



Administration of IV Antibiotics by CADD Pump in Long Term Care

Introduction

Historically, seniors in long term care homes have been sent to hospital when IV antibiotic therapy is required.

Antibiotic therapy is typically ordered for seven to fourteen days, thus requiring the senior to be admitted to hospital for this time period. This transfer causes undue stress to the resident, leaving a familiar environment they call home, and staff that care for them on a daily basis.

Transfer to hospital generally means lying on a stretcher in the emergency department (ED) for long periods waiting to be assessed or waiting to be admitted.

It is the general belief that alternate levels of care patients are a cause for problems experienced in acute care regarding the shortage of beds. Being able to provide IV antibiotic therapy in the long term care setting would address a number of problems currently affecting the cost of health care including:

- Seniors in long term care homes are not receiving non-critical care in their home and there are higher costs of providing non-critical care in acute care (\$600.00 per day per resident)
- Functional decline in the elderly related to hospitalization
- Increase in nosocomial infections acquired in acute care
- Repeated use of EMS for transfer to and from hospital
- Within the CE LHIN, when a LTC resident requires IV antibiotics they must be admitted to hospital. We do not yet have the capacity in long-term care to initiate and administer IV antibiotics but recognize the importance of being able to offer this treatment to our residents. The elderly living in their homes in the community have access to IV antibiotic therapy through the CCAC. Residents in our long term care homes are not able to access this service. They must be transferred to hospital for the duration of their treatment – often up to 14 days or more in some cases.

Actions

- Business proposal for buy in – found out funded through high intensity
- Contacted GEM nurse for input and best practice guidelines
- Drafted policy for senior management approval
- Wrote letter for clinical support and guidance of a nurse practitioner and accepted as one of the homes to have an assigned nurse practitioner – filling of practitioner position still pending
- Contacted CCAC who in turn contacted outside agency
- Outside agency visiting homemakers association contacted
- Manager of Nursing Practice and set up time for education to staff
- VHA nurse arrived and provided education on CADD pump and initiated first antibiotic
- VHA nurse returned daily throughout course for four days providing 1:1 or 1:2 for changing of bag until staff comfortable doing on own

Results

- Promotes senior-centered care that is easy to access using an interdisciplinary approach
- Resident has a greater opportunity to age at his/her home (being a LTC home) with quality of life, respecting dignity and choice
- Engages services in working together to create a system that fosters and supports the health and well being of the resident
- Promoted framework within which a seamless system of care and support by staff can access the appropriate referral
- Ensures the senior in LTCH is allowed the opportunity to remain in their home with expanded services that already exist (i.e. CE CCAC home care) avoiding unnecessary visits to ED and hospital stays
- Response for treatment that will ensure the right care at the right time, in the right place
- LTCH will be able to provide ongoing support to the resident and family when treatment is required
- Residents become familiar with their surroundings and there is less stress when care is provide by the home's multidisciplinary team that the resident and family have developed a trust relationship with
- Hospitalization leads to social isolation; Residents have established friendships with other residents, staff and volunteers; The burden is also felt by family when resident is in hospital as residents in LTC are often supported by a frail caregiver (spouse or elderly relative); Hospitalization of their loved one is difficult for these caregivers who may find navigating the hospital difficult and who may also suffer a decline in their health related to stress and exposure to infectious disease agents in hospital; Therefore, staying in the home is more client and family focused
- The team through assessment and interviews have developed plans of care that include the culture, beliefs, and behaviors of the residents so the staff know the likes and dislikes of the resident they provide care to on a daily basis

Hillsdale Estates, Hillsdale Terraces and Lakeview Manor have been successful in the implementation of IV antibiotic via CADD pump within their own facilities



Challenges

- Funding models and service availability depending on where a client resides not based on need or person-centred rather are system-centred
- Networking with other profit and non-profit Homes to get together and collectively share any service gaps, solve key challenges we have in common
- Development of Best Practices, policies and indicators and opportunities through examination of what exists and what is not currently in place
- Develop evidence-based practices has we proceed through the implementation stages of the pilot
- Connection with outside agency- through collaboration with CCAC there was a solution
- Communication – challenges to communicate measures to all registered staff – solution was working with outside agency to assist with training
- Collaboration with other municipal homes as not all had gone through process

Lessons Learned

- Provide ample time and instruction before implementation if at all possible
- Get all staff on board- promote positive attitude as keeping up with clinical skills
- Evaluate as we proceed – found this to be rushed
- Ensure communication is provided with a multidisciplinary approach
- Ensure pertinent clinical documentation is current
- Clinicians should be kept informed – try to use one clinician to decrease chance of error (as some on call may not know the situation or resident)
- There are resources available if one knows how to access and there is a willingness to collaborate

New Evidence/Best Practices

- ★ Use of Administration of Medication by Computerized Ambulatory Drug Delivery (CADD-Prizm®) infusion pumps for oncology/palliative care patients–policy and procedures from Lakeridge Health Corporation were helpful.
- ★ RNAO Nursing Best Practice Guidelines are a good resource.

Next Steps

- As we have been through process now, we know key points to be aware of what and can be improved.
- Continue to keep clinical guidelines up to date through ongoing training.
- Continue to keep communication flowing and clinicians informed.

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