Chapter 1
Mental Modelling Digital Aged Care and Service Management

Margee Hume
CQ University Australia, Australia

Paul Johnston
Care Systems, Australia

ABSTRACT

Aged care is projected to be the fastest-growing sector within health and community care industries with digital aged care growing in interest. Strengthening understanding of delivery and technology will assist in better delivery and reach more elderly in need through improved service delivery. In this we examine advance recent discourse on the role of knowledge management (KM) in digital aged care with the view to assist delivery of aged care. We advance knowledge by offering a unique view of KM from the perspective of 28 aged care stakeholders through in-depth interviewing and mental model pictorials. We offer advances in understanding for digital aged care and suggest practices for knowledge capture and management for aged care providers. We culminate the discussion by offering a digital agenda for aged care facilities and advance the discourse in this sector. Specifically reflections are offered for leadership and the consideration of the key players and links that should be developed in comprehensively capturing and disseminating knowledge digitally in the sector.

INTRODUCTION

Health informatics is a field of growing interest, popularity, and research. It deals with the resources, ICT (information and communications technology), and methods required to facilitate the acquisition, storage, retrieval, and use of information in the health sector. Currently, the tools include computers, formal medical terminologies such as tele-health monitors 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 and introduces digital applications and channels for consideration. This chapter focuses on informing the advance of an analytics - driven operational systems and innovative KM hub practices for aged care

management and patient care services and advances on previous early work (Hume et al, 2014). Analytics is focused on communication and decision-making based on meaningful patterns in data gained from a methodological analysis. The chapter introduces the providers view of the digital pathways that will support knowledge management, decision support systems and data management in aged care and focuses on the importance of the diffusion pathways of knowledge to those in need.

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 recent reforms of aged care finding and delivery has created the need to exploit new information and knowledge to ensure innovative delivery and offer more innovative access to the aged. This need and the increased complexity of the information required to positon care at the forefront of consumer choice, encourages the need to be innovative in the management of knowledge ((Bailey & Clarke, 2001; Binney, 2000; Blair, 2002; Wiig, 1997) and the digital delivery of care. There is no doubt t some types of knowledge are efficiently managed such as patient medical records, funding reporting and basic accreditation records. However there is much data available that can enable better work practice and cost efficiencies that is not being accessed (Venturato & Drew, 2010; Sankaran, Cartwright, Kelly, Shaw, Soar, 2010) and digital practices that can enable this data to be used for more effective care.

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 services, provided by not-for-profit (NFP) organizations (Productivity Commission, 2011) it is vital to assist and inform leadership, decision making and productivity improvements through advanced leadership techniques and decision making support such as KM (Bailey &Clarke, 2001; Binney, 2000; Blair, 2002). The notion of effective leadership and decision making warrants continued investigation. Previous work (Jeon, Merlyn, & Chenoweth, 2010; Cartwright, Sankaran & Kelly, 2008) identified that NFP aged care leaders require improved and supported decision making and knowledge support for leadership and performance was identified as an essential part of this (Riege, 2005). Knowledge supporting the accreditation process and ability to meet compliance expectations and standards was the primary focus of this knowledge support. While some KM systems and knowledge hubs have been developed in health they have failed to meet the requirements of the broader sector in a consistent manner with further research and advanced application required specifically in aged care (Pinnington, 2011; Hume and Hume 2008; Hume, Pope & Hume 2012; Hume Clarke & Hume, 2012).

Specifically, the research is:

- Not context specific to aged care;
- the KM business cases have been conducted in for profit firms and insufficiently flexible for use in NFP organizations and in particular health and faith based firms;
- Fail to embrace the aged care sector diversity, complexities and requirements of accreditation and quality of care; and

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