

## Chapter 76

# The Role of Knowledge Management (KM) in Aged Care Informatics: Crafting the Knowledge Organization

**Margee Hume**

*University of Southern Queensland, Australia*

**Paul Johnston**

*Care Systems Pty Ltd, Australia*

**Craig Hume**

*Griffith University, Australia*

**Jeffrey Soar**

*University of Southern Queensland, Australia*

**Jon Whitty**

*University of Southern Queensland, Australia*

### ABSTRACT

*Aged care is projected to be the fastest-growing sector within the health and community care industries (Reynolds, 2009). Strengthening the care-giving workforce, compliance, delivery, and technology is not only vital to our social infrastructure and improving the quality of care, but also has the potential to drive long-term economic growth and contribute to the Gross Domestic Product (GDP). This chapter examines the role of Knowledge Management (KM) in aged care organizations to assist in the delivery of aged care. With limited research related to KM in aged care, this chapter advances knowledge and offers a unique view of KM from the perspective of 22 aged care stakeholders. Using in-depth interviewing, this chapter explores the definition of knowledge in aged care facilities, the importance of knowledge planning, capture, and diffusion for accreditation purposes, and offers recommendations for the development of sustainable knowledge management practice and development.*

DOI: 10.4018/978-1-4666-9840-6.ch076

## **INTRODUCTION**

Key to responding to this pressure is increased empowerment and capability of leadership and management within the aged care workforce and offsetting practices through advance technological developments and knowledge creation. Aged care is becoming more diverse and complex advancing from residential care to incorporate community directed care. As a result, “aged care knowledge” is becoming increasingly heterogeneous which puts more emphasis on the need for better Knowledge Management (KM) including its creation, access and diffusion to ensure an appropriate/fit for purpose level of care. In other words, one size does not fit all and while there might be some commonalities there will also be substantial differences.

Health informatics is a field of growing interest, popularity and research. It deals with the resources, ICT (information computer technology), and methods required to facilitate the acquisition, storage, retrieval, and use of information in the health sector. Tools include computers, formal medical terminologies and information and communication systems, with knowledge management systems at the forefront of thought in health (Murray & Carter, 2005). This chapter embraces the important area of knowledge generation and informatics in aged care healthcare. This chapter focuses on informing the development of an analytics - driven operational systems and advanced KM hub for aged care management and patient care services. Analytics is focused on communication and decision-making based on meaningful patterns in data gained from a methodological analysis. The chapter introduces the concepts of knowledge management, decision support systems and big data management in aged care and focuses on the importance of diffusion of knowledge to those in need.

This chapter focuses on the important area of aged care services as a national priority with this a priority for many countries worldwide (Cartwright, Sankaran, Kelly, 2008) and adopts a case study approach with the Australian aged care sector as the basis of analysis. The Australian aged care system is seen as innovative globally and provides the benchmark for many countries developing reforms and strategies for aged care. Many countries including Australia are burdened with an ageing population (Venturato & Drew, 2010). This burden has created the need for policy reform and the introduction of new programs to improve the quality of life of senior citizens (Department of Health and Ageing, 2013). The changing industry needs are driven by a combination of changing demographics, changing care needs, increased funding for community care and restructuring by service providers to meet government reforms and initiatives. The reform and accreditation process has created the need to exploit new information and knowledge to ensure innovative delivery. This need and the increased complexity of the information required encourage the need to be innovative in the management of knowledge ((Bailey & Clarke, 2001; Binney, 2000; Blair, 2002; Wiig, 1997) There is no doubt that the sector manages some types of knowledge efficiently such as patient medical records, funding reporting and basic accreditation records however there is much data available that can enable better work practice that is not being accessed (Venturato & Drew, 2010; Sankaran, Cartwright, Kelly, Shaw, Soar, 2010).

## **THE AUSTRALIAN AGED CARE SECTOR**

The aged sector needs are driven by a combination of demographics, changing care needs, increased funding for community care and restructuring by service providers to meet government reforms and initiatives. With 84% of community care packages and approximately 60% of residential aged care ser-

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/the-role-of-knowledge-management-km-in-aged-care-informatics/150235](http://www.igi-global.com/chapter/the-role-of-knowledge-management-km-in-aged-care-informatics/150235)

## Related Content

---

### On Document Representation and Term Weights in Text Classification

Ying Liu (2009). *Handbook of Research on Text and Web Mining Technologies* (pp. 1-22).

[www.irma-international.org/chapter/document-representation-term-weights-text/21714](http://www.irma-international.org/chapter/document-representation-term-weights-text/21714)

### Big Data Analytics on the Characteristic Equilibrium of Collective Opinions in Social Networks

Yingxu Wang and Victor J. Wiebe (2016). *Big Data: Concepts, Methodologies, Tools, and Applications* (pp. 1403-1420).

[www.irma-international.org/chapter/big-data-analytics-on-the-characteristic-equilibrium-of-collective-opinions-in-social-networks/150222](http://www.irma-international.org/chapter/big-data-analytics-on-the-characteristic-equilibrium-of-collective-opinions-in-social-networks/150222)

### Semantic Web-Based Framework for Scientific Workflows in E-Science

Singanamalla Vijayakumar, Nagaraju Dasari, Bharath Bhushan and Rajasekhar Reddy (2017). *Web Semantics for Textual and Visual Information Retrieval* (pp. 187-202).

[www.irma-international.org/chapter/semantic-web-based-framework-for-scientific-workflows-in-e-science/178374](http://www.irma-international.org/chapter/semantic-web-based-framework-for-scientific-workflows-in-e-science/178374)

### A Classification Framework Towards Application of Data Mining in Collaborative Filtering

Neeti Sangwan and Naveen Dahiya (2017). *Collaborative Filtering Using Data Mining and Analysis* (pp. 100-114).

[www.irma-international.org/chapter/a-classification-framework-towards-application-of-data-mining-in-collaborative-filtering/159497](http://www.irma-international.org/chapter/a-classification-framework-towards-application-of-data-mining-in-collaborative-filtering/159497)

### Collective Entity Disambiguation Based on Hierarchical Semantic Similarity

Bingjing Jia, Hu Yang, Bin Wu and Ying Xing (2020). *International Journal of Data Warehousing and Mining* (pp. 1-17).

[www.irma-international.org/article/collective-entity-disambiguation-based-on-hierarchical-semantic-similarity/247917](http://www.irma-international.org/article/collective-entity-disambiguation-based-on-hierarchical-semantic-similarity/247917)