

Nurse Delegated Medicines Administration Enabled by Digital Technology

Executive Summary

The care home sector is facing many challenges including a reduction in funding levels, increasing costs of providing care, increased regulation and a shortage of qualified staff leading to dependency on nursing agencies.

Safe and effective medication management is key to enhancing the health and wellbeing of residents. Many reports have cited that medication administration errors in care homes are prevalent. The traditional documentation associated with medicines management is often cumbersome and time consuming and is often highlighted by regulators as a cause of concern and risk.

These two latter factors are particularly relevant in care homes with Nursing residents where only qualified Nurses have traditionally administered medicines and where on average a full time equivalent nurse is required to complete tasks associated with medicines administration and management for up to 30 residents. This is in contrast to care homes with residential status where trained carers manage and administer medicines to residents.

Recent guidance issued by the Department of Health and by Care Inspectorate Wales has indicated that care assistants with the right training and competency assessment can support registered nurses and administer medicines for nursing residents (1,2). These guidance documents advocate the delegation of medicines administration by nurses to appropriately trained and competent carers whilst retaining overall responsibility for the nursing care of that resident.

It is against this background of resourcing challenges and recent policy documents that two nursing homes in South Wales primarily approached Invatech Health with subsequent research support from Cardiff University with a proposal to enable and validate nurse delegation of medicines administration to carers.

Invatech Health provides the Proactive Care System (PCS) which has previously been evaluated and shown to reduce risks and improve regulatory compliance in medicines management (3). Integral to the use of the system is accredited e-learning courses on medicines management and handling as well as competencies for the use of the system. In addition, Invatech Health uses the data collected by the PCS system to provide performance and compliance measures for medicines management, called the Beacon Med Score. The managers and nurses use the Beacon Med Score to ensure safe and appropriate delegation to carers through the monitoring of medicines administration.

The School of Pharmacy and Pharmaceutical Sciences at Cardiff University evaluated the project both quantitatively and qualitatively. The quantitative study compared administration of nurses and carers across 8 nursing homes over a 12-week period representing almost 300,000 medicine administrations. The comparison was made against the following measures:

- Safety of administration as measured by the percentage of medicine administered by scanning the unique barcode on medicine instruction labels
- Administrations measured as 'Not Given to the resident' and the corresponding reasons
- Range of medicine formulations, for example tablets, capsules, liquids, cream etc
- The number and type of system interventions made e.g. medicine given too soon or not due
- The timing of actual administrations as opposed to scheduled due time for administration

The quantitative study found that whilst local variability existed, in general there was no overall difference between nurses and carers performance and compliance against these measures. On average, carers administered approximately 36% of all medicines in the care home. System interventions were made on average in 5.5% of the administrations made by nurses and 5.3% by carers but no statistical significance was detected.

The qualitative study used semi-structured interviews to explore the views and experiences of carers, nurses and managers before and after the implementation of the new medicines administration model. In total 29 interviews were carried out. Pre-implementation three main themes were evident:

- Operational issues:
 - carers were concerned who would carry out their personal care activities if they left their colleagues to administer medicines,
 - the need to practice administering medicines, morning and evening rounds taking longer,
 - and what if the technology ceases to function.
- Perceived Values and Beliefs:
 - medicines are the responsibility of nurses and carers should volunteer to administer medicines,
 - friction between carers who administer medicines and those that do not
- Training:
 - perceived training needs of carers to administer medicines,
 - difference in level of training of carers and nurses,
 - carers expressing that they wanted more training on what the medicines were used for.

In planning for implementation, four themes emerged:

- Safeguarding and support frameworks:
 - carers were protected from making decisions by being prompted by the system and having the fall back of the nurse on duty
- Contextual factors:
 - necessity to find a solution to nurse shortages
 - the fact that in residential homes carers administer medicines
- Staff management:
 - back fill of staff to ensure personal care activities are covered in a timely fashion
- Training:
 - the need for training prior to administration of medicines by carers

In terms of the impact / early outcomes of the model four themes emerged:

- Perceived improvements in staff morale:
 - there was a positive feeling towards the new model,

- job satisfaction was voiced by many of the carers,
- whereby feelings of pride and a sense of appreciation was often mentioned throughout the interviews
- Nurses focusing on other duties:
 - registered nurses were able to concentrate on completing care plans and paperwork,
 - responding to unexpected events and emergencies,
 - performing clinical duties like wound management, liaising with healthcare professionals to discuss resident care,
 - spending time with residents to assess their needs and health status
- Resident centred care:
 - residents were benefitting from the nurse-delegation of medicines administration as a holistic and flexible approach to care.
 - carers were providing personal and medical care
- New opportunities for carers:
 - personal development for carers, and not only in medicines administration but also in other areas.

This evaluation has shown that the model of nurse delegated medicines administration to carers through the use of Invatech Health's technology in the settings examined is safe, provides great accountability and offers a more holistic approach to the care of residents in Nursing homes by releasing valuable nursing time and resource as well as enabling a team approach to the care and wellbeing of residents.

References

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