous trends in Germany where a very small number of young doctors considered changing their careers while over half of doctors in the middle to late stages of their career who have qualified as a certain type of specialist considered switching their careers to non-clinical work. [50,51] Previous research has only assessed a particular specialist's intentions to shift into non-clinical work, while this study has actually tracked the number of doctors who have followed through with their intentions. The tracking of these transitions has enabled us to determine if there are any specific drivers influencing transitions to solely non-clinical roles among middle to late career doctors.

In a traditional sense, young doctors undergo rigorous training as a student, a resident and finally as a registrar before enjoying the benefits of working as a consultant. These benefits generally include increased income, more control over working hours and improved clinical independence. Recent data indicates that specialists earn an average of $316,750 per year and work an average of 45 hours a week. [52] Au contraire, the average doctor's income is about $148,000, which is much lower than what a specialist could potentially earn. [53] We hypothesise then that income and clinical independence are not the sole drivers of specialist retention in clinical practice, as specialists and older doctors are more likely to make the transition to strictly non-clinical work compared to other doctors in this study. When the results for age, doctor type and the satisfaction variables are considered together, they suggest that changing to a non-clinical role in the mid-career stage represents a chosen strategy to develop and diversify one's career, rather than being driven by 'push' factors such as dissatisfaction with clinical work or unfavourable labour market conditions.

The concept of a predictable structural career, where employees advance through specific stages within an organisation is gradually being replaced by a more dynamic

self-directed career path enhanced by ongoing learning and fresh challenges. [54] Medical careers are no exception to this change, and the customary model of completing medical training at a specific institution before assuming duties as a senior clinician at the same institution is diminishing. [55] Specifically, this self-directed career path in medicine may involve working in a non-clinical setting (ie, research, administration, teaching, finance, etc) to create a break from normal routine and acquire new skills.

Compared to other doctors, the results highlight that GPs are the least likely to move into strictly non-clinical work. GPs attempt to diversify their careers by teaching, adopting management roles in various practices and participating in health policy discussion on a national level, [16] but most of them perform these activities on a part-time basis. GPs only enjoy limited support for their research, teaching and private endeavours compared to specialists, [56] and GPs are more isolated from well-funded research hospitals and academic institutions as they tend to practise in small clinical settings within the community. Since GPs work in smaller practices, they may be less inclined to take a management position as they might choose to outsource management within their practice to non-clinical non-medical individuals. Perhaps GPs do not tend to drop out of clinical work totally, as the culture within their professional organisation encourages them to continue to meet the clinical needs of the community they serve.

There was only marginal evidence in this study linking job and life satisfaction to increased likelihood of making the transition to sole non-clinical work. It is important to consider that non-clinical transitions may be achieved unintentionally by individuals with limited non-clinical skills, and may not be sought after positions in terms of career development. This finding reflects a previous study in the United Kingdom, where doctors who graduated from medical school in the 1980s and were currently working for the NHS indicated that their clinical jobs provided them a high degree of satisfaction, but decreased leisure time was a major factor in influencing them to consider other non-clinical careers. [57] This could mean non-clinical transitions could be associated with no change or negative changes in life and job satisfaction. For example, non-clinical transitions into management and leadership may occur due to position availability, may be forced roles and may be offered to individuals without specialist management and leadership skills. [9,10] Concerns include stigmatisation by clinical medical colleagues who feel medical managers implement the intentions of non-clinical management staff, and management staff who feel medical managers implement the intentions of clinical medical colleagues. [11] One possible solution to the undesirability of management and leadership positions is to enhance the skill capacity of doctors for such positions.

We have analysed transitions to medical non-clinical roles, and it is possible that low job satisfaction is more closely related to leaving the medical profession altogether than to this type of transition. [58] In our sample, 83 doctors reported moving to a non-medical role across the five-year period, representing less than one per cent of the respondents.

Study strengths and weaknesses

This study's strengths come from the large number of Australian doctors that participated in the MABEL survey. Since the MABEL survey is a longitudinal survey, it was able to document the yearly transitions doctors made from a clinical role to a non-clinical role. This is the first study to chart doctor transitions to non-clinical work from clinical work and the findings are illustrative of the Australian doctor population. Unfortunately doctors performing completely non-clinical work may have been less likely to continue to respond to the longitudinal survey, as they might assume that the survey no longer pertains to them once they stop performing any type of clinical work. In this case, the results underestimate the true rate of transitions. The questionnaire does not collect data about the reasons for opting out of clinical work, or about the type of non-clinical work doctors are transitioning into and whether it is a mixture of activities or primarily a single activity.

Finally, this study explored career transition as a categorical variable (clinical or non-clinical), whereas it is necessary in the future to explore this topic as a continuous variable (ie, the ratio of clinical to non-clinical work). We suspect more doctors will be making a fractional increase in non-clinical work as opposed to a large transition to pure non-clinical work. This is therefore important as a future research question.

Future directions

Workforce planners need to begin quantifying non-clinical engagement within the workforce in numerous ways. It is important for workforce planners in the future to take into account non-clinical work in a more comprehensive fashion. This could entail inclusion in projection models of attrition rates from clinical to non-clinical work, which our study suggests are in the order of 1%-1.5% on an annual basis, with higher rates for older age groups. Furthermore, it would be prudent to identify what kind of non-clinical engagement

is actually happening (ie, academic roles, business ventures, pharmaceutical development, etc). This will then allow governments and professional medical colleges to allocate resources more judiciously within the workforce. For example, if doctors are calling for more non-clinical opportunities within their profession, the formalisation of non-clinical work in medical careers may be necessary. This study was not able to clearly identify particular personal characteristics that drive doctors to transition into non-clinical work, suggesting that, in the case of doctors in the early stages of their career in particular, systematic shortages of clinical opportunity (ie, lack of specialist training places, increased competition in the marketplace for clinical jobs, etc) may be key driving factors. This further highlights the need to consider formalising a wider range of training and career pathways.

Conclusion

The comprehension of characteristics of doctors transitioning into a non-clinical role aids in health workforce planning. Further studies are required to determine the main drivers for doctors making the transition to non-clinical work, and the fraction of clinical to non-clinical work.

Competing interests

The authors declare that they have no competing interests.

References

1. Health Workforce Australia. Health Workforce 2025 – doctors, nurses and midwives – Volume 1 [Internet]. 2012 March [cited 2014 Sep 15]. Available from: http://www.hwa.gov.au/sites/uploads/FinalReport_Volume1_FINAL-20120424.pdf.
2. Australian Medical Association. Clinical support time for public health doctors - Position Statement [Internet]. 2009 [cited 2014 Oct 15]. Available from: https://ama.com.au/sites/default/files/documents/Clinical_support_time_for_public_hospital_doctors_0.pdf.
3. Eyre H, Mitchell R, Milford W, Vaswani N, Moylan S. Portfolio careers for medical graduates: implications for postgraduate training and workforce planning in Australia. Aust Health Rev. 2014;38(3): 246-51.
4. Joyce CM, Eyre H, Wang WC, Laurence C. Australian doctors' non-clinical activities: results from the Medicine in Australia: Balancing Employment and Life (MABEL) survey of doctors. Aust Health Rev. 2015. doi:10.1071/AH14223.
5. Pathiraja F, Wilson MC. The rise and rise of the portfolio career. BMJ Careers [Internet]. 2011 [cited 2014 Oct 3]. Available from: http://careers.bmj.com/careers/advice/view-articlehtml?id=20001807.
6. McGilvray A. Doctors of many talents. MJA Careers [Internet]. 2014 [cited 2014 Nov 5]. Available from: https://www.mja.com.au/careers/199/10/doctors-many-talents?0=ip_login_no_cache%3D4c7fd598529e8a01e2b2ba4400d419b6.
7. Australian Government Department of Health and Ageing. Strategic review of health and medical research [Internet]. 2013 [cited 2014 Aug 15]. Available from: http://www.mckeonreview.org.au/downloads/Strategic_Review_of_Health_and_Medical_Research_Feb_2013-Final_Report.pdf.
8. Joyce CM, Schurer S, Scott A, Humphreys J, Kalb G. Australian doctors' satisfaction with their work: results from the MABEL longitudinal survey of doctors. Med J Aust. 2011;194(1): 30-3.
9. Oxtoby K. How doctors can take steps into leadership and management. BMJ Careers [Internet]. 2013 [cited 2015 Jun 23]. Available from: http://careers.bmj.com/careers/advice/view-article.html?id=20015488.
10. Moberly T. Doctors need to 'step up' to leadership roles to help improve patient care. BMJ Careers [Internet]. 2014 [cited 2015 Jun 23]. Available from: http://careers.bmj.com/careers/advice/view-article.html?id=20017882.
11. Wilson K. Why are doctors so reluctant to be leaders in the NHS? The Guardian [Internet]. 2014 Sep 1 [cited 2015 Jun 23]; Healthcare Network. Available from: http://www.theguardian.com/healthcare-network/2014/sep/01/nhs-leadership-doctors-reluctant-manage-lead.
12. Knowles L, O'Dowd C, Hewett D, Schafer J, Wilkinson D. The University of Queensland Medical Leadership Program: a case study. The Ochsner Journal. 2012;12: 344-7.
13. Langer LJ. Building a curriculum for bioentrepreneurs. Nature Biotechnology. 2014; 32: 863-5.
14. Patel MS, Arora V, Kinney JM, Pauly MV, Asch DA. The Role of MD and MBA training in the professional development of a physician: a survey of 30 years of graduates from the wharton healthcare management program. Acad Med. 2014;89(9): 1282-6.
15. Patel MS, Davis M, Lypson M. Advancing medical education by teaching health policy. N Engl J Med. 2011;364:695-97.
16. Piko L, Phillips C. General practice as a career: insights for workforce policy. Med J Aust. 2010;193(2):99-100.
17. Van Ham I, Verhoeven AA, Groenier KH, Groothoff JW, De Haan J. Job satisfaction among general practitioners: a systematic literature review. The European Journal of General Practice. 2006;12(4):174-80.
18. Health Workforce Australia. Health Workforce Data Resource [Internet]. 2014 [cited 2014 Jul 15]. Available from: https://www.hwa.gov.au/resources/health-workforce-data.
19. Beyond Blue. National mental health survey of doctors and medical students: Executive Summary [Internet]. 2013 [cited 2014 Oct 7]. Available from: http://www.beyondblue.org.au/docs/default-source/research-project-files/bl1148-report---nmhdmss-exec-summary_web.pdf?sfvrsn=4.
20. Hall DT. Protean careers of the 21st century. Acad Manag Exec. 1996;10(4): 8-16.
21. Australian Government Productivity Commission. Australia's health workforce [Internet]. 2005 [cited 2014 Aug 17]. Available from: https://www.dhhs.tas.gov.au/__data/assets/pdf_file/0005/9077/AustraliasHealthWorkforceProductivityCommission5B15D.pdf.
22. Fitzpatrick N. General practice medical services in Australia. IBISWorld Industry Report [Internet]. 2011 [cited 2014 Jun 15]. Available from: http://www.ibisworld.com.au/industry/default.aspx?indid=611.
23. Australian Competition and Consumer Comission. ACCC proposes surgical college reform to help address surgeon shortage [Internet]. 2003 [cited 2014 Sep 12]. Available from: http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22media%2Fpressrel%2FJDI86%22.

24. Fitzpatrick N. Specialist medical services in Australia. IBIS World Industry Report [Internet]. 2011 [cited 2014 Jun 15]. Available from: http://www.ibisworld.com.au/industry/default.aspx?indid=612.
25. Kim KJ, Park JH, Lee YH, Choi K. What is different about medical students interested in non-clinical careers? BMC Med Educ. 2013; 4(13):81.
26. Joyce CM, Scott A, Jeon SH, Humphreys J, Kalb G, Witt J, Leahy A. The 'medicine in Australia: balancing employment and life (MABEL)' longitudinal survey - protocol and baseline data for a prospective cohort study of Australian doctors' workforce participation. BMC Health Serv Res. 2010;10(1):50.
27. Yan W, Cheng TC, Scott A, Joyce CM, Humphreys J, Kalb G, Leahy A. Data survey Medicine in Australia: Balancing Employment and Life (MABEL). Australian Economic Review. 2011;44(1): 102-12.
28. Muthén B, Masyn K. Discrete-time survival mixture analysis. Journal of Educational and Behavioral Statistics. 2005;30(1):27-58.
29. Muthén LK, Muthén BO. Mplus user's guide. Los Angeles, CA: Muthén & Muthén; 1998-2013.
30. Sheldon GF, Ricketts TC, Charles A, King J, Fraher EP, Meyer A. The global health workforce shorage: role of surgeons and other providers. Adv Surg. 2008;42:63-85.
31. Kane GC, Grever MR, Kennedy JI, Kuzma MA, Saltzman AR, Wernik PH, Baptista NV. The anticipated physician shortage: meeeting the nation's need for physician services. Am J Med. 2009;122(12): 1156-62.
32. Toker A, Shvarts S, Glick S, Reuveni H. A report card on the physician work force: Israeli healthcare market--past experience and future prospects. Health Policy. 2010;97(1): 38-43.
33. Simoens S, Hurst J. The supply of physician services in OECD countries. OECD Health Working Papers. 2006;21.
34. Ochsmann EB. Thinking about giving up clinical practice? A gender-stratified approach to understanding junior doctors' choices. Acad Med. 2012;87(1): 91-7.
35. Degen C, Weigl M, Glaser J, Li J, Angerer P. The impact of training and working conditions on junior doctors' intention to leave clinical practice. BMC Med Educ. 2014;14: 119.
36. Goldacre MJ, Lambert TW. Participation in medicine by graduates of medical schools in the United Kingdom up to 25 years post graduation: national cohort surveys. Acad Med. 2013; 88(5): 699-709.
37. Khan M. Medicine - a woman's world? BMJ Careers [Internet]. 2012 [cited 2015 Jun 23]. Available from: http://careers.bmj.com/careers/advice/view-article.html?id=20006082.
38. Hedden L, Barer ML, Cardiff K, Kimberlyn MM, Law MR, Bourgeault IL. The implications of the feminization of the primary care physician workforce on service supply: a systematic review. Human Resour Health. 2014;12:32.
39. McKinstry B, Colthart I, Elliott K, Hunter C. The feminization of the medical work force, implications for Scottish primary care: a survey of Scottish general practitioners. BMC Health Services Research. 2006;6:56.
40. Costa CM, Permezel M, Farrell LM, Coffey AE, Raney A. Integrating parental leave into specialist training: experience of trainees and recently graduated RANZCOG Fellows. Med J Aust. 2013; 199(5): 359-62.
41. Williams SA. Flexible surgical training in Australasia. Med J Aust. 2013;198(8): 426.
42. Australian Government Department of Health. Medical Training Review Panel: Sixteenth Report [Internet]. 2013 [cited 2014 Jul 30]. Available from: http://www.health.gov.au/internet/main/publishing.nsf/Content/38D69486D82F4A59CA257BF0001ACD8E/$File/Medical%20Training%20Review%20Panel%2016th%20Report.pdf.
43. Duggan EM, O'Tuathaigh CMP, Horgan M, O'Flynn S. Enhanced research assessment performance in graduate vs. undergraduate-entry medical students: implications for recruitment into academic medicine. QJM. 2014;107(9):735-41.
44. Agostini A. To the brainy, the spoils. The Economist. 2013.
45. Clinite KL, DeZee KJ, Durning SJ, Kogan JR, Blevins T, Chou CL, Diemer G, Dunne DW, Fagan MJ, Hartung PJ, Kazantsev SM, Mechaber HF, Paauw DS, Wong JG, Reddy ST. Lifestyle factors and primary care specialty selection: comparing 2012-2013 graduating and matriculating medical students' thoughts on specialty lifestyle. Acad Med. 2014;89(11): 1483-9.
46. Jeffe DB, Andriole DA, Hageman HL, Whelan AJ. The changing paradigm of contemporary U.S. allopathic medical school graduates' career paths: analysis of the 1997-2004 national AAMC Graduation Questionnaire database. Acad Med. 2007; 82(9): 888-94.
47. Norman R, Hall J. Can hospital-based doctors change their working hours? Evidence from Australia. Intern Med J. 2014;44(7): 658-64.
48. Royal Australasian College of Surgeons. 2015 Australian Selection to Surgical Education and Training in General Surgery for 2016 Intake [Internet]. 2014 [cited 2014 Nov 20] Available from: http://www.generalsurgeons.com.au/media/files/Education%20and%20Training/Selection/REG%202015%20Selection%2Regulations%20Australia%20-%20Final.pdf.
49. Eley DS, Young L, Wilkinson D, Chater AB, Baker PG. Coping with increasing numbers of medical students in rural clinical schools: options and opportunities. Med J Aust. 2008;188(11): 669-71.
50. Kopetsch T. German healthcare runs out of doctors! Studie zur Altersstuktur - und Arztzahlentwicklung. Bundesarztekammer und Kassenarztliche Bundesvereinigung. Berlin, Germany: 2010.
51. Bornschein S, Erbas B, Borelli S, Emminger C, Hesse J, Pilz J, Schwarzkopf-Steinhauser G, Wenzl H, Kunze D, Borelli C. Working hours and job satisfaction among physicians in hospitals and general practice in Munich. Gesundheitswesen. 2006; 68(8-9): 535-44.
52. New study highlighs medicine's big earners. Med J Aust Insight [Internet]. 2010 [cited 2014 Oct 17]. Available from: https://www.mja.com.au/insight/2010/4/new-study-highlights-medicines-big-earners.
53. Australian Bureau of Statistics. Australian Social Trends [Internet]. 2013 [cited 2014 Oct 12]. Available from: http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features20April+2013.
54. Hall DT, Mirvis PH. The new career contact: developing the whole person at midlife and beyond. Journal of Vocational Behaviour. 1995;47(3): 269-89.
55. Heiligersa PJM, Hingstmana L. Career preferences and the work – family balance in medicine: gender differences among medical specialists. Soc Sci Med. 2000; 50(9): 1235-46.
56. Joyce CM, Piterman L, Wesselingh S. The widening gap between clinical, teaching and research work. Med J Aust. 2009; 191(3):169-72.
57. Taylor K, Lambert T, Goldacre M. Career destinations, views and future plans of the UK medical qualifiers of 1988. J R Soc Med. 2010;103(1):21-30.
58. Landon B, Reschovsky J, Pham H, Blumenthal D. Leaving medicine: the consequences of physician dissatisfaction. Med Care. 2006; 44: 234-42.

BOOK REVIEW

Leading and Managing in Health Services – an Australasian Perspective

Reviewed by W Lawrence

Bibliographic Details:
Day G and Leggat S
Leading and Managing in Health Services
– an Australasian Perspective.
Port Melbourne: Cambridge University Press; 2015.
ISBN: 978-1-107-48639-3

This is a 'How To ' book not an 'About What ' book. It is ambitious in scope and structure and it delivers much to the reader. The book is edited by two well known Australian Professors of Health Services Management, Gary Day from Griffith University and Sandra Leggat from La Trobe University. It draws together, in some 360 pages, contributions from 31 authors, from the ranks of highly experienced healthcare managers, leaders and academics.

Such a work requires careful editing and underlying discipline in its shaping. This enables the reader to progress through the text with a sense of context and structure.

Two features of this work are of value in providing order and coherence. Firstly there is the adoption of the Health LEADS Framework to address Leading and Managing. This provides meaningful order. LEADS had been adopted by the Australian Health Ministers' Advisory Council (AHMAC) in June 2013. It was accepted as a nationally agreed health leadership framework, following adaptation to local settings, from the original Canadian work, by the then Health Workforce Australia and others. Traditionally New Zealand is represented at AHMAC Meetings. Secondly, the individual chapters of the book, that are clustered under the individual domains of the Health LEADS Framework, are structured to provide a common format that comprises sections within the chapters to give insights to the reader in a predictable way. Usually this comprises, at least, Learning Objectives, an Introduction to the subject matter, Definitions involved and a concluding Summary.

Of critical importance however, in assessing the logic of the book, is how the Health LEADS Framework facilitates a focus on 'Leading and Managing'. Once this is addressed, then it needs to be explored just how this focus then supports the thematic coherence required within this lengthy work, with its high number of individual contributors. Of particular interest to this reviewer was how the logic of the linkage of the LEADS Framework to 'managing' was established, as it is also a fundamental issue within the construct of the book.

These considerations are addressed early in Part 1 Introduction of the book, which covers some 24 pages. A reasonably convincing theoretical position is established. It is essentially summarised as :

'Leadership is not something wholly different from management, indeed it is a component of management and a responsibility of management, especially for senior managers. The present situation in health systems suggests that effective managers need to be effective leaders, and that the most effective leaders are also good managers.' (p 2)

The reader needs to concentrate on all of the Introduction section and indeed, on the insightful earlier Preface by the editors, before diving into individual parts of the book that might have intrinsic personal interest.

There are some excellent sections in the separate parts of the book, and their individual chapters, that are allocated to the key domains of leadership as defined in Health LEADS. Individual chapters introduce important contemporary issues such as Ethical Leadership, Power and Political Astuteness, Leadership and Critical Reflective Practice, Networking, Holding to Account, Critical Thinking and Decision Making as well as Evidence Based Practice. This is not an exhaustive selection of the subject matter, but an indicative sample to demonstrate breadth.

Without structure, and tight editing, a work of this size could have the potential to introduce some broad concepts and practical insights into a devolving series of overlapping individual contributions that can also even be built upon differing conceptual foundations. Thankfully this is essentially avoided. The editors and the individual contributors have served the readers well in the discipline applied to the assembling of this book.

William Lawrence AM
Life Member – Australasian College of Health Service Management

The book also adds further considerable value by drawing upon a wide range of references from the very extensive published literature, with special efforts taken to be relevant to contemporary heath services leadership and management matters, from an Australasian perspective. It also offers a very useful range of instructor resources, including accompanying online components that add further reading, multiple choice and short answer questions, case studies, as well as reflective and self analysis questions. It will become a very useful standard reference text for tertiary education and health workforce training in a range of settings, and for many health service professional disciplines.

After a health services management career that spanned over 40 years, with the vast majority of those years spent in CEO roles in major NSW hospitals, Regional and Area Health Services settings, as well as in Commonwealth Government and national organisations, I have found the book to be of high worth.

To be entirely candid, I should add that there is also some personal sense of minor irritation, that some parts of it were not available to me earlier. On further reflection on parts of the text, there is also a measure of guilt that I did not pursue certain aspects to a greater degree in my own professional development activities.

Personal indulgences aside, this book has many good messages for all who are aspiring to be leading and managing. It also conveys clear improvement advice for all those now entrusted with such roles. It enhances our capacities to improve Australasian health services.

Bill Lawrence has worked in the health sector for over 40 years in a variety of senior management roles in the NSW public health system and national healthcare organisations.

In 1972 he was appointed Chief Executive Officer of Griffith Base Hospital and in 1977 he became Chief Executive of the Wollongong Hospital.

Mr Lawrence was also a Foundation Surveyor for the Australian Council on Healthcare Standards, was a Regional Director of the former Health Commission of NSW, and was a Visiting Fellow to the School of Health Services Management at the University of New South Wales.

As Chief Executive of Sydney's Prince Henry, Prince of Wales and Prince of Wales Children's Hospitals and then as Chief Executive of Eastern Sydney Area Health Service, he had extensive responsibilities for major public hospitals and community health services from 1983 to 1995.

Mr Lawrence received international recognition as a King's Fund Fellow, a W K Kellogg Foundation Fellow, an International Hospital Federation Innovation Award winner, and as a WHO Consultant. He served on the Australian College of Health Service Executives (ACHSE) Federal Council, Australian Healthcare Association Council and was a President of the University Teaching Hospitals Association (NSW).

In 1995 he joined the ACHSE as National Director and was seconded in January 2006 for a six month period as the Interim CEO of Australia's National Health and Medical Research Council. In 1995 he was a member of the Commonwealth Ministerial Taskforce Review of Quality in Australian Health Care.

Mr Lawrence resigned from ACHSE in June 2006 to join the Australian Commission on Safety and Quality in Health Care as its Deputy Chief Executive. In 2007 he was made a Member of the Order of Australia for his contributions to the health sector.

RESEARCH ARTICLE

A Model of Home-Based Care for People with Disabilities: Better Practice in Rural Thailand

C Wanaratwichit, D Hills, M Cruickshank and B Newman

Abstract

Background and objective: People with disabilities living in rural areas often require considerable support to meet their complex needs. This study investigated a best practice model in home-based care for people with disabilities in rural Thailand.

Design and Setting: A case study method was adopted to investigate a best practice model of home-based care for people with disabilities in Nakhonthai District, Phitsanulok Province, Thailand. Data were collected from 30 participants through in-depth interviews, focus groups, direct observation and document analysis. Content and thematic analyses were conducted for qualitative data. The Wilcoxon Signed-Rank test was used for the outcome measurement of activities of daily living (ADL) scores.

Results: This model of home-based care for people with disabilities, as an integrated network model, brings together the community, health professionals and other organisations. The role of trained community health volunteers was mainly to deliver home-based personal care for people with disabilities, while health professionals focused mainly on controlling the quality of care, managing the knowledge and skills of volunteers, and co-ordinating the network. The difference between ADL scores before and after the implementation of the model (n=20) was statistically significant ($p<0.01$).

Conclusion: This best practice model of home-based care for people with disabilities in rural Thailand shifts responsibility in the main service decisions from professionals to the community and other stakeholders and engages and empowered all stakeholders in the provision, co-ordination and management of care.

Abbreviations: ADL – Activities of Daily Living; CUP – Contracting Unit for Primary Care; HBC – Home-Based Care; PwD – People with Disabilities.

Key words: home-based care; people with disability; integrated care.

Civilaiz Wanaratwichit
Health Service Management
Naresuan University
Phitsanulok, Mueang Phitsanulok, Thailand.

Danny Hills*

Mary Cruickshank*

Barbara Newman*

Correspondence:
civilaiz_6@hotmail.com

* Faculty of Health
University of Canberra
Canberra, Australian Capital Territory, Australia.

Introduction

Since 2002, healthcare system reform in Thailand has emphasised the provision of primary healthcare through the Contracting Unit for Primary Care (CUP) network at the district level to improve healthcare accessibility, especially for more disadvantaged people such as people with disabilities (PwD). The committees of CUPs manage their population health based on the budget provided from the National Health Security Office.

The healthcare for PwD has depended on the health policy and the provision of the *Thai Rehabilitation of Disabled Persons Act* (1991). [1] However, the accessibility of health services remains insufficient, [2] especially in relation to physical rehabilitation services and the complications resulting from accessibility to continuing physical rehabilitation. [3]

Establishing appropriate patterns of care for PwD has been problematic because of a lack of understanding and poor information sharing about the rehabilitation process by health professionals, [4] funding, professionals' knowledge and attitudes, communication gaps and health system failures. [5] The main problems for PwD are, living with limited movement and subsequent difficulties with self-care [6] and that they require home care from a nurse. [7]

As a consequence of this gap in the evidence base, an existing best practice model of home based-care (HBC) for PwD in rural Thailand was investigated, focusing on the context, processes, mechanism of management and outcomes for disabled people who have severely limited movement.

Methods

A case study design [8] was used to explore and describe a HBC model selected from 43 districts in health service region two of Thailand, which was identified as representing better practice in a rural area of Thailand by the National Health Security Office. The unit of analysis was a Nabou sub-district Health Centre and its stakeholders, Nakhonthai district, Phitsanulok Province in northern Thailand. The analyses were conducted within the framework of established concepts of HBC [9,10] and the district health system, [11] in accordance with healthcare system reforms. Realist evaluation [12] was applied to analyse the relationships between the issues of concern.

In this mixed-methods study, qualitative data were gathered in in-depth interviews [13] and focus groups with four primary care providers, four members of the district health management team, one leader of local government and three village leaders, one supporting officer at the provincial level, one supporting officer from the National Health Security Office, as well as 20 disabled people and five family members. Every participant had a role focused on disabled people in the study area for at least one year. In addition, eight trained community health volunteers who delivered care and seven healthcare workers participated in focus group interviews. [14] The in-depth interviews began with semi-structured questions and data were collected to help clarify the process and program of HBC, the participation of stakeholders, the mechanisms of management, the outcomes for disabled people and the socio-cultural context of the services and outcomes.

The focus group interviews investigated three issues – the experiences and the achievements of HBC, and the mechanisms for its management.

All data were fully recorded by electronic recorder and the main points were noted. Additionally, a participant observation check-list was utilised by researchers in the community setting. The qualitative data were analysed using content analysis [15] and thematic analysis. [16] All records were read and reviewed several times. Coding for the process and management of care were undertaken within the framework of HBC principles and the district health system, utilising realist evaluation.

In the quantitative component of the study, the health record form of each person with a disability was used to collect data on care provided and the score of daily activity was determined from this document. Descriptive statistics were used for quantitative data and the Wilcoxon signed-rank test was employed to examine the difference between functional measures and activity of daily living scores, before and after the introduction of HBC services. Post-intervention measures were conducted one year after commencement of the HBC model. Permission to conduct the study was provided by the Human Research Ethics Committee of Naresuan University, Naresuan, Thailand.

Results

Two primary themes emerged from the qualitative analyses, reflecting the structures and characteristics, and the process of the model of HBC for disabled people in rural communities of Nabou sub-district. A third theme, drawn from the quantitative analysis, demonstrated the positive functional outcomes for PwD receiving care and support.

Community context

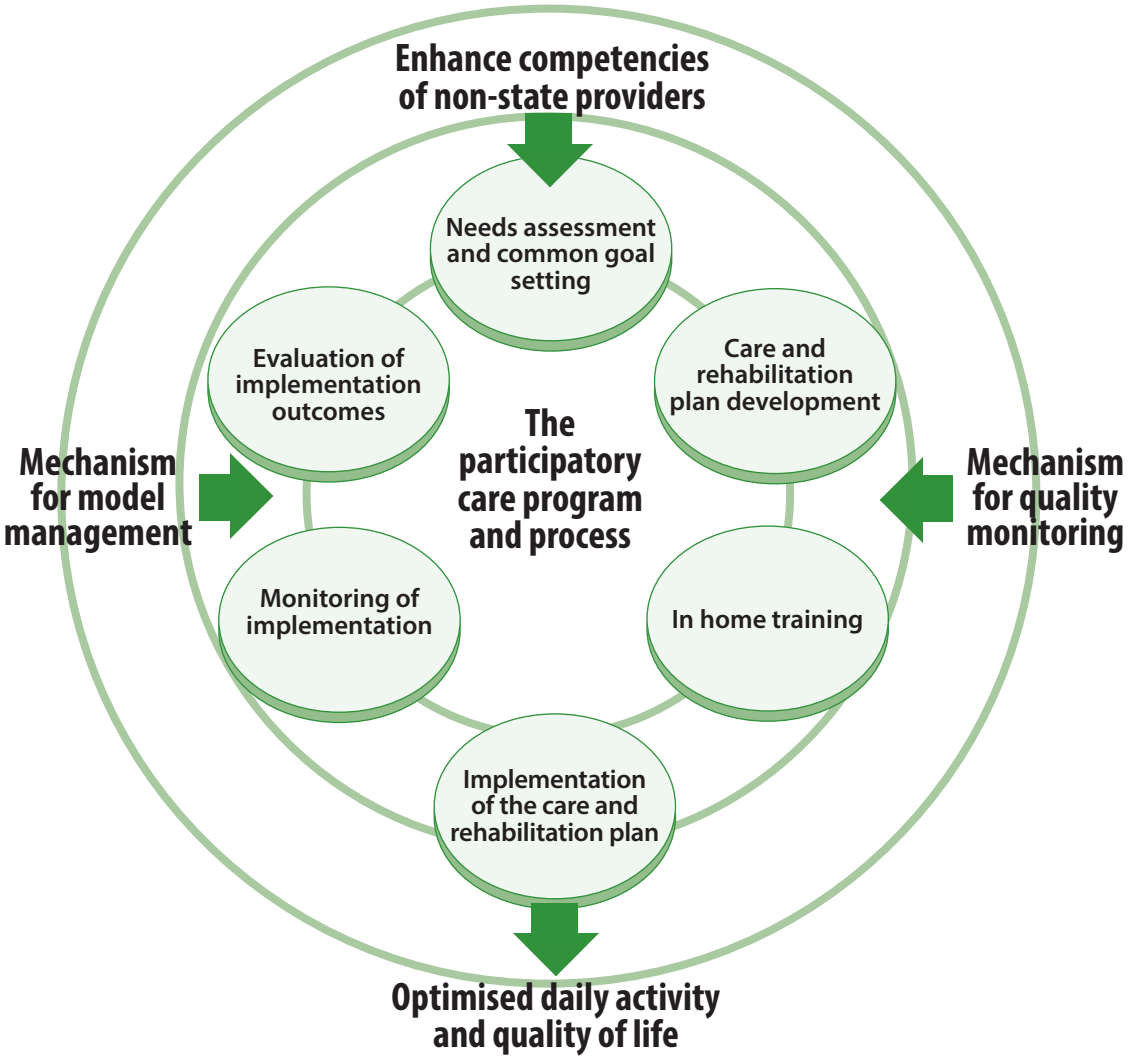
This community had high social capital, social kinship, good relationships, high social participation, helping each other, community member trust and respect in leaders. Village leaders had the vision to develop the community's health. This led to the willing participation of the community in HBC for PwD.

An integrated network model

Firstly, the characteristics of the HBC model were identified as an integrated network model (Figure 1), integrating the team and the care, and incorporating care between the health and social welfare services among the inter-professional collaboration and community.

They were found to be working together, with the Health Centre as the coordinating centre. A key instrument through which care, support and resource allocation could be facilitated was a healthcare record toolkit for healthcare. The nurse designed record enables the recording of health volunteer actions and achieved outcomes against planned goals or activities, including aids to daily living (ADL).

Figure 1. The better practice home based care model for people with disabilities in rural Thailand



The care program was found to focus mainly on health and functional rehabilitation, and mental and spiritual support. Nursing care was provided based on the presenting health problems. There was less focus, however, on physical environments and occupational support in the home.

A participatory care program and process model

A model of care was identified and operationalised within the framework of a six-stage process of participatory care, and three primary management context factors leading to the optimisation of the daily activities and quality of life of PwD in this rural setting (Figure 1).

The six-stage process of participatory care comprised:

Needs assessment and common goal setting

Health professionals and community stakeholders visited PwD in their home to assess their health, social and environment needs and potential to engage in daily activities for setting common goals.

The nurse and physiotherapist came to visit the disabled person with us, assessed their ability of movement, discussed with us and advised us what we can do for the person with disability. However, it was also with consensus among the disabled person and their family.

[Community health volunteer – translated from Thai]

We [the stakeholders] reached consensus in developing the rehabilitation plan. It is very important because it leads to care participation among the stakeholders.

[Physiotherapist – translated from Thai]

Care and rehabilitation design following on from needs analysis and goal setting, care and rehabilitation were designed through collaboration and involvement of all stakeholders.

In home training

Trained community health volunteers, PwD and their family members were trained at home again by the physiotherapist, based on the individual person's needs and assessed potential. This training not only improved the self-confidence and skills of the community health volunteers, it also enhanced the disabled person's belief and trust in the care provided.

The physiotherapist comes again to teach us at the home of the disabled person, based on the problem of the people, which gives us high self-confidence to look after the disabled person and they also feel confident.

[Community health volunteer – translated from Thai]

We [community health volunteers] were very glad that the physiotherapist and nurse trained us again when they visited at the disabled person's home. I felt confident to look after the disabled person, and they perceived that we were well-trained.

[Community health volunteer – translated from Thai]

Implementation of the care and rehabilitation plan

Most home care was provided by the trained health community volunteers, twice each week, and comprised guiding and supporting the person in undertaking exercises, measuring vital signs and providing mental support. Supported activities also extended to family members. In addition, other stakeholders were engaged in service provision. The 'elderly volunteers' supported mental health and the Thai massage volunteer visited based on the person's needs and care plan.

The people who continuously look after the disabled people are community health volunteers. They also continuously report or tell us about any changing condition of the disabled people when I haven't visited them.

[Nurse – translated from Thai]

I come here two times per week to help the disabled person to exercise, give encouragement to their family.

[Community health volunteer – translated from Thai]

At a co-ordination and leadership level, the local government leader co-ordinated and supported vehicles for transportation to the hospital, social and welfare support and some home modification services, while the provincial public health office, the district public health office, the National Health Security Office and the community hospital provided relevant resource support, including in relation to budget, materials, knowledge and health policy, according to their mission.

Monitoring of implementation

Every two weeks, the health professionals visited the person with disabilities, to monitor and evaluate the home care practice of the volunteers, assess outcomes, and where required set new goals and plans, provide direct care and rehabilitation interventions, and provide further training for the community health volunteers.

The nurse and physiotherapist go to a disabled person's home every two weeks to teach us about nursing and rehabilitation again as well as monitoring our performance.

[Community health volunteer – translated from Thai]

I and the nurse in the Health Centre always went to a disabled person's home to provide care and monitor the rehabilitation provided by the volunteers. If it is not successful we take action to improve the plan or care provided.

[Physiotherapist – translated from Thai]

Evaluation

Participatory evaluation by stakeholders was undertaken when visiting the disabled people at home and decisions were made in relation to referral, such as to the community hospital or to other relevant organisations dependent on the problem(s). Decision-making then returned to reassessing needs and common goal setting, as required.

The three primary management context factors leading to the optimisation of daily activities and quality of life of people with disabilities, highlighted in Figure 1 comprised:

Enhancing competencies of non-state providers

Before the instigation of the HBC model, a one-day training session was provided by the district health system committee for the selected non-state providers, including the community health volunteers, who had more skill in nursing and were willing to help other people, and family members of PwD. They were trained in relation to movement and exercise skills as basic rehabilitation.

We select five community health volunteers per village, who have more skill in nursing and are willing to help other people, to train in the principles of rehabilitation for disabled people and, at the same time, we also trained the disabled person's family.

[Nurse – translated from Thai]

Mechanism for monitoring the quality of care and rehabilitation

A key way of monitoring and controlling care in the non-health professional group was in a case conference. A monthly conference was held among community care workers, where a complicated case was selected to discuss, share and exchange experience and knowledge, and solve

problems collaboratively. This mechanism depended, somewhat, on the commitment and co-ordination skills of the health professional in the Health Centre. Another way of monitoring of care quality was visiting the person with disabilities at the same time as the volunteers, reviewing their performance 'on the job'.

Every month the community health volunteers come to the Health Centre for a meeting with the health professionals and talk about the health condition of the disabled people, successes, and problems of the disabled people. In complicated cases, we discussed together. This process is led by the head of the Health Centre who is highly skilled in running the meeting.

[Nurse – translated from Thai]

Mechanism for model management

The mechanism for managing the implementation of the model of HBC in rural communities consists of three components. Each had a role in enhancing the accessibility and integration of care and decreasing its cost. Firstly, a steering group consisting of the main health professionals, physiotherapist and nurse who led and drove the care process was established. They worked together to plan and monitor the accessibility, provision and quality of HBC. Secondly, sharing the lessons learned in the implementation of all aspects of the model among all stakeholders facilitated ongoing HBC planning and delivery. This strategy was an important instrument in supporting the participation and partnership of all stakeholders, especially at the community level, in both decision-making and implementation of the model. Thirdly, the role of the Health Centre as the Co-ordination Centre was central in managing the overall implementation of the HBC model, providing a meeting venue, a centre for exchanging and distributing data on disabled people to stakeholders, coordinating care and resource support from other organisations, and the central hub for facilitating and monitoring care. In this way, the Health Centre was able to reduce gaps in care provision and increase the participation of the community and the collaboration among organisations. The success of the Health Centre as the co-ordination centre was attributed to the management skills, experience and social relation of its health processionals.

Functional outcomes of model implementation

Quantitative measures in a sample of 20 PwD showed a demonstrable difference in outcomes following the instigation of the HBC model. Firstly, as shown in Table 1, while all people with disability received a health assessment, few had received other care and self-care interventions prior to instigation of the HBC intervention.

The mental support of care providers and other stakeholders, and the positive impact of exercise or rehabilitation were fundamental to the ongoing morale and intention of the PwD to achieve increased levels of self-care, well-being and improved quality of life.

Previously, she only laid there and could not do anything. We had to help her for eating and taking a bath. After many people came to visit, to help and teach her to exercise, she was better. Now she can eat and move to do many things by herself.

[Family caregiver (speak and smile) – translated from Thai]

Table 1. Comparison of performance after and before implementation of home-based care for people with disability

CARE AND SELF-CARE INTERVENTIONS	BEFORE (n)	AFTER (n)
Health assessment	20	20
Care based on problems or needs	0	20
Teaching and rehabilitation by health professional at home	0	20
Teaching /assistance with rehabilitation by volunteers at home	0	20
Mental support	0	20
Social and welfare support	7	20
Mobility aids support	3	20
Did exercise or rehabilitation by disabled people	0	20
Correctly did exercise or rehabilitation by disabled people	0	20

Yes, now I can do it and every morning I have to exercise before I move from my bed … because it is good for my movement, so I try to do it every morning.
[Disabled women aged 68 years – translated from Thai]

Secondly, using the Wilcoxon signed-ranks test, a statistically significant improvement in the pre-post intervention Activity of Daily Living scores was evident (n=20, Z=-3.378, p<0.01).

Discussion

The great achievements of the HBC model are high accessibility to home care and enhanced self-care, well-being and quality of life for PwD. This is in line with the broader goal of HBC models, which is to help family caregivers and sick family members maintain their independence and achieve the best possible quality of life. [10,17]

Health policy and payment methods of top-up funding for service provision and utilisation are important because they affect the design of the care model. The more that PwD access services, the greater the compensation to the district health organisation. The social context – social capital, strong community – also supports the design of the participatory process of the model.

The characteristic of the model was integrated network care among stakeholders in all sectors according to the WHO concept of primary healthcare as an integral part both of the health system and overall of the community as well as integral to curative care, health promotion, prevention and rehabilitation. [18] Although the model involves integrated care, the care providers still mainly emphasise health rehabilitation because of the specific problems with physical movement experienced by PwD. Mental and spiritual support is also important. People who have good mental health can make the most of their potential and cope well with life and its changes. [20]

The PwD in the current study, however, did not receive much support in relation to the physical environment, such as helping technology, which allows them to have independence, maintain good health and prevent social isolation. [21]

While the functioning of the integrated team as a network in the current model is generally aligned with the principle of the HBC program for people living with HIV/AIDS, which is to build and support referral networks and collaboration among participating entities, [22] key stakeholders in this network included the relevant organisations and the coordinator, whose role is fundamental to linking the various members of the network. This is different from the care providers for HIV in a household that consists of community care workers, primary (family) caregivers and care recipients. [17] The more complex needs of the PwD require more diverse input from a multidisciplinary care team.

Inter-professional collaboration led to the achievement of desired care outcomes. This is similar to the effectiveness of inter-professional care working for older people living in the community, where more than half reported improved health, functional, clinical, process outcomes and patient satisfaction. [23]

Unmet needs are still a problem for many PwD. [24] In the current study, however, the needs of PwD could mostly be met because of the process of case management that was, at its core, based on the problems and needs of each of the PwD and because it involved all stakeholders in working toward the improvement of patient outcomes. [25]

Trained community health volunteers working as a friend and coach of PwD's families were also fundamentally important people for the provision of continuous HBC. This finding is similar to a study which found that the village health volunteer is likely to be a key person for improving the accessibility to home healthcare for PwD in a rural community. [26]

On the job training enhanced health volunteer competencies and greatly enhanced the quality of care to the PwD in their homes. Training can reduce the barriers to care, by reducing gaps in communication, knowledge and skills, [5] and reducing overall costs of training due to less time spent retraining. [27] Additionally, participatory monitoring of the health volunteers providing care in the home, in conjunction with the regular case conferences, enhanced continuous learning, further strengthening care quality.

Overall, these components influenced the quality of care and level of community participation. [28] This finding indicates that the HBC process still needs health professionals, with their specific skills, to be engaged in solving problems. It is different from the principle of HBC that focuses on empowerment of family caregivers or families and communities to care for PwD. [9, 29]

A key mechanism for the model management, in the current study, was the steering team working in collaboration with the district health system, in accordance with the role and responsibilities of the district level in community HBC. [30] The steering team could not make decisions in relation to supporting resources as this was under the control of a committee of district health management.

The most important mechanism of the model management, however, was the Health Centre Co-ordinator, at the sub-district level. They could sustain and co-ordinate the whole model to achieve the optimal levels of participation in care and maximise health outcomes. The successes of these mechanisms are attributable to the individual skills in the Health Centre. Management skills, especially, are needed. According to Sunitha Dookie and Shenuka Singh, strong leadership, a strengthening of the current district heath system and a greater emphasis on health promotion, prevention along with community participation and empowerment was required in a well-functioning district health system for the re-engineering of primary healthcare. [31]

Study limitations

The primary limitation of this study is that it examined only one unit of best practice in the north of Thailand. The research would benefit from further, similar studies elsewhere.

Conclusions

The aim of this study was to explore a best practice model of HBC for disabled people in rural Thailand. The model shifted responsibility in the main service decisions from professionals to the community and other stakeholders in an integrated care network. Mental and spiritual support was key to promoting self-care and decision-making for PwD.

Co-ordination at the Health Centre level was also fundamental in ensuring continuous HBC for PwD, with care provided by community health volunteers under the direction of health professionals. Overall the care model led to optimal outcomes for PwD and their families.

Continuous training and support for non-state providers and community volunteers is also important. Capacity building for health professionals also needs to be considered, especially in relation to enhancing rehabilitation and management skills.

Overall, the model was built on high social capital and a strong community context, performance-based payment methods and targeted policy from the national level. Health policy and social context are key components of a best practice model of HBC for PwD.

Competing interests

The authors declare that they have no competing interests.

References

1. National Office for Empowerment of Persons with Disabilities. Persons with disabilities empowerment Act 2007. Bangkok: National Office for Empowerment of Persons with Disabilities; 2007.
2. National Health Security Office. The annual report of National Health Security Office (NHSO) 2011. Bangkok: National Health Security Office; 2012.
3. Wanaratwichit C, Sirasoonthorn P, Pannarunothai S, Noosorn N. Access to services and complications experienced by disabled people in Thailand. Asia Pac J Public Health. 2008 20(Suppl):251-6.
4. Nondwe B. Mlenzana, Jose M. Frantz, Anthea J. Rhoda, Arne H. Eide. Barriers to and facilitators of rehabilitation services for people with physical disabilities: A systematic review. African Journal of Disability. 2013; 2(1):1-6.
5. Morrison EH, George V, Mosqueda L. Primary care for adults with physical disabilities:perceptions from consumer and provider focus groups. Family Medicine. 2008;40(9):645-51.
6. Disability statistics in 2012 [Internet]. National Health Security Office. 2014 [cited 30 July 1014].
7. Statistical Forecasting Bureau. The 2012 disability survey. Bangkok: National Statistical Office; 2014.
8. Noor KBM. Case study: A strategic research methodology. Am J Appl Sci. 2008;5 (11):1602-4.
9. Lindsey Eea. Community home-based care in resource-limited settings. A framework for action. Geneva: Department of HIV/AIDS, Family and Community Health, WHO; 2001.
10. World Health Organisation. Home-based long-term care: report of a WHO study group. Geneva: WHO; 1999 Contract No: WHO technical report series, 898.
11. Tarimo E. Towards a healthy district : organizing and managing district health systems based on primary healthcare. WHO. 1991. Guides- Non Classroom Use(055). Available from http://files.eric.ed.gov/fulltext/ED337548.pdf.
12. Greenhalgh T, Humphrey C, Hughes J, Macfarlane F, Butler C, Pawson R. How do you modernize a health service? A realist evaluation of whole-scale transformation in London. Milbank Q. 2009;87(2):391-416.
13. Boyce C, Neale P. Conducting in-depth interviews: a guide for designing and conducting in-depth interviews for evaluation input. Pathfinder International; 2006.
14. McLafferty I. Focus group interviews as a data collecting strategy. J Adv Nurs. 2004;48(2):187–94.
15. Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. Qual Health Res. 2005;15(9):1277-88.
16. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006; 3:77-101.
17. Sips I. 'Who cares in the home?' A method overview. Rural Aids and Development Action Research Programme. Horsham, UK: AVERT; 2013. Available from: www.avert.org/media/pdfs/HBC-Research-Methodology.pdf.
18. World Health Organization. Primary healthcare. Report of the International Conference on Primary Healthcare, Alma - Ata, Union of Soviet Socialist Republics, 6-12 September 1978. Geneva: WHO; 1978.
19. Como E, Batdulam T. The role of community health workers in the Mongolian CBR Programme. DCID (formerly Asia Pacific Disability Rehabilitation Journal. 2012;23(1):14-33.
20. Skills for Care. Common core principles to support good mental health and wellbeing in adult social care. Leeds: Skills for Care; 2014. Available from: www.skillsforcare.org.uk.
21. Chan M, Campo E, Estève D, Fourniols J-Y. Smart homes: current features and future perspectives. Maturitas. 2009;64 90-7.

22. Van Acker I. Home and community based care of PLWHA. Integrated HIV/AIDS Prevention, treatment and care. Nairobi: The African Medical and Research Foundation; 2007.
23. Trivedi D, Goodman C, Baron N, Scheibl F, Iliffe S, Manthorpe J, et al. The effectiveness of inter-professional working for older people living in the community: a systematic review. Health Soc Care Community. 2013;21(2):113–28.
24. Mitra M, Bogen K, Long-Bellil LM, Heaphy D. Unmet needs for home and community-based services among persons with disabilities in Massachusetts. Disabil Health J. 2011;4(4):219–28.
25. Davies DJ. Quality improvement initiatives in a case management service: case study. Aust J Prim Health. 2014:A-H.
26. Nualnetr N, Sakhornkhan A. Improving accessibility to medical services for persons with disabilities in Thailand. Asia Pacific Disability Rehabilitation Journal. 2012;23(1):34-49.
27. Molnar J, Watts B. Structured on the job training effectively training employees with employees. Morgantown: West Virginia University; 2002.
28. Breuer D. Community participation in local health and sustainable development approaches and techniques. WHO Regional Office for Europe; 2002.
29. World Health Organization. Community home based care: action research in Kenya. Geneva: WHO; 2001 . Contract No: WHO/NMH/CCL/01.01. Available from: http://www.who.int/chp/knowledge/publications/community_home-based_care.pdf.
30. World Health Organization. Community home-based care in resource-limited settings: a framework for action. Geneva: WHO; 2002.
31. Dookie S, Singh S. Primary health services at district level in South Africa: a critique of the primary healthcare approach. BMC Fam Pract. 2012;13(67):1-4.

RESEARCH ARTICLE

Do Peer Leaders in the Workplace Improve Implementation of Self-Management Support Training?

K E Ervin and V Jeffery

Abstract

Objective: The study aimed to detect changes in implementation rates of self management support, utilising health coaching training, when staff are provided with increased workplace support through peer leaders.

Design: This study used a quantitative research approach. With organisational consent, staff who had recently completed health coaching (HC) training, were emailed an electronic survey. The survey sought information about staff knowledge and confidence in implementing their HC training and perception of workplace support to implement and embed the training into practice.

Setting: Nineteen staff trained in HC, from 10 different healthcare organisations completed an electronic survey. Sixty eligible primary healthcare staff from twelve healthcare organisations in rural Victoria, were invited to participate in the study.

Main outcome measures: Measures used included a visual analogue scale of staff confidence levels of using the training in their work role, perceived barriers to implementation, the presence of structured opportunities to practice training in the workplace and ongoing colleague support in the workplace post training.

Results: Despite increased workplace support through the presence of peer leaders in some organisations, staff confidence and implementation rates of HC training has not improved since previous evaluations.

Conclusion: HC training for primary healthcare staff requires an organisational post training plan to support and improve implementation rates.

Keywords: self management support, chronic disease, implementation of training.

Kaye Elizabeth Ervin
Rural Health Academic Network
University of Melbourne -
Shepparton, Victoria, Australia.

Vivienne Jeffery
Project Coordinator : Access & Integration Support
Goulburn Valley Primary Care Partnership
Shepparton, Victoria, Australia.

Correspondence:
ervink@humehealth.org.au

Introduction

Self-management in chronic disease is, as the term suggests, what a person with chronic disease does to manage their illness, with or without the assistance of a health clinician. [1] The prevalence of chronic conditions is increasing in Australia with more than half of the population aged 65-84 years having five or more long-term conditions, which now contributes to 80% of disease burden in Australia. [2] There has been demonstrated evidence for many years that self-management of chronic conditions improves patient outcomes. [3] Furthermore, primary healthcare clinicians are increasingly being encouraged to adopt self-management support for patients with chronic disease. [3,4]

Self-management support (SMS) can be defined as clinicians collaboratively helping patients to develop their skills, knowledge and confidence to manage their own condition.

[5] The national agreed definition of SMS is a process that includes a broad set of attitudes, behaviours and skills. [6] It is directed toward managing the impact of the disease or condition on all aspects of living by the patient with a chronic condition. SMS encompasses what health professionals, carers and the system do to assist the patient in managing their condition. [7]

There are many models of self-management strategies currently in use in Australia including Stanford, Flinders, motivational interviewing and health coaching. [8] Key principles include; engaging the patient in decision-making including formulating health goals, using planned evidence-based care, improving support and access to resources to assist in self-management and systematic monitoring of the patients health status at agreed intervals. [5,9] Australian policy documents are underpinned by the Chronic Care Model, [10] which the Victorian Department of Health has endorsed as the model to guide the service system redesign required to support people with chronic disease. [11]

Much of the literature regarding SMS details the difficulty staff have in translating training into clinical practice when they return to the workplace. [9,12] The reasons for this are varied, but include reported difficulty in integrating new skills into the existing workplace model of care, poor staff motivation and confidence to change their practice and lack of consistency in organisational approaches to collaborative care. [12-14] One study found that staff perceived there was no expectation to implement the training into practice. [13]

The Hume region in Victoria, Australia introduced staff training in health coaching (HC) to be used in a self-management support context, in primary healthcare settings. The training of primary healthcare clinicians and evaluation of their implementation of the strategies has been ongoing since 2010. The evaluations have focused on clinicians' perceptions of barriers and enablers of implementing HC training in their workplace. The evaluations demonstrated that HC was very challenging to integrate into usual care for multi factorial reasons, such as a perceived lack of time, clinician confidence and experience. [13,14] In an effort to assist staff to better implement HC, four primary healthcare organisations in the Hume region had five staff members agree to participate in an additional, peer leader support program training, with the intention of providing themselves and colleagues with increased workplace support to embed previous HC training. The peer leader support participants were not provided with any particular organisational support mentor from a regional or local government area perspective and hence undertook the training with the support and camaraderie that existed internally within the group.

The evaluation described here reports staff perceptions of barriers and enablers to the implementation of HC for patients, following six months of horizontal concurrent colleague peer leader accreditation training and resultant anticipated increased workplace implementation of HC as a by-product of this training. The study aimed to detect staff change in issues relating to implementation of HC as a result of the peer leader support programs, a post-training adjunct to initial basic training.

Methods

The study was conducted in the Hume region in Victoria, which contains 12 local government areas. It is a geographically diverse area, including alpine areas, remote farming communities and three major regional centres. The primary healthcare settings in each township are therefore equally diverse; some located at major regional health services, some within small rural health services and others only providing outreach services for limited days per week.

The training model undertaken by the staff was HC, with the training organisation providing on-site training at two agreed sites. The HC model of training had been used and evaluated in the study area since 2010.

The five participants of peer leader training met primarily via videoconference with only two having direct opportunity for face-to-face peer contact within their organisation. The training provider interactions were via various methods including videoconference, teleconference and email. There was no nominated convenor/facilitator of the group. The timeline for peer support training completion was six months.

Peer support training included individual knowledge development and skills, provision of skills development to support co-workers, facilitation of short presentations and demonstrations intra organisational for those who had not attended HC training. All peer leaders attended a one-day peer leader planning and implementation workshop with the training organisation, as well as participating in five teleconference calls in a ten-month period. Peer leaders submitted two drafts and a final detailed peer skills development and practice change action plan, a case study and a detailed organisational plan. To maintain peer leader accreditation, peer leaders were also required to attend two additional training days with the training organisation.

The study reported here used purposive sampling. Chief Executive Officers from each of the primary healthcare

services whose staff had undertaken HC training, were invited by email to be included in the study. With consent, staff trained in HC from each of the organisations were invited by email to complete an electronic survey. The targeted staff came from a wide variety of disciplines, predominantly nursing and allied health.

The survey explored implementation of the training into practice, staff confidence level in using the training in their work role, main barriers to implementation, additional barriers to implementation, the presence of structured opportunities to practice training in the workplace and ongoing clinical support in the workplace post training. The participant's demographic information was also sought. A copy of the survey is available from the corresponding author.

Approval to conduct the study was granted by the Goulburn Valley Health Human Research Ethics Committee. The project was conducted in accordance with the National Health and Medical Research Council ethical standards.

Basic descriptive statistics were collated by the electronic survey tool used. Further analysis was conducted using IBM SPSS computer software.

Results

Twelve organisations with sixty staff trained in HC agreed to researchers sending their staff an invitation to participate in HC evaluation. Nineteen staff from 10 different organisations completed the electronic survey, a 32% response rate. Reasons for nonparticipation were not asked. Seven of the 19 respondents (36%) who participated were located in primary healthcare settings with peer leader support.

The characteristics of the participants in the study are shown in Table 1. The staff who responded identified from 11 different allied health positions within the organisations. The majority were Dieticians (four), followed by Key Worker (three), two each from Physiotherapy, Occupational Therapy, and Community Health Nurses, and one each identified as Allied Health Assistant, Diabetes Educator, Podiatrist, Speech Therapist, Health Promotion Officer and Social Worker.

Eleven participants (57.9%) reported that they had implemented the HC training into practice, four (36%) from the sites that had peer leader support and seven (64 %) from sites with no peer leader support. Of the 19 participants who responded to the survey, 14 (73.7%) reported that they were unaware of any colleagues completing peer leader support

Table 1: Participants characteristics

PARTICIPANT	CHARACTERISTIC SUBCATEGORY	TOTAL SAMPLE (n=19) n	%
Current role in the organisation	Dietician	4	21.1
	Key Worker	3	15.8
	Physiotherapist	2	10.5
	Community Health Nurse	2	10.5
	Occupational Therapist	2	10.5
	Other, including Allied Health Assistant, Diabetes Educator, Podiatrist, Speech Therapist, Health Promotion Officer, Social Worker	1 (5.3%) each	31.8
	MEDIAN (IQR)	RANGE	
Age (years)	35 (26,50)	24-57	
Years of practice	9 (2,14)	2-39	

Table 2: Main barrier to use and implementation of self-management support training

	NON PEER LEADER SUPPORT SITE (n=12)	PEER LEADER SUPPORT SITE (n=7)	BOTH GROUPS COMBINED (n=19)
	n(%)	n(%)	n(%)
Relevance to using HC in my work	3(25.0)	3(42.8)	6(31.6)
The time required to use HC	2(16.6)	1(14.2)	3(15.8)
My knowledge of applying HCA training	1(8.3)	0	1(5.3)
How to implement HC into current work practice	1(8.3)	0	1(5.3)
Where and what documentation to use	1(8.3)	1(14.2)	2(10.5)
My experience in using HC with clients	1(8.3)	2(28.5)	3(15.8)
My confidence in using HC with clients	3(25.0)	0	3(15.8)

training. Fourteen participants also reported that there were no structured opportunities to practise the new HC skills when they returned to their workplace after the training, six (42.8%) from sites with peer leader support and eight (57%) from non peer leader sites. The same number (73.7%) reported that there had been no ongoing clinical support since completing the HC training, seven (50%) from the peer leader sites and seven (50 %) from non-peer leader sites.

Although there were seven participants from sites with peer leader support, only four participants (26.3%) reported that there were colleagues who had completed peer leading support training, with one of those stating that it made no difference in the work environment. Three cited a benefit to having peer leader support, through provision of new resources, group discussions about HC and consolidating knowledge and confidence in using HC (which is reflected in Table 2).

If participants reported that they had implemented HC training into practice, they were asked what changes needed to happen in their workplace to increase the utilisation of HC. For participants who reported they had not implemented it, they were asked what needed to change in the workplace to facilitate HC implementation. Seven respondents provided further comments, which included the need to sustain implementation, practising HC more, developing a philosophy of care for HC utilisation, and guidance to applying the principles of HC in acute care settings.

Participants were asked to identify one main barrier to implementing HC use. Six respondents (31.6%) reported relevance of HC to their work as a barrier. When asked to identify other barriers to implementation of HC the most frequently occurring response was the staff members experience in using HC with clients (47.4%). The main barrier to use and implementation of HC are shown in Table 2.

Overall, the reported confidence of participants in using HC in their work role was low. The HC training provided to staff, uses a numerical scale to rate clients' self confidence in implementing change and management of their chronic condition. A client's confidence is considered low if they select a number below seven out of ten regarding their perceived ability to self manage. Using the same construct, staff were asked to rate their own confidence in using HC training in the workplace, using a visual analogue scale from 1=no confidence to 10=extremely confident. Despite only three participants listing it as a main barrier, 17 out of 19 (89%) respondents rated their own confidence below seven. Of these 17, nine (53%) were from the peer leader support sites and eight (47%) from the non-peer leader support sites.

The final question asked the participants if they thought SMS benefitted the client. All responded positively (100%), that clients derive benefit from HC.

Discussion

A broad range of primary healthcare disciplines are represented in the evaluation of implementation of HC in the workplace. The results of this evaluation suggest that increased workplace activity to integrate HC training into practice was not effective, with 73.7% reporting that there were no structured opportunities to practise the new HC skills when they returned to their workplace after the training and that there had been no ongoing clinical support since completing the HC training. In addition 89% expressed low

levels of confidence in using HC training in practice, though confidence was lower in the sites with peer leader support, it was less likely to be reported as a main barrier.

Nineteen respondents representing 10 different organisations result in a highly heterogeneous group, both from an individual and organisational perspectives. Previous research [15] discusses this issue and how to achieve standardised practice. There was no apparent post training plan by organisations to assist trainees with training translation. The peer leader support training was undertaken after previous evaluations demonstrated a failure to implement HC training in practice. Critically, the organisations appear to have had no post training plan for the peer leaders either, with resulting lack of implementation again. One recent study, [16] which acknowledges the problematic implementation of SMS, discusses the clinician characteristics required to encourage to self-management programs, including clinician confidence. Confidence is pertinent to this study and the problematic inherent issues for implementation for a highly heterogeneous group.

Low levels of confidence, barriers such as experience with using HC and knowledge of how to implement it, remain unchanged since previous research when there was no peer leader support, and are in keeping with other recent research in HC implementation. [4,12] Three respondents (15.7%) reported benefits in having peer leader support in the workplace, one respondent, while aware of the support, perceived that it made no difference. The seven respondents who offered opinions on what changes were required to enable better implementation of HC in the workplace, suggested organisational change such as developing a philosophy of care or increased guidance and practice in using HC. These opinions are in keeping with previous findings on integrating HC into workplace practices. [13,14]

Implementation rates of the HC training into practice have not increased since the initial evaluations undertaken in 2010, despite the groundswell in the number of staff trained, and other well intentioned interventions, such as toolkits to guide implementation and peer leader support training. Former evaluations demonstrated that staff perceived HC training to be valuable, but its effectiveness was limited by their ability to implement it on their return to their workplace. In this study staff unanimously agree that SMS benefits clients, which is the aim of HC training. Despite this, many (31.6%) reported that there was no perceived relevance of HC to their role.

Early opinions about Australia's chronic disease strategy suggested that healthcare professionals would need to become more experienced in understanding the psychosocial aspects of long-term conditions and how to work in partnership with patients. [17] This same author ([17] predicted that without a robust framework to introduce SMS and the provision of adequate resources, it would become the preserve of the motivated minority. The National Chronic Disease Strategy (2006) also acknowledges that SMS principles require a major cultural shift in workplace practices and service delivery. This study demonstrates that health service organisation staff are slow to embrace this change, despite apparent gains for clients of their services. A large British randomised controlled trial on SMS found that effectiveness depended on a change in clinician behaviour. [18] Zwar (2013) echoes the findings from this study, that SMS training for staff is prone to fail without structured follow up to ensure change in practice becomes embedded and systemic. (18) Also in support of the findings here, another study [19] identified that organisational change factors are required to enable training recipients opportunity to practise and collaborate, regardless of the SMS training approach used. Lawn and Schoo (2009) examined a number of models of self-management strategies currently in use in Australia (including Stanford, Flinders, motivational interviewing, and health coaching) and concluded that no training model was superior but the effectiveness of the training was dependent on opportunities and support for staff to practise what they had learned. [19]

Implications

This evaluation indicates that organisational change at multifactorial levels is required to facilitate staff implementation of HC training. A top down approach needs to complement the ground up approach, which has so far been unsuccessful in integrating the learned skills of HC training to support clients with chronic disease. The broad range of disciplines represented in this study demonstrates a widespread inability to successfully implement HC for clients, which limits the effective use of the primary healthcare team. While continued HC training for staff is recommended, it must be supported by management systems that allow full integration of the training into practice. In addition, peer leader support training also requires careful planning and support by senior management to ensure its effectiveness.

Limitations

The small sample size and low response rate limit the conclusions that can be drawn from the results, though they are similar to other studies of this type, and demonstrate a trend that change is very slow. In addition the responses may be biased toward participants who actively practise, or wish to practise SMS, meaning the implementation rates may be much lower than reflected in the evaluation. Given that evaluations have been ongoing for four years, staff of health services in the region studied may have been saturated with previous evaluations of HC training. Ultimately it is the reader who decides the value and relevance of the results to their own practice.

Recommendations and conclusion

HC training requires robust post training management support to ensure the implementation of the newly learned skills into practice. There is very limited evidence from this study that peer leader workplace support improved the implementation of HC training. With the exception of a limited number of sites, at present implementation is ad hoc rather than planned and systematic. A consistent approach to the implementation of HC and peer leader training is required, which is complementary to the current decision-making framework employed in primary healthcare settings. While HC is best practice clinical care, its application in most settings is sporadic, inconsistent and the quality of delivery unmonitored. Future research should include post-training interviews with staff who undertake peer leader support training to determine the barriers central to their role. HC training organisations should also focus on implementation of the training in the workplace, for long-term improvement of these interventions to be possible.

Competing interests

The authors declare that they have no competing interests.

References

1. Bodenheimer T, Lorig K, Holman H, Grumbach K. Patient self-management of chronic disease in primary care. J Am Med Assoc. 2002;288(19):2469-73.
2. Stone G, Packer T. Evaluation of a rural chronic disease self-management program. Rural Remote Health. 2010;10(1203).
3. Lawrence W, Black C, Tinati T, Cradock S, Begum R, Jarman M, Pease A, et al. 'Making every contact count': evaluation of the impact of an intervention to train health and social care practitioners in skills to support health behaviour change. J Health Psychol. 2014(DOI: 10.1177/1359105314523304):1-14.
4. Cheffins T, Twomey J, Grant J, Larkins S. An evaluation of self-management support capacity of providers of chronic condition primary care. Aust J Prim Health. 2012;18:112-5.
5. Gale J. Health coaching guide for health practitioners: using the HCA model of health coaching. 1st ed. Sydney: Health Coaching Australia; 2010.
6. Australian Government Department of Health and Ageing. National chronic disease strategy. The National Health Priority Action Council (NHPAC); 2006; Canberra.
7. Lawn S, Battersby M. Capabilities for supporting prevention and chronic condition self-management: a resource for educators of primary healthcare professionals. Flinders University, Adelaide: Australian Government Department of Health and Ageing; 2009.
8. Victorian Department of Health. Common models of chronic disease self-management support. A fact sheet for primary care partnerships. 2008. Available from: http://www.health.vic.gov.au/pch/downloads/factsheet08.pdf. [accessed Feb 2, 2015].
9. Flinders University. The Flinders Program. Journal [serial on the Internet]. [accessed May 2011].
10. Department of Human Services. DHS Primary Healthcare Branch revised Chronic Disease Management program guidelines for Primary Care Partnerships and Primary Healthcare Services; 2008.
11. Department of Health. Incorporating self-management support into primary care – a fact sheet for Primary Care Partnerships. 2008.
12. Jeffery V, Ervin K. Early intervention in chronic disease: four years on. J Allied Health. 2013;43(1):1-3.
13. Ervin K, Jeffery V. Staff perceptions of health coaching as a tool for self-management in chronic disease: a qualitative study. J Nurs Edu Prac. 2013;3(9).
14. Ervin K, Jeffery V, Koschel A. Evaluating the implementation of health coaching in a rural setting. J Hosp Adm. 2012;1(2).
15. Fortin M, Chouinard M, Bouhali T, Dubois M, Gagnon C, Bélanger M. Evaluating the integration of chronic disease prevention and management services into primary healthcare. BMC Health Serv Res. 2013;13(132):http://www.biomedcentral.com/1472-6963/13/132
16. Kirby S, Dennis S, Bazeley P, Harris M. What distinguishes clinicians who better support patients for chronic disease management? Aust J Prim Health. 2012;18:220-7.
17. Dowrick C. The chronic disease strategy for Australia. Med J Aust. 2006;185(2):61-2.
18. Zwar N. Self-management support has potential but is difficult to deliver in routine primary care. Evidenced Based Medicine Online. 2013;10.1136/eb-2013-101434.
19. Lawn S, Schoo A. Supporting self-management of chronic health conditions: common approaches. Patient Educ Couns. 2010; 80:205-2011.

RESEARCH ARTICLE

The Changing Face of Healthcare Accreditation in Australia

R McPhail, M Avery, R Fisher, A Fitzgerald and L Fulop

Abstract

Objective: To review the background of accreditation in healthcare. We examine the National Safety Quality Health Service (NSQHS) standards development and the perceptions of some of the NSQHS accredited accreditation providers in Australia.

Design: An exploratory qualitative study in which the researchers use interviews and content comparison analysis to examine the Australian NSQHS standards (the Standards), the approving accrediting agencies and the perceived impact of the changes on the healthcare system.

Setting: The researchers focus on providers' accreditation products and services, and how the Standards will impact on the Australian Healthcare system. Australia is not alone in undergoing reforms in accreditation and performance in healthcare. Other countries and international organisations have recently revised and renewed their interest in how healthcare systems perform.

Outcome: This has led to the development of revised standards; quality and safety review frameworks; performance indicators for monitoring, assessing and managing healthcare systems to achieve effectiveness, equity, efficiency and quality.

Measures: Analysis of qualitative data using the constant comparison method.

Findings: Five major themes are found from in-depth interviews with accreditation program providers: the multiple levels of accreditation that are offered; the importance of assessor recruitment and training; the aspiration of service excellence; improved processes; and the importance of value versus price to those who are accredited by the participants of this study.

Conclusions: The findings focus on optimisation of the regulatory environment to drive performance and quality in health facilities and the importance of the assessors, in what is expected to continue to be, a value-driven accreditation market.

Abbreviations: ACSQHC – Australian Commission on Safety and Quality in Health Care; NSQHS – National Safety Quality Health Service.

Key words: accreditation; approved accrediting agencies; NSQHS; assessors; qualitative.

Ruth McPhail
Griffith University – ERHR
Griffith University Gold Coast Campus,
Gold Coast , Queensland, Australia.

Mark Avery
Centre for Health Innovation, School of Medicine,
Griffith University Gold Coast Campus,
Gold Coast , Queensland, Australia.

Ron Fisher
Griffith Business School
Griffith University Gold Coast Campus,
Gold Coast , Queensland, Australia.

Anneke Fitzgerald
Griffith Business School
Griffith University Gold Coast Campus,
Gold Coast , Queensland, Australia.

Liz Fulop
Griffith Business School
Griffith University Gold Coast Campus,
Gold Coast , Queensland, Australia.

Correspondence:
r.mcphail@griffith.edu.au

Introduction

A feature of good governance of health systems is the demonstration of its effectiveness, efficiency and quality to users, the community and funders. There are different approaches to ensuring quality and improving standards in healthcare services internationally. In some countries, quality assurance in healthcare has been left to professional organisations and provider associations with little specific regulation, where participation in quality assurance programs is largely voluntary or driven by funder requirements. In other countries, particularly where the State is the main funder and provider of healthcare, rigid controls are imposed over the health sector, leaving little scope for professional autonomy and consumer engagement. Unfortunately, the latter approach is frequently accompanied by acceptance of minimum standards and little openness in disclosing relative performance. [1] In this study we seek to explore how recent changes in Australia, from an accreditation model to one of regulation through the introduction of 10 National Safety Quality Health Service (NSQHS) standards, will impact healthcare services and those who have been selected to accredit them. We seek to answer the research question: What is the perceived impact of the introduction of the NSQHS standards in Australia on the accredited providers and those they accredit?

Accreditation

Background

Healthcare accreditation is reported from the early part of the twentieth century in the United States as a mechanism to ensure an appropriate environment in which clinicians could practise effectively. It was adopted in Canada and Australia, where it conformed to the early design of standards to control hospital environments. [2,3] Australia was therefore an early adopter in respect to accreditation and the associated use of standards within the healthcare system. This supported professionalmengagement, ownership and inclusion; inter-professional working; specialist knowledge and research application; as well as opportunities for uniformity and consistency. Sustained development has occurred since the 1970s with movement across the regulatory spectrum (voluntary, consequential engagement due to compliance to third party agreements, legislative requirements etc.). Standards utilised in Australian accreditation programs have been for general application (eg, governance) or for specific performance requirements (eg, ionising radiation). Recent developments and changes in accreditation and standards development are consistent with this history and development of the regulatory continuum. In the past decade, these accreditation systems have been forced to change in response to the ability to support a wider spectrum of healthcare delivery environments and services along with the demands of governments and the public for greater surety and information about quality of healthcare. Accreditation, originally perceived as a vehicle to enable organisational development, is increasingly an agent of government regulation. [3]

Recent research

To date research has focused more on evidence of the impact on health services than on accreditation providers; little has been published on the determinants of the growth or decline of accreditation organisations and programs. [4] This research is significant as it explores the introduction of the Standards into the accreditation programs of accreditation providers in Australia. Accreditation programs are traditionally a form of external peer review of organisational processes and structures. At the heart of an accreditation system are standards, which describe agreed good practice for a health service organisation such as a hospital. The focus for accreditation standards in the past has been on organisational policies and procedures rather than the organisation of clinical activity and has, over the last decade, developed more importance on outcomes.

Introduction of new Standards

In 2010 the Australian Commission on Safety and Quality in Healthcare (ACSQHC) announced the introduction of the Standards effective January 1 2013, which are mandatory for the majority of healthcare services in the country. Focused on improving safety and quality the Standards aim to '…provide a nationally consistent and uniform set of measures…they propose evidence-based improvements strategies to deal with gaps between current and best practice outcomes that affect a large number of patients'. [5] In addition to confirming that minimum standards are in place a quality improvement mechanism should '…allow health services to realise aspirational or developmental goals'. [5] However there appears to be limited structural motivation to achieve best practice, instead compliance with the 10 standards is reflected in the ratings of 'not met', 'met' or 'met with merit'. The new Standards replace ones that recognised achievement beyond the minimum standard to achieve accreditation despite Braithwaite's warning against a 'cookbook' regulatory strategy and stressed the importance of continuous improvement as measures of success. [6] Emerging research, which explores the implementation of the national strategy, is focused on different contexts and concerns such as difficult standards

to implement, innovative audits to reduce administration, the role of orientation and expected benefits of the strategy is discussed next.

Implementing the new Standards

Poole reported the findings of a survey of 415 participants from public hospitals, private hospitals, day procedure services and community-based services. [7] She found respondents reported having the most difficulty in implementing actions related to the involvement of consumers and carers. This finding informed additional tools and materials which can be developed and tailored for the varying requirements of different types of health service organisations to assist in the implementation of this standard. Designed to reduce the administrative burden of accreditation, Jessing, Brookes and Rubin reported on the development of auditing systems. Comparison across wards and departments is achieved by creating a measurement of process indicator audits, which are completed by staff and allow for benchmarking, calculate the compliance rate and generating graphical data. [8] In addition, a monthly review and action planning process is incorporated in the system. The program reports to increase local ownership, improve timeliness of reporting and importantly reduces time away from clinical duties.

The importance of orientation in the implementation of the Standards was explored by Boyd and Sheen who conducted a review of 42 articles to explore the role of workplace orientation as a core requirement of the new Standards and found orientation provided an opportunity to meet several of the core standards detailing overlap and outlining potential curriculum design for practitioners to implement. [9] Greenfield et al conducted an extensive and comprehensive research program based on observations and 34 interviews with 197 diverse stakeholders. [10] This study identified the expected benefits strategy was enhanced levels of patient centred care at each level of the health system, promoting engagement of clinicians in patient quality improvement, identifying and responding to patient safety problems and the implementation of standardisation, integration and transparency through the National framework. The evidence-based clinically focused Standards were considered to be important in increasing engagement in safety and quality improvement and direct practice. Implementation challenges identified included expectation management regarding the reform, confusion concerning aspects of the strategy, the reliability of assessing compliance and an insufficient focus on continuous improvement. In addition the inconsistency between accrediting agencies ie, low inter-rater reliability, was of concern to participants. Strategies to facilitate implementation were identified as ongoing and broad consultation, educational activities and materials, strategies to promote reliability and accountability and outcomes are being used to inform the strategy and operations for ongoing quality improvement. This summary of the emerging research presents the issues and concerns from the providers' perspective. What is less understood are the perceptions of accreditors about the introduction of the new Standards, which is our contribution to the growing body of literature on the implementation of the NSQHS.

Method

The research is a qualitative study where data were obtained by means of open-ended, semi-structured interviews [11-13] and the examination of relevant documents. Although the research is positioned across several organisations its purpose is not to focus on differences between organisations but on major themes that are common to each of the providers interviewed. Given the exploratory nature of the research, together with a focus on contemporary events, it has been undertaken as a qualitative case study. [14] The study took place at the work locations of the providers of healthcare accreditation Australia wide. Three of the twelve approved providers of healthcare accreditation were interviewed. This study reports analysis of in-depth interviews ranging from 80-120 minutes in length. The organisations involved are long established; operate nationally and/or internationally; have developed specialisation in sectors of healthcare accreditation; and are accredited themselves (eg, JAS-ANZ). Interviews were conducted by arrangement with the interviewees and were audio recorded. Immediately following each interview the researcher reflected on the interview then compiled a memo to record an account of the interview (eg, non-verbal communication, observations etc.). Interviews were analysed using the constant comparison approach advocated by Strauss and Corbin [15,16] to identify phenomena and build these into concepts. Each interview was analysed on a line-by-line basis throughout, in an attempt to ensure that no concepts escaped the process of analysis. Initially concepts were identified from phenomena in interview transcripts in an open coding process. [15,16] At the end of the third interview the constant comparison process had generated 37 concepts, some of which were single concepts, while others were composite concepts (ie, they contained more than one instance of a concept). Composite concepts were

constructed using an axial coding process [15,16] where concepts with similar meaning were combined. At the conclusion of analysis of the first three interviews 48 single-spaced pages of interview data had been analysed. As open and axial coding were taking place the researchers had been attempting to think of the data at a theoretical level in order ultimately to reorganise it back into a meaningful whole following the coding schema proposed by Straus and Corbin [15,16] and Schreiber. [17] At this point in the study the researchers reflected on the data analysis carried out so far. Data had been collected from different sources; interviews and observations across the organisations, as Corbin has suggested, with multiple data sources being an important condition that influenced the research process positively. [18] Credibility and trustworthiness of data collected had been achieved by the constant comparison of data both within and between interviews, thus ensuring that themes were robust. In the early stages of analysis categories had developed quickly, slowing as data analysis progressed. [18] Understanding concepts arising from the open coding process had been accomplished by utilising an ongoing process of querying the data in the manner suggested by Corbin, [18] Glaser, [19] Strauss [20] and Strauss and Corbin 15,16] (eg, What is going on here? What does this mean? Why is the respondent saying that?). Concepts had been built from data as described above and it is proposed to continue interviews and analysis until saturation (ie, no new concepts emerging) occurs in order to ensure that concepts are robust and dense. [21] At several points during data analysis an independent researcher conducted analysis of interview data in order to ensure credibility of the overall analysis.

During open and axial coding the researchers had also commenced the third level of coding, often referred to as selective coding. [22,23] As third level coding continued, the researchers attempted to make linkages between concepts by moving them from lower to higher levels of abstraction in order to provide a conceptual ordering of the data. [18] From making linkages between categories the issues discussed by interviewees, as constructed by interviewees themselves, could be grouped into five main domains or themes. An independent researcher also analysed the construction of each theme as a means of ensuring credibility based on inter judge reliability.

Results

The five themes that emerged from analysis were: 1) multiple levels of accreditation offered; 2) assessor recruitment and training; 3) service excellence; 4) improved processes; and 5) value versus price. These are now discussed.

Theme 1: Multiple levels and types of accreditation offered

All interviewees discussed the presence of an available and emerging range of accreditation models or programs now available highlighting the multiple levels and types. One commented that the introduction of national Standards in 2013 has '…seriously opened up the market to competition'. The interviewees discussed three types of accreditation that have been developed over the years: 1) the ACHS model; 2) ISO certification with some clinical standards since 2007; and 3) the National Standards since 2013. Some organisations offer National Standards as a standalone accreditation, ISO certification and ISO incorporating the National Standards. Accreditation providers have also now incorporated the Standards in a type of hybrid of their previous model. The ongoing issue of multiple accreditations being required for services also emerged.

Theme 2: Assessor recruitment and training

The need for competent and well-trained assessors was highlighted by all interviewees. One stated that a clinical background is a requirement with '…fairly high level experience in the healthcare sector' along with the ability '…to understand the risks across the hospital. Assessors are subject to annual performance reviews in which client satisfaction is part of the review process. Periodic observation of assessors in the field is also carried out '…just to make sure that they are still performing well'. Twice-yearly auditor training workshops are also held as special training sessions. In special circumstances (eg, the need for a mental health specialist) the organisation co-opts technical experts to '…audit with one of the auditors, so you audit as a team'.

Another interviewee reinforced the need for assessors to have '…some association with either health or community services', and of '…a number of assessors who are still current practitioners in the health environment'. This organisation does not actively recruit assessors, stating that '…they come to us'.

Organisations of the three assessors interviewed have developed programs of assessor or surveyor training and ongoing professional development. The use of competency based learning models was demonstrated including training delivered externally and internally to the accreditation organisation.

Theme 3: Service excellence

There is an interest and perceived value in the differentiation of compliance with improvement assessment with accreditation providers interested and capable of supporting both key agendas. One interviewee discussed moving beyond the three forms of accreditation discussed in Theme

1 above. She spoke of creating a two-tiered system where tier one is the '…compliance tier' and tier two is '…service excellence'. She said, '…so you go beyond compliance and take a journey to excellence'. Although according to this interviewee no organisation has yet commenced the journey to excellence she commented that '…it's met positively… because I think people in healthcare want more than just compliance'. The interviewee explained the ways in which organisations can access the service excellence programme. The main ways are by applying for a service excellence award and following the processes associated with it, or by being assessed by the accrediting body against criteria developed by it. The interviewee explained that what service excellence involves '…is sustainable improvement'. She predicted that once the compliance cycle had been completed organisations would be keen to discuss service excellence. Continuous improvement beyond compliance is the key to service excellence. Continuing with the theme of excellence another interviewee stated 'Our philosophy is to work and to help improve, quality improve or lead continuous improvement in the health and community sector.' The organisation has a mission to '…help the sector'. The third interviewee provided a contrasting perspective of assisting organisations to achieve excellence. She spoke of encouraging auditors to '…identify best practice, so I guess we would do that in a qualitative way'. However, when prompted for examples of processes to identify best practice the interviewee stated 'We have to be very careful doing that, because that's overstepping the mark. We're auditors. We're not consultants. That's the job of a consultant and that's a huge tension in this business…'

Theme 4: Improved processes

One interviewee suggested that the new Standards meant that all hospitals would now be accredited to the same standards, instead of a mixture of ISO and other standards. A consistent approach under the new standards should result in even and improved processes, as organisations would have a common understanding of the intent of each standard. Evaluation '…to make sure we have the same understanding of the intent of each standard, or each criteria, and of each action, then it will definitely change process'. She believed that it is the intent of the new Standards to change processes, and then outcomes. However, changing processes through the adoption of common standards depends heavily on auditor competence, which is only as good as the auditors undertaking the audit.

Another interviewee believed that the new Standards would change processes, but mainly for large organisations. She stated '… my feel for the national Standards at the moment is they are big hospital standards' describing some organisations as '…very small, simple things'. The interviewee gave an example of day surgery in relation to the requirement of element two of the standard that requires input from the consumer. She questioned how this could occur given limited contact between medical practitioners and clients. She queried how consumer involvement in a situation like the one just discussed could change practice. She did not think the standards would change. The third interviewee suggested that '…the information collecting arm is going to be very powerful, and I guess it will standardise practice in healthcare services.' From standardisation would come the opportunity to improve processes. The threat of accreditation failure to healthcare institutions would be a very potent one that would encourage change.

Theme 5: Value versus price

The cost of delivering accreditation programs and processes, as with all quality activities, comes at a cost. Interviewees identified that healthcare organisations generally focus on value propositions rather than service cost. One interviewee explained '… decisions are not being made around the price, it's around the value of the accreditation'. She cited examples of healthcare institutions that had received '… glowing reports' in the past, which caused them to reflect that '…we're not that good. We need somebody to tell us what we're not good at, what we're not doing well'. Their decision was driven by a need to identify weaknesses, leading to improvement, a focus on value not price of audit. She concluded that '…day surgeries are very price sensitive as a general rule and price is a real issue there. But really, for most hospitals my experience is its value rather than just straight price'. Another interviewee expressed the view that '…the strength of the auditor…' is a major factor in providing value for clients.

Discussion

The principal findings reinforce the changing nature of accreditation in Australia including an acknowledgement of the multiple levels and types of accreditation that are offered; the importance of assessor recruitment and training, the aspiration of service excellence; improved processes; and the importance of value versus price to those who are accredited by the participants of this study. The study identifies the multiple layers of accreditation still apparent within the sector with the NSQHS Standards in some ways adding to that. Interviewees appear hopeful that the new standardised model will ultimately replace some layers. Also of interest is an expectation that the accreditation program marketplace will become more open and competitive in the future.

The findings also stress the critical importance of assessors; their skills, contributions and inter-rater reliability to accreditation providers and the accreditation process. The importance of the need to attract, train, retain, and value assessors/surveyors as an important part of the standards compliance process is critical to providers. Comprehensive and thorough selection, induction and ongoing certification of assessors again highlight the significant role that they play in accreditation. The findings also suggest that providers are still experiencing a push to achieve more than compliance and to reach a standard of service excellence beyond the NSQHS Standards from their clients. While some healthcare providers only meet the basic standard there is a willingness to extend beyond the use towards service excellence, supporting and recognising best practice and innovation. There is a perception that improved processes will result through the shared language of the 10 NSQHS, potentially leading to greater consistency amongst healthcare providers.

Participants suggest a value-driven accreditation market will continue despite some concern of a market-driven system leading to discounted audit prices. While some sectors will be price sensitive they will also be those who face challenges in meeting compliance with all of the standards, for example day surgery patients.

The strength of this study includes examination of the new Standards from the perspective of the accredited accreditation providers. A potential weakness is lack of participation from all accreditation providers in Australia, possibly reflecting concerns of the new marketplace or the necessity for them to alter their products to align with the national Standards. A limitation of this exploratory study is that not all providers participated and therefore the findings are strictly not generalisable. It is important that future studies include all providers wherever possible. The issues identified in this study provide information for health service providers and healthcare system policy development on the development of accreditation from minimum requirements and compliance. It also identifies the need for improvement processes and agendas as well as standardised system performance assessment. Future research may include a potential longitudinal study of continued changes and outcomes in the landscape of Australian accreditation, which is moving along a regulation continuum and attempt to study the other accredited providers in Australia.

Conclusion

The healthcare system in Australia is currently implementing a stronger regulatory framework that has many key and important features. These include common standards, legislated participation and sector wide involvement and the provision of common platforms for performance review and reporting. An important agenda is the identification and opportunities to enable a robust continuum of compliance to improvement in these formal quality processes. The provision of accreditation services to monitor against the national Standards as well as against standards focused on specialised service provision and linkage to individual health provides quality strategic agendas and plans should be supported. A key driver associated with both the interpretation of quality and performance and the consistency of ratings of organisations in a complex system is the availability, training and engagement of assessors and surveyors with in-depth understanding of health service delivery and healthcare organisations.

Competing interests

The authors declare that they have no competing interests.

References

1. Shaw CD. Toolkit for accreditation programs. Melbourne: Int Soc Qua Health Care; 2004.
2. Chuang S, Inder K. An effectiveness analysis of healthcare systems using a systems theoretic approach. BMC Health Serv Res. 2009; 9: 195-206.
3. Scrivens E. International trends in accreditation. Int J Health Plan Manage. 1995; 10: 165-81.
4. Shaw CD, Kutryba B, Braithwaite J, Bedlicki M, Warunek A. Sustainable healthcare accreditation: messages from Europe in 2009. Int J Qua Healthcare 2010; 22 :341-50.
5. ACSQHC. NSQHS Standards: Australian Commission on Safety and Quality in Healthcare Canberra: AGPS; 2010.
6. Braithwaite J. Leading from behind with plural regulation. In: Healy J, Dugdale P, editors. Patient safety first. Sydney: Allen and Unwin: 2009.
7. Poole N. Partnering with consumers for better care [Internet]. Health Issues. 2014; 112: 15-18. Available from: <http://search.informit.com.au/documentSummary;dn=362160245980240;res=IELHEA> ISSN: 0819-5781. [verified 08 Jan 15].
8. Jessing M, Brookes K, Rubin G. Measuring aspects of eXcellent care (MAXC): Easing the burden of auditing for the national safety and quality health service standards [Internet]. Asia Pac J Health Manag. 2014; 9 (1):18-23. Available from: <http://search.informit.com.au/documentSummary;dn=180824169695438;res=IELHEA> ISSN: 1833-3818. [verified 08 Jan 15].
9. Boyd L, Sheen J. The national safety and quality health service standards requirements for orientation and induction within Australian Healthcare: a review of the literature [Internet]. Asia Pac J Health Manag. 2014; 9 (3): 31-37. Available from: <http://search.informit.com.au/documentSummary;dn=775010989682517;res=IELHEA> ISSN: 1833-3818. [verified 08 Jan 15].

10. Greenfield, David, Hinchcliff R, Banks M, Mumford V, Hogden A, Debono D, Pawsey M, et al. Analysing 'big picture' policy reform mechanisms: the Australian health service safety and quality accreditation scheme. Health Expectations. 2014.
11. Kvale S. Interviews: An introduction to qualitative research interviewing. Thousand Oaks: Sage; 1996.
12. Minichiello V, Aroni R, Timewell E, Alexander L. In-Depth interviewing: principles, techniques, analysis. South Melbourne: Addison Wesley Longman; 1997.
13. Creswell J. Research design: qualitative, quantitative and mixed methods approaches. Thousand Oaks: Sage; 2003.
14. Yin R. Case study research: design and methods. Thousand Oaks: Sage; 2003.
15. Strauss A, Corbin J. Basics of qualitative research: grounded theory procedures and techniques. Newbury Park: Sage; 1990.
16. Strauss A, Corbin J. Basics of qualitative research: techniques and procedures for developing grounded theory. 2nd ed. Thousand Oaks: Sage; 1998.
17. Schreiber RS. The 'how to' of grounded theory: avoiding the pitfalls. In: Schreiber RS, Stern PN, editors. Using grounded theory in nursing. New York: Springer; 2001.
18. Corbin J. Qualitative data analysis for grounded theory: qualitative research in nursing. In: Chenitz WC, Swanson JM, editors. From practice to grounded theory. Menlo Park, CA: Addison-Wesley Publishing Company; 1986.
19. Glaser B. Theoretical sensitivity. Mill Valley, CA: Sociology Press; 1978.
20. Strauss A. Qualitative analysis for Social Scientists. New York: Cambridge University Press; 1987.
21. Johnson P, Duberley J. Understanding management research: an introduction to Epistemology. Londom: Sage; 2000.
22. McCann TV, Clark E. Grounded theory in nursing research: Part 1 - methodology. Nurs Res. 2003a; 11 :7-18.
23. McCann TV, Clark E. Grounded theory in nursing research: Part 3 - Application. Nurs Res. 2003c; 11:29-39.

REVIEW ARTICLE

The Clinical and Economic Value of Health Libraries in Patient Care

M Peterson, L Harris and G Siemensma

Abstract

Clinicians have long recognised the value of current, authoritative information to support and inform their practice. The concept of evidence-based practice has itself gained acceptance through a substantial body of literature demonstrating how improvements in health care delivery and outcomes can be achieved through the application of the best evidence of clinical practice. Health libraries are core to the provision of information resources in all health-care settings. They have played a leading role in the adoption and dissemination of an unprecedented range of information resources and digital services in a rapidly changing health environment. There is a substantial and growing, body of evidence that health libraries are vital to the delivery of healthcare, both financially and clinically.

Key words: **best practice; cost benefit; information management; health libraries; health information; clinical decision making; evidence-based practice.**

Mary Peterson
South Australia Health Library Service
South Australia Health
Adelaide, South Australia, Australia.

Lindsay Harris
South Australia Health Library Service
The Queen Elizabeth Hospital
Adelaide, South Australia, Australia.

Gemma Siemensma
Ballarat Health Services Library
Ballarat , Victoria, Australia.

Correspondence:
mary.peterson@sa.gov.au
gemmas@bhs.org.au
lindsay.harris@sa.gov.au

Health libraries have a vital, and measurable, impact upon safe, cost effective health care

Clinicians have long recognised the value of current, authoritative information to support and inform their practice. The concept of evidence-based practice has itself gained acceptance through a substantial body of literature demonstrating how improvements in healthcare delivery and outcomes can be achieved through the application of the best evidence of clinical practice. This short article seeks to highlight some of the more recent national and international reports on how health libraries contribute in measurable terms to safe, cost-effective healthcare.

Health libraries managed by professional librarians are core to the provision of information resources in all healthcare settings. They have played a leading role in the adoption and dissemination of an unprecedented range of information resources and digital services in a rapidly changing health environment. There is a substantial and growing, body of evidence that health libraries and their services are vital to the delivery of healthcare, both financially and clinically.

Affirmation of these observations from an Australian perspective is demonstrated in a series of reports recently published by ALIA (Australian Library and Information Association) and HLI (Health Libraries Inc) during 2012 and 2013. ALIA commissioned the award-winning firm SGS Economics & Planning to examine the economic contribution of Australian health libraries to the health sector as part of a broader national study of industry-based libraries. SGS Economics surveyed health libraries and followed up with a selection of case studies. The resulting report: 'The community returns generated by Australian health libraries' [1] found that that Australian health libraries return on average $9 for every dollar invested as a conservative estimate. SGS Economics assessed the benefits directly provided to health library users through the value of time saved for library users and the value of 'out of pocket' expenses saved for library users, such as subscription and access content fees. Because the study did not include the return on investment in terms of patient care, SGS

concluded 'it is highly likely that the benefits of industry libraries outweigh their costs considerably.' [2,p.2]

Another recent research project report on the value of health libraries published in October 2012 is: 'Questions of Life and Death, an investigation into the value of health libraries and information services in Australia'. [3] Library users and staff were surveyed nationally to ascertain the impact of Australian health libraries upon the work of medical practitioners and the outcomes for patients. Amongst the report's extensive results were the key findings that 83% of respondents stated using library services had helped them improve patient health outcomes, 76% said that it had changed their thinking and improved their diagnosis or treatment plan, some 95% indicated that it assisted them in discovering new and valuable information, 86% said it kept them abreast of the latest clinical developments and 65% reported that it had confirmed their diagnosis or treatment plan. [4]

A condensed version of the original SGS Economics report was subsequently issued by ALIA in November 2013 entitled 'Worth every cent and more. An independent assessment of the return on investment of health libraries in Australia.' [5] This report is a concise summary of the findings of both the 2013 SGS Economics report and the associated 2012 report 'Questions of Life and Death.'

These Australian reports are the latest additions to a body of evidence about the value of health libraries dating back to the 1970s. Over the past five decades there has been sustained and wide ranging research to demonstrate in quantifiable ways to managers, practitioners and fund holders the benefits of health libraries for healthcare institutions, clinicians and patients. Representative of this work was a major Australian survey dating from 2000 known as the Canberra Study. Conducted by Irena Ali, this study measured the value and impact of information provided by two Canberra hospital libraries on clinical decisions and patient care management. The data from the Canberra Study indicated that the case related information provided by the librarians was of high cognitive, clinical and quality value and had an impact on many aspects of patient management. [6]

Another significant Australian study was Ruth Sladek's 2004 investigation into the value of an 'informationist' or clinical librarian working as a member of a clinical team on ward rounds in a hospital setting. The study found that doctors in an Australian acute tertiary hospital would use the service and the information supplied contributed to the revision of treatment plans, confirmation of proposed therapies, avoided adverse events, avoided additional tests and procedures and improved clinical outcomes. [7] In 2003 Patrick O'Connor described a pilot utilising a British designed library value toolkit to assess the impact of library services upon regional Queensland clinicians. The pilot concluded library services generally have a positive impact on the quality of clinical care. Some 85% of participants in the pilot stated that the information received from the library confirmed proposed therapy, 83% said it aided the recognition of abnormal or normal conditions, 70% said it minimised treatment risks or led to revised treatment plans and 67% said it influenced the choice of diagnostic tests. [8]

Abroad, in 2008 McGowan et al implemented a randomised control trial of a library service in a primary care setting. During seven months 88 medical and nurse practitioners submitted 1,889 clinical questions and 80% of the librarian-provided answers were rated as having a positive cognitive influence on decision making as against just 20.8% for the control question responses. [9] Holst et al in 2009 undertook an in depth review of the relevant literature, combined with a previous 2002 study and solicited examples from hospital librarians, to support the hypothesis of librarians being essential in fulfilling organisations' mission-critical goals. The review found that health librarians added quantifiable value/benefits to clinical care, management of operations, education, innovation and research and customer service. Overall, the evidence supported the view that hospital librarians are an excellent return on investment. [10]

Most recently, Perrier et al, undertook a systematic review of the effects of librarian-provided services in healthcare settings. The review concluded that services provided by librarians to clinicians were shown to be effective in saving time for health professionals and providing relevant information for decision-making. Two cited studies in the review indicated that patient length of stay was reduced when clinicians requested literature searches related to a patient's case. [11]

Perhaps the largest exercise to date on the impact of health libraries has been the 2013 Value Study by Joanne Marshall et al in the United States. The Value Study encompassed 56 libraries serving 118 hospitals with a survey of physicians, residents and nurses involved in either patient care or clinical research. There were no less than 16,122 respondents including 5,379 physicians, 2123 residents and 6788 nurses, a massive amount of data. Some three fourths of these respondents reported that they had definitely or probably handled some aspect of patient care differently because of

information obtained from libraries. The Value Study found, inter alia, that using health libraries resulted in clinical staff changing the advice given to patients (48%), changing diagnosis (25%), changing choice of drugs (33%) as well as avoiding or reducing the risk of patient misunderstanding of their disease (23%), additional tests (19%), misdiagnosis (13%), adverse drug reactions (13%), medical errors (12%) and patient mortality (6%). [12]

Based on the financial data collected by SGS Economics current expenditure on Australian health libraries, including hospital libraries, account in total for just over $100 million annually. In the context of the estimated nearly $50 billion spent annually on public and private hospitals recurrent expenditure on hospital libraries constitutes just 0.1% of all recurrent expenditure in Australian hospitals. [13] The estimated return on investment of $9 for every dollar invested in Australian health libraries is, as the SGS reports stresses, highly conservative and actual returns in support of cost effective patient care are certainly considerably higher than this headline figure suggests.

Relative to the massive amounts expended on health budgets health libraries are, in fact, low cost, high value return assets to their organisations. In the twenty-first century where access to, and management of, evidence based information is crucial for a safe and cost efficient health care system, professionally staffed health libraries are not an optional overhead, they are an operational necessity.

Competing interests

The authors declare that they have no competing interests.

References:

1. SGS Economics & Planning. The community returns generated by Australian health libraries. Final report. September 2013. Canberra: , SGS Economics 2013. http://www.alia.org.au/advocacy-and-campaigns/advocacy-campaigns-0/australian-health-libraries-return-investment (accessed December 2013)
2. SGS Economics & Planning. The community returns generated by Australian industry libraries. Final report. September 2013. Canberra: SGS Economics, 2013: 2.
3. Health Libraries Inc. Questions of life and death: an investigation into the value of health library and information services in Australia. Canberra: ALIA and Health Libraries Inc., 2012. http://www.hlinc.org.au/index.php?option=com_content&view=article&id=94&Itemid=73 (accessed December 2013)
4. Health Libraries Inc. Questions of life and death: an investigation into the value of health library and information services in Australia. Canberra: ALIA& Health Libraries Inc.,2012: 9.
5. ALIA & HLI. Worth every cent and more: an independent assessment of the return on investment of health libraries in Australia. Canberra: ALIA, October 2013. http://www.alia.org.au/news/2124/australian-health-libraries-return-investment (accessed December 2013)
6. Ali, I. Library provided information and clinical decision making: a study of two hospitals in Canberra. Australian Academic and Research Libraries. 2000; 31(1): 30-45.
7. Sladek R, Pinnock C. Phillips PA. The informationist: a prospective uncontrolled study. Int J Qual Health Care. 2004; 16(6): 509-515.
8. O'Connor P, Wallin M. A pilot application of the Value Toolkit: assessing the impact of information services to clinicians in regional Queensland. Proceedings of the 10th Asia Pacific Special, Health and Law Librarians Conference; 2003 August 24-27; Adelaide: ALIA, 2003: 1-16.
9. McGowan J. Hogg W. Campbell M et al. Just-in-time information improved decision-making in primary care: a randomized controlled trial. PLoS One. 2008; 3(11): e3785.
10. Holst R. Funk C. Adams H et al. Vital pathways for hospital librarians: present and future roles. J Med Libr Assoc. 2009; 97(4): 285-292.
11. Perrier L, Farrell A, Ayala AP, et al. Effects of librarian-provided services in healthcare settings: a systematic review J Am Med Inform Assoc 2014; 21:1118–1124.
12. Marshall J. Sollenberger J. Easterby-Gannett, S. et al. The value of library and information services in patient care: results of a multisite study. J Med Libr Assoc. 2013; 101(1): 38-46.
13. ALIA & HLI. Worth every cent and more: an independent assessment of the return on investment of health libraries in Australia. Canberra: ALIA, October 2013: 14.

Is it Time to Stop Writing Discharge Summaries?

D K Arya

Abstract

Writing of a 'Discharge Summary' has been an integral part of discharge from hospital or transfer of care. With the move from paper-based to electronic clinical records, is there an opportunity to eliminate the practice of 'writing' a discharge summary?

One potential benefit of electronic clinical records is that they provide a facility to automate the retrieval of key information without having to re-enter, re-orientate or manually re-format the information contained in the dataset. Equally importantly, they exclude the subjective errors of commission and omission and the personal bias of the person writing a discharge summary who most often is a junior doctor, either intern or a resident.

In developing the electronic clinical records systems we should endeavour to make the contextual information, the results of procedures and investigations and the plan of management automatically visible and accessible without recourse to `writing' a separate or additional discharge summary.

Abbreviation: **CIP – Context, Investigations and Plan.**

Key words: **discharge; transfer; summary.**

Professor Dinesh Arya
Chief Medical Officer
Department of Health
Northern Territory Government
Darwin, Northern Territory, Australia.

Correspondence:
Dinesh.Arya@NT.gov.au

Introduction

At every transition point – referral, shift handover within hospitals, transfer and discharge – effective communication of clinical information can be a key determinant of effective care and good outcomes.

The need to improve communication between hospital, outpatient and primary care services to ensure continuity of care is well recognised [1-4] and discharge summaries have been seen to be critical for this handover to occur. Clinicians have written discharge summaries, perhaps ever since modern medicine began, both to communicate as well as inform the accepting clinician and the patient about what was done. A well-written discharge summary has been thought to serve to summarise essential aspects of a patient's clinical assessment, investigations and treatment provided. It is purported to improve transition of care [5,6] as well as resource use. [7] If done well it improves provision of relevant care post-discharge [8] and reduces preventable admissions. [9,10]

In the pre-electronic era, when clinical documentation was on paper, writing discharge summaries was absolutely necessary as it was just not possible to transcribe, copy or transfer the entire set of clinical notes. Writing a discharge summary was the most efficient and effective way to communicate about a patient's on-going care requirements and to ensure continuity of care was maintained when the patient moved from one facility to another and from the care of one physician to the next. Whether writing a discharge summary remains an efficient and effective way to handover and transfer a patient's care in an era when information management and transfer can be done electronically is an important question to consider.

Is it possible that despite advancements in science, technology and communication, we are continuing to use tools and methods from the past even though these may be fast becoming redundant and unnecessary? Perhaps there is a need to shift our mind set from improving discharge summaries within our electronic clinical documentation systems to eliminating the need for discharge summaries having to be written!

There are many reasons why writing discharge summaries are problematic and the key ones are summarised in Table 1.

Table 1: Problems with `writing' discharge summaries that we do want to overcome

ISSUE	REASON	WE SHOULD ACHIEVE
Partial, inadequate, incomplete, delayed, incorrect, missing information	Because we summarise This is often done by junior medical practitioners who transcribe information given to them; allied health and nursing information is invariably excluded	Access to a complete information set by the accepting healthcare provider at the point of care delivery
Inconsistent	No error proofing within our systems We don't really insist on clear transfer of accountability before transfer or discharge can occur	No referral, transfer or discharge possible without accepting of responsibility for the patient by the receiving clinician and without essential clinical information set
Inefficient	• Re-work the same information • Do not save information appropriately/properly • Do not retrieve available information • Summarise (and often distort) information, over and over again	• Insert information in `set' fields • Information is available in a format that is user friendly • Information is available (doesn't have to be retrieved).

What problems are we trying to solve?

When considering the most efficient and effective way to undertake an existing process or developing a new process or system, it is always useful to consider what problems we are trying to resolve. At the point of care transition, including referral, shift handover during a hospital admission, transfer and discharge, there is no disagreement that a good handover is absolutely critical for patient safety and the delivery of effective care. It is an essential that we communicate well. [11-14] However, the critical question is whether the prevalent practice of writing a discharge summary is the best and most effective way of achieving this goal.

The system of writing discharge summaries has not been an easy one to implement and manage for a number of health services. Over the years, many health service organisations have been confronted with the problem of delays in dispatching discharge summaries [15-17] and summaries not being written because of workload, change in workforce, or just confusion about who should do them and how they should be done. Even when discharge summaries have been written, they have not reached the right healthcare provider in a timely manner. [18-21] There have also been concerns about partial, inconsistent, inefficient, inadequate and incomplete discharge summaries. [17,20,22] Concerns about the fact that many discharge summaries lack critical information are not uncommon. [18,23,24]

Would it not be better if the information did not have to be rewritten and the accepting service provider received only a notification of transfer of care; acknowledged it and retrieved the complete set of clinical information and then customised it in a manner that allowed easy retrieval at the point of care delivery? In an era of shared electronic health records surely this should be the preferred direction. In fact, rather than spending time and effort improving methods to `write' a discharge summary well, it would be more value-adding to invest in improving the discharge process. For example, in preparation for transfer of care, it is more important for the accepting clinician or health facility to be involved in discussions about the treatment plan. [25] We need to insist that direct communication between hospital and primary care practitioners occurs as this is an important step in the transfer of accountability that is often missed. [26-28] It is important that the discharge summary is not simply a mechanism for `notification' of discharge, although even this does not happen as frequently as we would like. [29,30]

A potential solution

Writing a discharge summary has to be accepted as a `patch' that we applied to overcome the problem of handing over relevant clinical information in the era of paper documentation when it was difficult, if not impossible, to transfer a complete set of information. It is time to revisit whether, in the current era of electronic documentation, [31] we still need this `patch'. There is a need to conceptually re-think how we handle clinical documentation (and therefore handover), and then redesign our communication processes.

Would we want to add to complexity, or eliminate wasteful steps?

The obvious answer to such a rhetorical question has to be in favour of a desire to eliminate waste, but one would have to insist – only if simplicity does not lead to the exclusion of essential clinical information or make retrieval of information more complex.

The objective of writing a good discharge summary is to bring together relevant, essential and most important parts of clinical information into a one- or two-page document. At least in theory this document should summarise key events, observations, assessments and opinions made, as well as interventions planned, recommended and accepted by the patient. It should also include an evaluation of the response to those interventions and recommendations about treatments and interventions that the patient is likely to benefit from, in the future.

Summarising care of a patient can be a complex task. Concerns about the quality of information in hospital discharge summaries are neither new nor rare. More importantly, it is also an additional task that has to be done. The most common reason why discharge summaries are delayed is because the writer does not have enough information or time, or has to deal with more important priorities.

This task is often done by an intern or a resident, who often has neither the expertise nor involvement in treatment provision. This intern or resident has to summarise, paraphrase or transcribe information to go into the discharge summary. The complexity of this task is such that need for this skill to be taught has been considered to be a key intervention to improve communication and information transfer. [32,33]

Summarising this complex and technical information can itself be a challenge. Table 2 summarises reasons why there are a number of drawbacks in preparing a summary document.

Table 2: Summarising information has its pitfalls

NOT A GOOD IDEA	REASON
To re-write, reframe, summarise	• Potential for distortion • May neglect to include important information • Second hand information; Chinese whispers
Add additional steps, complexity	Wasteful
Have pieces of documentation that are binned/lost and never become part of a patient record	Risky, inappropriate, unacceptable
Make clinical judgements with incomplete or partial information	Very inappropriate
Ask again, inflict pain by repeating investigations or waste time of patients and their families	Matter of morality and ethics
Not handover a clear plan or recommendations	Matter of good practice
Not be certain that the patient will continue to receive the best possible care	Matter of accountability

Proposed guiding principles to manage information transfer

It should be considered a matter of principle that the set of clinical information that was relevant to one clinician pre-transfer, is the information set that is likely to be relevant for the accepting clinician post-transfer. The benefit of an electronic information system is that it can enable this to occur efficiently and effectively without any additional effort as long as information is entered in a manner that allows the above principle to be achieved.

To achieve the above, it is important that some basic and definitive principles are established and adhered to in order to guide management of clinical information.

1. Within a health service system, there must be only one source of factual information. The complex arrangement of many different data systems within a health service that sometimes do not talk to each other or contain contradictory information should be unacceptable. Complete interconnectivity is essential to ensure that administrative, patient, clinician and provider clinical information is linked across the entire system.
2. The administrative process must ensure information is accurate (ie, automatically checked, verified and updated at every contact point).
3. A high level of security is required while ensuring that it does not become a barrier to access of information. Necessary rules and audit processes should ensure that information is secure yet accessible at the point of care delivery.
4. Information systems with complex arrangements for data entry that require clinicians to go through time consuming and complex processes to enter information, are likely to fail. In principle, `one screen entry', to make a record and `one click and one screen access to the essential `information set' must be achieved.
5. An information system has to be intuitive. If someone has to be `trained' for several hours to use it, then perhaps the system is not sophisticated enough to be put to common use.
6. Clinical information systems should be supported by decision support tools rather than snakes and ladders type complex algorithms with mandatory fields that impede a clinician's work flow.
7. Reports should not have to be re-written, but should be a one-click production.
8. Lines of communication shouldn't have to be re-defined each time information needs to be shared.

What should be essential information to facilitate transfer?

From review of literature Kriplani et al [4] concluded that:

> Primary care physicians consider the following information as most important for providing adequate follow-up care: main diagnosis, pertinent physical findings, results of procedures and laboratory tests, discharge medications with reasons for any changes to the previous medication regimen, details of follow-up arrangements made, information given to the patient and family, test results pending at discharge, and specific follow-up needs.

Even though these elements of clinical care provision are critical, it is equally important that accepting clinicians are provided with the full context within which treatment was provided and recommendations have been made for ongoing healthcare provision. Failure to do so is also likely to result in duplication in the collection of information at the point where care is accepted.

The following information elements should comprise the essential clinical information set for the transfer of information (see Table 3). This is the information set that clinicians should use pre-discharge and also for handover to the next clinician or facility.

Essentially, this information set should comprise of three types of information, viz. Context, Investigations and Plan (or CIP).

1. **Context (History, assessment and diagnosis):**
   Any treatment decision must be made in the context of the patient's history, assessment and diagnosis. A decision made without a complete context is often not a sound one. Transfer information that does no give the accepting clinicians appropriate context is inadequate and inappropriate.
2. **Investigations (Observations, laboratory and radiological investigations):**
   It is important that accepting clinicians have access to any observations that have been made and any investigations that have been conducted. The results of these investigations need to be presented in a form that is relevant to the `Context'.
3. **Plan (medication, interventions and treatment plan):**
   From the perspective of a patient, the most value added activity is the medication prescribed, intervention performed, treatment plan recommended and referrals made, if any.

Table 3: Essential information set for transfer of clinical information

C (Context)	**H**	History
	A	Assessment
	N	`N' (and)
	D	Diagnosis
I (Investigation)	**O**	Observations
	V	Investigations
P (Plan)	**E**	E-script (Medication/ Interventions)
	R	Recommendations or Referral

Transfer of information without having to `write' a discharge summary

To minimise wasting time in an additional and unnecessary activity (ie, writing a discharge summary), minimise risk of important information being omitted and prevent information distortion from occurring, it is reasonable that we retire the practice of writing discharge summaries. Instead, the information available at the point of care delivery pre and post discharge should be the same and available in a user-friendly handover format (Table 3) containing mandatory information of CIP. The transfer process must retrieve the essential information set from the single source of facts (the clinical information database) and present as CIP.

Contextual information must be a summary of past and present history, assessment and current diagnosis. More importantly, contextual information must always be current to ensure the current context always informs decisions at any given time. The information system must formulate investigations (observations and investigations) in a format that is easily readable as collated tables and graphs of observations and investigations. Plans must include medications prescribed, interventions done, treatment plan recommendations and any referrals that are needed.

Can we `retire' writing discharge summaries just yet?

Perhaps not while we are transitioning from paper-based to electronic clinical records. However, if the above argument is accepted, now is the time and opportunity to make a shift away from investing in processes to develop refined discharge summary templates within electronic clinical record systems, to eliminating this complex non value-adding activity that has plagued us for decades and has been fraught with risks. Instead, we can insist that our electronic clinical record systems enable functionalities to be built around the exhibition of current CIP.

For some electronic clinical record systems this will require a conceptual re-think about the information system architecture as well as rules that are set for data entry, display, access and reporting. During the period of transition while interconnectivity between systems is partial and patchy and changeover from paper-based to electronic clinical documentation is happening, insistence on one click printing of CIP at the point of care transition can potentially replace the need for a discharge summary to be written.

Conclusions

It is time that we promote an electronic documentation system that automatically provides the essentials of CIP necessary for information to be available at any and every point of care delivery. Such a system must not overlook some very basic `systemic' issues.

- A system that requires clinicians to re-enter, re-use and/or re-format data to understand information is undesirable and is unlikely to be efficient and effective.
- Information entry must be one screen entry. Systems that require clinicians to move from screen to screen (and database to database) to enter information are unlikely to meet the needs or satisfaction of clinicians. Information once entered in the system must not have to be re-entered again (unless it has to be updated).
- Reports that are needed must be able to be delivered (and retrieved) in a format that clinicians want.
- Reports cannot afford to have redundant information included in them. Preparing a report must not be about dumping whatever information is available in the system. Instead, information that is imported and the format in which it is imported must be determined by the need and preferences of referring and accepting providers.

Writing a discharge summary is an activity that effectively requires re-entry, re-use and re-formatting of existing data. It requires information to be manually reviewed, retrieved,

collated and transcribed. Often this time consuming processes results in delays in preparing a discharge summary, important pieces of information are missed and not uncommonly redundant information can sneak in (from perspective of the recipient). As we plan to achieve better functionality within our electronic clinical documentation systems, we should seriously consider retiring this non-value added activity, because we now can.

Funding Acknowledgement Statement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Competing interests

The author declares they have no competing interests.

References

1. Medicine. SoH. Growth of hospital medicine nationwide [cited 2012 26 December]. Available from: http://www hospitalmedicine.org/Content/NavigationMenu/MediaGrowthofHospitalMedicine Nationwide/Growth_of_Hospital_M.htm.
2. Wachter RM. An introduction to the hospitalist model. Ann Intern Med. 1999;130:338-42.
3. Wachter RM, Goldman L. The hospitalist movement 5 years later. JAMA. 2002;287:487-94.
4. Kripalani S, LeFevre F, Phillips CO, Williams MV, Basaviah P, Baker DW. Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care. JAMA. 2007;297(8):831-41.
5. Alpers A. Key legal principles for hospitalists. Am J Med. 2001; 111:5S-9S.
6. Goldman L, Pantilat SZ, Whitcomb WF. Passing the clinical baton: 6 principles to guide the hospitalist. Am J Med. 2001;111:36S-9S.
7. O'Leary KJ, Liebovitz DM, Feinglass J, et al. Creating a better discharge summary: improvement in quality and timeliness using an electronic discharge summary. J Hosp Med. 2009;4(4):219-25.
8. Moore C, Wisnivesky J, Williams S, McGinn T. Medical errors related to discontinuity of care from an inpatient to an outpatient setting. J Gen Intern Med. 2003;18:646-51.
9. van Walraven C, Seth R, Austin PC, Laupacis A. Effect of discharge summary availability during post-discharge visits on hospital readmission. J Gen Intern Med. 2002;17(3):186-92.
10. Forster AJ, Murgg HJ, Peterson JF, Ghandi TK, Bates DW. . The incidence and severity of adverse events affecting patients after discharge from the hospital. Ann Intern Med. 2003;138:160-7.
11. ACSQHC. The OSSIE Guide to Clinical Handover Improvement. In: ACSQHC, editor. Sydney; 2010.
12. AMA. Safe handover : safe patients. Guidance on clinical handover for clinicians and managers. In: Association AM, editor. Kingston, ACT; 2006.
13. Australian Commission on Safety & Quality in Health Care. Clinical Handover Standard 6 2015 [cited 2015, 20 January]. Available from: http://www.safetyandquality.gov.au/wp-content/uploads/2012/01/NSQHS-Standards-Fact-Sheet-Standard-6.pdf.
14. nehta. Discharge Summary Factsheet 2015 [cited 2015, 20 January]. Available from: http://www.nehta.gov.au/media-centre/news/publications/brochures/272-discharge-summary-factsheet.
15. Kriplani S, LeFevre F, Phillips CO, Williams MV, Basaviah P, Baker DW. Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care. JAMA. 2007;297(8):831-41.
16. van Walraven C, Seth R, Laupacis A. Dissemination of discharge summaries. Not reaching follw-up physicians. Can Fam Physician. 2002;48:737-42.
17. Wilson S, Ruscoe W, Chapman M, Miller R. General practitioner-hospital communications: a review of discharge summaries. J Qual Clin Practice. 2001;21:104-8.
18. Fair JE. Hospital discharge and death communications. Br J Hosp Med. 1989;42(1):59-61.
19. Mageean RJ. Study of 'discharge communications' from hospital. Br Med J (Clin Res Ed). 1986;293(6557):1283-4.
20. van Walraven C, Weinberg AL. Quality assessment of a discharge summary system. CMAJ. 1995;152(9):1437-42.
21. Wilson S, Ruscoe W, Chapman M, Miller R. General practitioner-hospital communications: a review of discharge summaries. J Qual Clin Pract. 2001;21(4):104-8.
22. Macaulay E, Cooper G, Engeset J, Naylor A. Prospective audit of discharge summary errors. Br J Surg. 1996;83:788-90.
23. Tulloch AJ, Fowler GH, McMullan JJ, Spence JM. Hosptial discharge reports: content and design. Br Med J. 1975;4(5994):443-6.
24. Roy CL, Poon EG, Karson AS, et al. Patient safety concerns arising from test results that return after hospital discharge. Ann Intern Med. 2005;143(2):121-8.
25. Meara JR, Wood JL, Wilson MA, Hart MC. Home from hospital: a survey of hospital discharge arrangements in Northamptonshire. J Public Health Med. 1992;14:145-50.
26. Cartwright A. The relationship between general practitioners, hospital consultants and community nurses when caring for people in the last year of their lives. Fam Pract. 1991;8:350-5.
27. Mant A, Rotem WC, Kehoe L, Kaye KI. Compliance with guidelines for continuity of care in therapeutics from hospital to community. Med J Aust. 2001;174:277-80.
28. Long A, Atkins J. Communications between general practitioners and consultants. BMJ. 1974;4:456-9.
29. Isaac DR, Gijsbers AJ, Wyman KT, Martyres RF, Garrow BA. The GP-hospital interface: attitudes of general practitioners to tertiary teaching hospitals. Med J Aust. 1997;166:9-12.
30. Pantilat SZ, Lindenauer PK, Katz PP, Wachter RM. Primary care physician attitudes regarding communication with hospitalists. Am J Med. 2001;111:15S-20S.
31. Carroll J. Stimulus bill spurs plans for rapid IT progress. Manag Care. 2009;18(2):5-6.
32. Flyer B, Rubenstein LZ, Robbins AS, Wieland GD, Henry D, Cugalj N. An intervention to improve the hospital discharge summary. J Med Educ. 1988;63(5):407-9.
33. Myers JS, Jaipaul CK, Kogan JR, Krekun S, Bellini LM, Shea JA. Are discharge summaries teachable? The effects of a discharge summary curriculum on the quality of discharge summaries in an internal medicine residency program. Acad Med. 2006;81 (10 Suppl):S5-8.

LIBRARY BULLETIN

Contact Library

If you wish to set-up your own Internet Alerts or require guidance in using the Journal database please contact the librarian on (02) 9805 0125 or email library@achsm.org.au

Research

Are you preparing to present a paper, write a journal article or require the most up-to-date information about a particular topic? The library can undertake this research for you. The first 2 hours are free, thereafter a charge of $50/hour applies.

COMPETENCIES

The hidden competencies of healthcare: Why self-esteem, accountability, and professionalism may affect hospital customer satisfaction scores.
Decker, P. J.
Hospital Topics 1999; 77(1):14-26.
http://search.proquest.com/docview/214586312?accountid=144610

Advanced communication skills: conflict management and persuasion.
Ang, M.
Academic Medicine: Journal of the Association of American Medical Colleges 2002; 77(11):1166-1166.
http://search.ebscohost.com/login.aspx?direct=true&db=mdc&AN=12431946&site=ehost-live&scope=site&authtype=uid&user=s5511570main&password=main

In search for a public health leadership competency framework to support leadership curriculum – a consensus study.
Czabanowska, K., Smith, T., Könings, K. D., Sumskas, L., Otok, R., Bjegovic-Mikanovic, V., et al.
European Journal of Public Health 2014; 24(5):850-856.
http://search.ebscohost.com/login.aspx?direct=true&db=her&AN=98636091&site=ehost-live&scope=site&authtype=uid&user=s5511570main&password=main

Evidence Informed Policymaking using conjoint analysis to develop a system to score research engagement actions by health decision makers.
Makkar, S. R., Williamson, A., Turner, T., Redman, S., Louviere, J.
Health research policy and systems / BioMed Central 2015; 13(1):22-22.
http://www.health-policy-systems.com/content/pdf/s12961-015-0013-z.pdf

HUMAN RESOURCES

Burnout among primary care physicians: a test of the areas of worklife model.
Gregory, S., Menser, T.
Journal of Healthcare Management 2015; 60(2):133-148.

Career management in today's healthcare environment.
Broscio, M. A.
Journal of healthcare management / American College of Healthcare Executives 2014; 59(6):395-398.

Physical work environment as a managerial tool for decreasing job-related anxiety and improving employee-employer relations.
Sadatsafavi, H., Walewski, J., Shepley, M.
Journal of Healthcare Management 2015; 60(2):114-131.

The Well-being and mental health of male and female hospital doctors in Germany.
Mache, S., Groneberg, D., Burghard, K.
World Hospitals and Health Services 2014; 50(4):17-22.

INNOVATION IN HEALTHCARE

Change from the inside out: Health care leaders taking the helm.
Berwick, D. M., Feeley, D., Loehrer, S.
JAMA 2015.
http://dx.doi.org/10.1001/jama.2015.2830

Creating Value In Health By Understanding And Overcoming Resistance To De-Innovation.
Ubel, P. A., Asch, D. A.
Health Affairs 2015; 34(2):239-244.
http://content.healthaffairs.org/content/34/2/239.abstract

Designing a knowledge translation mentorship program to support the implementation of evidence-based innovations.
Gagliardi, A. R., Webster, F., Straus, S. E.
BMC health services research 2015; 15(1):198-198.
http://www.biomedcentral.com/1472-6963/15/198
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4443629/pdf/12913_2015_Article_863.pdf

Measuring vital signs: An iom report on core metrics for health and health care progress.
Blumenthal, D., McGinnis, J.
JAMA 2015; 313(19):1901-1902.
http://dx.doi.org/10.1001/jama.2015.4862

Ten rules for 21st century healthcare: a US perspective on creating healthy, healing environments.
Sadler, B. L., Guenther, R.
Future Hospital Journal 2015; 2(1):22-27.
http://futurehospital.rcpjournal.org/content/2/1/22.abstract

A theoretical framework to support research of health service innovation.
Fox, A., Gardner, G., Osborne, S.
Australian Health Review 2015; 39(1):70-75.
http://www.publish.csiro.au/paper/AH14031

You Need an Innovation Strategy.
Pisano, G. P.
Harvard Business Review 2015; (June):44-54.

LEADERSHIP

When Leaders Fail to "Walk the Talk": Supervisor Undermining and Perceptions of Leader Hypocrisy.
Greenbaum, R. L., Mawritz, M. B., Piccolo, R. F.
Journal of Management 2015; 41(3):929-956.
http://jom.sagepub.com/content/41/3/929.abstract

Leadership and Employee Engagement: Proposing Research Agendas Through a Review of Literature.
Carasco-Saul, M., Kim, W., Kim, T.
Human Resource Development Review 2015; 14(1):38-63.
http://hrd.sagepub.com/content/14/1/38.abstract

Medical leadership is the New Black: or is it?
Jorm, C., Parker, M.
Australian Health Review 2015; 39(2):217-219.
http://www.publish.csiro.au/paper/AH14013

Examining the Unique Mediators That Underlie the Effects of Different Dimensions of Transformational Leadership.
Saboe, K. N., Taing, M. U., Way, J. D., Johnson, R. E.
Journal of Leadership & Organizational Studies 2015; 22(2):175-186.
http://jlo.sagepub.com/content/22/2/175.abstract

Leaders as Decision Architects.
Beshears, J., Gino, F.
Harvard Business Review 2015; (May):52-62.

Transforming the Next Gen Leaders.
Bawany, S.
Leadership Excellence 2014; 31(7):30-31.
http://search.ebscohost.com/login.aspx?direct=true&db=heh&AN=97104737&site=ehost-live&scope=site&authtype=uid&user=s5511570main&password=main

MANAGEMENT

When Senior Managers Won't Collaborate.
Gardner, H.
Harvard Business Review 2015; (March):75-82.

Quality of care and long-term care administrators' education: does it make a difference?
Castle, N. G., Furnier, J., Ferguson-Rome, J. C., Olson, D., Johs-Artisensi, J.
Health care management review 2015; 40(1):35-45.

Interpersonal mentoring and its influence on retention of valued health care workers: the moderating role of affective commitment.
Fleig-Palmer, M. M., Rathert, C.
Health care management review 2015; 40(1):56-64.

Six principles to enhance health workforce flexibility.
Nancarrow, S.
Human Resources for Health 2015; 13(1):9-9.
http://www.human-resources-health.com/content/13/1/9

ORGANISATIONAL CULTURE

Motivating Organizations to Learn: Goal Orientation and Its Influence on Organizational Learning.
Chadwick, I. C., Raver, J. L.
Journal of Management 2015; 41(3):957-986.
http://jom.sagepub.com/content/41/3/957.abstract

Manuscript Preparation and Submission

General Requirements

Language and format

Manuscripts must be typed in English, on one side of the paper, in Arial 11 font, double spaced, with reasonably wide margins using Microsoft Word.

All pages should be numbered consecutively at the centre bottom of the page starting with the Title Page, followed by the Abstract, Abbreviations and Key Words Page, the body of the text, and the References Page(s).

Title page and word count

The title page should contain:

1. **Title**. This should be short (maximum of 15 words) but informative and include information that will facilitate electronic retrieval of the article.
2. **Word count**. A word count of both the abstract and the body of the manuscript should be provided. The latter should include the text only (ie, exclude title page, abstract, tables, figures and illustrations, and references). For information about word limits see *Types of Manuscript: some general guidelines* below.

Information about authorship should not appear on the title page. It should appear in the covering letter.

Abstract, key words and abbreviations page

1. **Abstract** – this may vary in length and format (ie structured or unstructured) according to the type of manuscript being submitted. For example, for a research or review article a structured abstract of not more than 300 words is requested, while for a management analysis a shorter (200 word) abstract is requested. (For further details, see below - Types of Manuscript – some general guidelines.)
2. **Key words** – three to seven key words should be provided that capture the main topics of the article.
3. **Abbreviations** – these should be kept to a minimum and any essential abbreviations should be defined (eg PHO – Primary Health Organisation).

Main manuscript

The structure of the body of the manuscript will vary according to the type of manuscript (eg a research article or note would typically be expected to contain Introduction, Methods, Results and Discussion – IMRAD, while a commentary on current management practice may use a less structured approach). In all instances consideration should be given to assisting the reader to quickly grasp the flow and content of the article.

For further details about the expected structure of the body of the manuscript, see below - Types of Manuscript – some general guidelines.

Major and secondary headings

Major and secondary headings should be left justified in lower case and in bold.

Figures, tables and illustrations

Figures, tables and illustrations should be:

- of high quality;
- meet the 'stand-alone' test;
- inserted in the preferred location;
- numbered consecutively; and
- appropriately titled.

Copyright

For any figures, tables, illustrations that are subject to copyright, a letter of permission from the copyright holder for use of the image needs to be supplied by the author when submitting the manuscript.

Ethical approval

All submitted articles reporting studies involving human/or animal subjects should indicate in the text whether the procedures covered were in accordance with National Health and Medical Research Council ethical standards or other appropriate institutional or national ethics committee. Where approval has been obtained from a relevant research ethics committee, the name of the ethics committee must be stated in the Methods section. Participant anonymity must be preserved and any identifying information should not be published. If, for example, an author wishes to publish a photograph, a signed statement from the participant(s) giving his/her/their approval for publication should be provided.

References

References should be typed on a separate page and be accurate and complete.

The Vancouver style of referencing is the style recommended for publication in the APJHM. References should be numbered within the text sequentially using Arabic numbers in square brackets. [1] These numbers should appear after the punctuation and correspond with the number given to a respective reference in your list of references at the end of your article.

Journal titles should be abbreviated according to the abbreviations used by PubMed. These can be found at: http://www.ncbi.nih.gov/entrez/query.fcgi. Once you have accessed this site, click on 'Journals database' and then enter the full journal title to view its abbreviation (eg the abbreviation for the 'Australian Health Review' is 'Aust Health Rev'). Examples of how to list your references are provided below:

Books and Monographs

1. Australia Institute of Health and Welfare (AIHW). Australia's health 2004. Canberra: AIHW; 2004.
2. New B, Le Grand J. Rationing in the NHS. London: King's Fund; 1996.

Chapters published in books

3. Mickan SM, Boyce RA. Organisational change and adaptation in health care. In: Harris MG and Associates. Managing health services: concepts and practice. Sydney: Elsevier; 2006.

Journal articles

4. North N. Reforming New Zealand's health care system. Intl J Public Admin. 1999; 22:525-558.
5. Turrell G, Mathers C. Socioeconomic inequalities in all-cause and specific-cause mortality in Australia: 1985-1987 and 1995-1997. Int J Epidemiol. 2001;30(2):231-239.

References from the World Wide Web

6. Perneger TV, Hudelson PM. Writing a research article: advice to beginners. Int Journal for Quality in Health Care. 2004;191-192. Available: <http://intqhc.oxfordjournals.org/cgi/content/full/16/3/191>(Accessed 1/03/06)

Further information about the Vancouver referencing style can be found at http://www.bma.org.uk/ap.nsf/content/LIBReferenceStyles#Vancouver

Types of Manuscript - some general guidelines

1. Analysis of management practice (eg, case study)

Content

Management practice papers are practitioner oriented with a view to reporting lessons from current management practice.

Abstract

Structured appropriately and include aim, approach, context, main findings, conclusions.
Word count: 200 words.

Main text

Structured appropriately. A suitable structure would include:

- Introduction (statement of problem/issue);
- Approach to analysing problem/issue;
- Management interventions/approaches to address problem/issue;
- Discussion of outcomes including implications for management practice and strengths and weaknesses of the findings; and
- Conclusions.

Word count: general guide - 2,000 words.

References: maximum 25.

2. Research article (empirical and/or theoretical)

Content

An article reporting original quantitative or qualitative research relevant to the advancement of the management of health and aged care services organisations.

Abstract

Structured (Objective, Design, Setting, Main Outcome Measures, Results, Conclusions).

Word count: maximum of 300 words.

Main text

Structured (Introduction, Methods, Results, Discussion and Conclusions).

The discussion section should address the issues listed below:

- Statement of principal findings;
- Strengths and weaknesses of the study in relation to other studies, discussing particularly any differences in findings;
- Meaning of the study (eg implications for health and aged care services managers or policy makers); and
- Unanswered questions and future research.
  Two experienced reviewers of research papers (viz, Doherty and Smith 1999) proposed the above structure for the discussion section of research articles. [2]

Word count: general guide 3,000 words.

References: maximum of 30.

NB: Authors of research articles submitted to the APJHM are advised to consult 'Writing a research article: advice to beginners' by Perneger and Hudelson (2004) and available at: <http://intqhc.oxfordjournals.org/cgi/content/full/16/3/191> This article contains two very useful tables: 1) 'Typical structure of a research paper' and 2) 'Common mistakes seen in manuscripts submitted to this journal'. [3]

3. Research note

Content

Shorter than a research article, a research note may report the outcomes of a pilot study or the first stages of a large complex study or address a theoretical or methodological issue etc. In all instances it is expected to make a substantive contribution to health management knowledge.

Abstract

Structured (Objective, Design, Setting, Main Outcome Measures, Results, Conclusions).

Word count: maximum 200 words.

Main text

Structured (Introduction, Methods, Findings, Discussion and Conclusions).

Word count: general guide 2,000 words.

As with a longer research article the discussion section should address:

- A brief statement of principal findings;
- Strengths and weaknesses of the study in relation to other studies, discussing particularly any differences in findings;
- Meaning of the study (eg implications for health and aged care services managers or policy makers); and
- Unanswered questions and future research.

References: maximum of 25.

NB: Authors of research notes submitted to the APJHM are advised to consult 'Writing a research article: advice to beginners' by Perneger and Hudelson (2004) and available at: <http://intqhc.oxfordjournals.org/cgi/content/full/16/3/191> This article contains two very useful tables: 1) 'Typical structure of a research paper' and 2) 'Common mistakes seen in manuscripts submitted to this journal'. [3]

4. Review article (eg policy review, trends, meta-analysis of management research)

Content

A careful analysis of a management or policy issue of current interest to managers of health and aged care service organisations.

Abstract

Structured appropriately.

Word count: maximum of 300 words.

Main text

Structured appropriately and include information about data sources, inclusion criteria, and data synthesis.

Word count: general guide 3,000 words.

References: maximum of 50

5. Viewpoints, interviews, commentaries

Content

A practitioner oriented viewpoint/commentary about a topical and/or controversial health management issue with a view to encouraging discussion and debate among readers.

Abstract

Structured appropriately.

Word count: maximum of 200 words.

Main text

Structured appropriately.

Word count: general guide 2,000 words.

References: maximum of 20.

6. Book review

Book reviews are organised by the Book Review editors. Please send books for review to: Book Review Editors, APJHM, ACHSM, PO Box 341, NORTH RYDE, NSW 1670. Australia.

Covering Letter and Declarations

The following documents should be submitted separately from your main manuscript:

Covering letter

All submitted manuscripts should have a covering letter with the following information:

- Author/s information, Name(s), Title(s), full contact details and institutional affiliation(s) of each author;
- Reasons for choosing to publish your manuscript in the APJHM;
- Confirmation that the content of the manuscript is original. That is, it has not been published elsewhere or submitted concurrently to another/other journal(s).

Declarations

1. Authorship responsibility statement

Authors are asked to sign an 'Authorship responsibility statement'. This document will be forwarded to the corresponding author by ACHSM on acceptance of the manuscript for publication in the APJHM. This document should be completed and signed by all listed authors and then faxed to: The Editor, APJHM, ACHSM (02 9878 2272).

Criteria for authorship include substantial participation in the conception, design and execution of the work, the contribution of methodological expertise and the analysis and interpretation of the data. All listed authors should approve the final version of the paper, including the order in which multiple authors' names will appear. [4]

2. Acknowledgements

Acknowledgements should be brief (ie not more than 70 words) and include funding sources and individuals who have made a valuable contribution to the project but who do not meet the criteria for authorship as outlined above. The principal author is responsible for obtaining permission to acknowledge individuals.

Acknowledgement should be made if an article has been posted on a Website (eg, author's Website) prior to submission to the Asia Pacific Journal of Health Management.

3. Conflicts of interest

Contributing authors to the APJHM (of all types of manuscripts) are responsible for disclosing any financial or personal relationships that might have biased their work. The corresponding author of an accepted manuscript is requested to sign a 'Conflict of interest disclosure statement'. This document will be forwarded to the corresponding author by ACHSM on acceptance of the manuscript for publication in the APJHM. This document should be completed and signed and then faxed to: The Editor, APJHM, ACHSM (02 9878 2272).

The International Committee of Medical Journal Editors (2006) maintains that the credibility of a journal and its peer review process may be seriously damaged unless 'conflict of interest' is managed well during writing, peer review and editorial decision making. This committee also states:

'A conflict of interest exists when an author (or author's institution), reviewer, or editor has a financial or personal relationships that inappropriately influence (bias) his or her actions (such relationships are also known as dual commitments, competing interests, or competing loyalties). The potential for conflict of interest can exist whether or not an individual believes that the relationship affects his or scientific judgment.

Financial relationships (such as employment, consultancies, stock ownership, honoraria, paid expenses and testimony) are the most easily identifiable conflicts of interest and those most likely to undermine the credibility of the journal, authors, and science itself...' [4]

Criteria for Acceptance of Manuscript

The APJHM invites the submission of research and conceptual manuscripts that are consistent with the mission of the APJHM and that facilitate communication and discussion of topical issues among practicing managers, academics and policy makers.

Of particular interest are research and review papers that are rigorous in design, and provide new data to contribute to the health manager's understanding of an issue or management problem. Practice papers that aim to enhance the conceptual and/or coalface skills of managers will also be preferred.

Only original contributions are accepted (ie the manuscript has not been simultaneously submitted or accepted for publication by another peer reviewed journal – including an E-journal).

Decisions on publishing or otherwise rest with the Editor following the APJHM peer review process. The Editor is supported by an Editorial Advisory Board and an Editorial Committee.

Peer Review Process

All submitted research articles and notes, review articles, viewpoints and analysis of management practice articles go through the standard APJHM peer review process.

The process involves:

1. Manuscript received and read by Editor APJHM;
2. Editor with the assistance of the Editorial Committee assigns at least two reviewers. All submitted articles are blind reviewed (ie the review process is independent). Reviewers are requested by the Editor to provide quick, specific and constructive feedback that identifies strengths and weaknesses of the article;
3. Upon receipt of reports from the reviewers, the Editor provides feedback to the author(s) indicating the reviewers' recommendations as to whether it should be published in the Journal and any suggested changes to improve its quality.

For further information about the peer review process see Guidelines for Reviewers available from the ACHSM website at www.achse.org.au.

Submission Process

All contributions should include a covering letter (see above for details) addressed to the Editor APJHM and be submitted either:

(Preferred approach)

1) Email soft copy (Microsoft word compatible) to journal@achse.org.au

   Or

2) in hard copy with an electronic version (Microsoft Word compatible) enclosed and addressed to: The Editor, ACHSM APJHM, PO Box 341, North Ryde NSW 1670;

All submitted manuscripts are acknowledged by email.

NB

All contributors are requested to comply with the above guidelines. Manuscripts that do not meet the APJHM guidelines for manuscript preparation (eg word limit, structure of abstract and main body of the article) and require extensive editorial work will be returned for modification.

References

1. Hayles, J. Citing references: medicine and dentistry, 2003;3-4. Available: <http://www.library.qmul.ac.uk/leaflets/june/citmed.doc> (Accessed 28/02/06)
2. Doherty M, Smith R. The case for structuring the discussion of scientific papers. BMJ. 1999;318:1224-1225.
3. Perneger TV, Hudelson PM. Writing a research article: advice to beginners. Int Journal for Quality in Health Care. 2004;191-192. Available: <http://intqhc.oxfordjournals.org/cgi/content/full/16/3/191> (Accessed 1/03/06)
4. International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. ICMJE. 2006. Available: <http://www.icmje.org/> (Accessed 28/02/06).

Other references consulted in preparing these Guidelines

Evans MG. Information for contributors. Acad Manage J. Available: <http://aom.pace.edu/amjnew/contributor_information.html> (Accessed 28/02/06)

Health Administration Press. Journal of Health care Management submission guidelines. Available: <http://www.ache.org/pubs/submisjo.cfm> (Accessed 28/02/06)

International Journal for Quality in Health Care. Instructions to authors, 2005. Available: <http://www.oxfordjournals.org/intqhc/for_authors/general.html> (Accessed 28/02/06)

The Medical Journal of Australia. Advice to authors submitting manuscripts. Available: <http://www.mja.com.au/public/information.instruc.html> (Accessed 28/02/06)

Further information about the Asia Pacific Journal of Health Management can be accessed at: www.achse.org.au.

About the Australasian College of Health Service Management

ACHSM (formerly Australian College of Health Service Executives) was established in 1945 to represent the interests of health service managers and to develop their expertise and professionalism. Today, the college is the leadership and learning network for health professionals in management across the full range of health and aged care service delivery systems in Australia and New Zealand and the Asia Pacific with some 3,000 members from both public and private sector organisations and non-government and not-for-profit organisations.

ACHSM aims to develop and foster excellence in health service management through the promotion of networking, the publication of research, and through its educational and ongoing professional development activities, including accreditation of tertiary programs in health service management, mentoring and learning sets.

ACHSM has Branches in all Australian States and Territories, New Zealand and Hong Kong. Memoranda of Understanding link ACHSM with other health management bodies in the Asia Pacific. As an international organisation, ACHSM is able to draw upon the experiences of researchers and managers in Australia, New Zealand, Hong Kong and other countries within the region to give readers valuable insights into management issues and approaches in a range of cultures and jurisdictions.

Australasian College of Health Service Management
PO Box 341 NORTH RYDE NSW 1670
Telephone: (02) 9878 5088 Facsimile: (02) 9878 2272
Email: achsm@achsm.org.au Web: www.achsm.org.au