

## **Introduction**

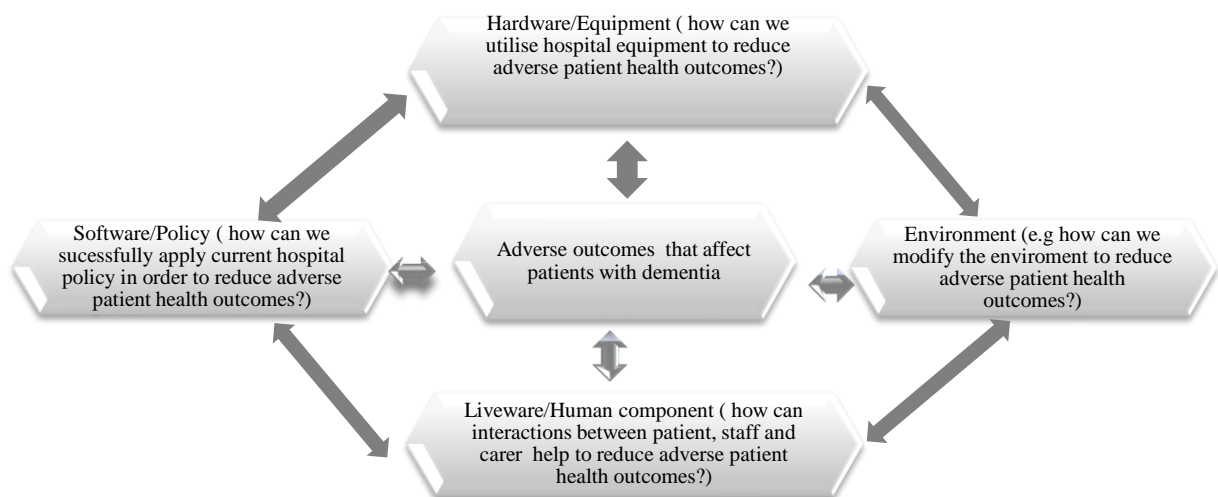
The UK Care Quality Commission (2014) reported that patients with dementia found it difficult to navigate their way through acute hospital environments. The authors, also, documented an inconsistent application of hospital policies within and between different acute settings. Furthermore, patients with dementia and their relatives are sometimes dissatisfied with the type of hospital care received alongside their participation in the provision of that care (Care Quality Commission, 2014). There is evidence to suggest that patients with dementia are at risk of adverse health outcomes such as malnutrition (Fogg, Meredith, Bridges, Gould, & Griffiths, 2017) and repeat hospitalisation within a short period of being discharged (Daiello, Gardner, Epstein-Lubow, Butterfield, & Gravenstein, 2014). These adverse outcomes occur to real patients who are admitted into our busy hospital settings where staff may be dissatisfied with their ability to provide the best possible care for patients with dementia as a result of staff shortages and pressure on resources (Byers & France, 2008).

How can we improve care given to patients with dementia in the acute settings? From a psychological view point, it is necessary to consider the important role that societal assumptions about dementia have and how they influence people's experience (Sabat & Harré, 1992). It has been suggested that stressful contextual factors can cause distress amongst people with dementia (The King's Fund, 2014). An incorporation of strengths based approaches, such as the use of Appreciative Inquiry, could also enhance the medical care for patients with dementia (McCarthy, 2017). These approaches could be supplemented with the use of a systems theory outlined by George, Long, and Vincent (2013) which emphasises the different roles that multiple stake-holders play in an institution. Therefore, a systems approach which takes into account the influence that the environment, policies, equipment and human interactions have in an acute setting could shed light on how to reduce the incidence of adverse events amongst patients with dementia (Edwards, 1972; Hawkins, 1987; Zecevic, Salmoni, Lewko, and Vandervoot, 2007).

This study is proposing that a systems approach based on the work of Edwards (1972), Hawkins (1987) and Zecevic et al. (2007), is likely to help reduce adverse outcomes without

necessarily significant increases in resources. Figure 1 illustrates how the application of the following four strategies may contribute to a reduction of adverse outcomes. 1) An assessment of how the human component within a hospital system can be drawn upon to reduce adverse outcomes, 2) An evaluation of how the hospital environment can be modified to reduce adverse outcomes, 3) An examination of how hospital equipment can help to reduce adverse outcomes and 4) A measurement of how hospital policies can be effectively utilised to reduce adverse outcomes (Edwards, 1972; Hawkins, 1987; Zecevic et al., 2007). This model, used in the aviation industry to enhance the safety of passengers (Edwards, 1972; Hawkins, 1987) and in a community setting (Zecevic et al., 2007), has transferable qualities in regard to patients' safety. Therefore, the aim of this project is to develop a support bundle which proposes strategies that can be used in acute hospital settings to reduce adverse outcomes amongst people with dementia through the lens of a systems theory.

Figure 1: A theoretical model depicting how a systems based approach which is derived from the work of Edwards (1972), Hawkins (1987) and Zecevic et al. (2007) could help to reduce adverse health outcomes amongst patients with dementia in an acute setting.



## **Discussion**

### **The Human Component of the Hospital System**

This aspect of the system seeks to understand how the relationships between patients/carers/staff can be enhanced in order to reduce adverse outcomes. What communication strategies do hospital staff employ when helping a patient with dementia to understand how they can reduce adverse outcomes? How do hospital staff involve family or paid (home) carers in the care of patients with dementia so as to reduce adverse outcomes? How do staff utilise other members of the multidisciplinary team in order to help reduce adverse outcomes? Does patient-patient socialisation on acute hospital wards help to reduce adverse outcomes? Do interactions amongst paid and family carers in hospital help to reduce adverse outcomes? The interactions within the hospital system may be improved through the use of psychological principles (Sabat & Harré, 1992), placing an emphasis on the strengths of patients (McCarthy, 2017) and the implementation of effective team building approaches (George et al., 2013).

### **The Environmental Aspect of the Hospital System**

This part of the system focuses on how the hospital environment can work for patients/carers/staff. How can the hospital ward be improved to help reduce adverse outcomes amongst patients with dementia? This may be enhanced by critically evaluating the organisational and physical design of the hospital environment (Bray et al., 2015; The King's Fund, 2014).

### **The use of Equipment within the Hospital System**

This section of the system examines the use of hospital equipment (i.e. clinical, general and manual handling equipment). How can the use of general hospital equipment (e.g. patients' clothing and eating utensils), help to reduce adverse outcomes? In what ways does the use of manual handling equipment (e.g. walking aides and slide sheets) help to reduce adverse outcomes? Does the use of clinical equipment (e.g. urine bags and fluid pumps) help to

reduce adverse outcomes amongst patients with dementia? This may be accomplished through continuous professional education of staff (George et al., 2013).

### The use of policy within the Hospital System

This segment of the system looks at the influence of hospital policies on the care received by patients with dementia. How do these Trust documents relate to the daily routine and care on the ward? Are all patients/carers/staff aware of these important protocols and how do they help to reduce adverse outcomes?

### A fictitious example

This example is based on how Edwards (1972), Hawkins (1987) and Zecevic et al. (2007) systems theory is envisaged to work for Mrs. Appleton who has been admitted into Hillview ward with a formal diagnosis of dementia and whose waterlow score indicates that she is at risk of developing pressure sores in an acute setting.

### The Human Component of the Hospital System

The 'This is me' (Alzheimer's Society, 2017) document can be used by the multidisciplinary team (Dietician, Tissue Viability nurse, Domestic Staff etc.) to help Mrs. Appleton and her support network (relatives or paid carers) understand that she is at risk of pressure sores. This can be achieved by drawing upon the emotional intelligence of staff (McCarthy, 2017) and enhancing their interpersonal skills (George et al., 2013). Information gathered from the 'This is me' (Alzheimer's Society, 2017) document can for example, be used by staff to help Mrs. Appleton to select and consume food that will help improve her nutritional status.

### The Environmental Aspect of the Hospital System

A simple adaptation of the hospital environment to make it dementia friendly can include decreasing transfers between and within wards (Bray et al., 2015) and the reduction of noise in an unfamiliar acute setting (The King's Fund, 2014). The ward environment can, with a commitment from management and front care staff, be designed to minimise adverse

outcomes. In the case of pressure sores, hospital staff and management can ensure that Mrs. Appleton mobilises on the ward (The King's Fund, 2014) to boost her circulatory system.

#### The use of Equipment within the Hospital System

Mrs. Appleton together with her support networks (relatives and paid carers) must for example be encouraged to understand and appreciate the importance of pressure care mattresses, cushions and heel protectors in patient care. If Mrs. Appleton is able to memorise the rationale for using a call bell staff can regularly remind her of the presence of the call bell, and ensure it is accessible (Chadwick & Hearn, 2013). This can help alert staff to Mrs. Appleton's toileting needs and, therefore, assist in maintaining her skin integrity. Alternatively, if Mrs. Appleton is unable to effectively use a call bell (Chadwick & Hearn, 2013), hospital staff can use the 'This is me' (Alzheimer's Society, 2017) document to spot how Mrs. Appleton discloses her toileting needs (Care Quality Commission, 2014).

#### The use of policy within the Hospital System

It is important to ensure that there is uniformity in the application of pressure prevention sore policies by the multidisciplinary team (Care Quality Commission, 2014). Also, all staff bands must be facilitated in gaining adequate training (Moonga & Likupe, 2016) so that policies are not seen as a paperwork exercise. Mrs. Appleton should be encouraged to appreciate how and why the pressure prevention sore policy has relevance to her personal care.

#### Conclusion

A systems approach applied to reducing adverse outcomes amongst patients with dementia in hospital could be effective because of its multi-dimensional focus (George et al., 2013). This may well be achieved without the allocation of increased resources but rather a different approach or perhaps we might say mind-set. The final step of this project is to develop a simple, short and comprehensive support bundle on the strategies that can be employed by busy health professionals in an acute setting to reduce adverse health outcomes amongst patients with dementia through the lens of a systems theory.

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