At a Rural Veterans Affairs Medical Center, Telehealth Decreased Antibiotic Use In Long-Term, but not Acute Care (Facility A) and Acute, but not Long-Term Care (Facility B)

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**Background**

- Most Veteran’s Affairs (VA) medical centers located in US rural settings have limited access to infectious disease (ID) expertise.
- This presents challenges to implementing antibiotic stewardship activities.
- We used the VA’s videoconference system to pilot test a program, termed the Video Antibiotic Stewardship Team (VAST).
- Through weekly videoconference meetings, the VAST connected a multidisciplinary team from a rural VA medical center with ID physicians at a remote site to support antibiotic stewardship.

**Objective**

To report the effect of the VAST pilot program on antibiotic use at 2 rural VA Medical Centers.

**Methods**

- We measured inpatient antibiotic use for acute care and long-term care at two rural VA facilities for 6 month intervals before and after implementation.
- The metrics used were:
  - Agent Days = number of days a patient received a particular agent.
  - Antibiotic Days = the number of days a patient received any antibiotic.
  - Mean Length of Therapy (days) = the length of individual antibiotic prescriptions

**Results**

The specific effects differed between the 2 sites in terms of both the location (acute vs. long-term care) and the specific antibiotic changes.

**Facility A:** Decrease in overall antibiotic use in long-term but not acute care.
- Broad Spectrum - Decrease in IV vancomycin, piperacillin/tazobactam and clindamycin
- Narrow Spectrum - Increase in narrow spectrum trimethoprim/sulfamethoxazole and nitrofurantoin

**Facility B:** Decrease in overall antibiotic use in acute care but not long-term care, with increase in length of therapy in long-term care.
- Broad Spectrum - Decrease in tetracycline and metronidazole.
- Narrow Spectrum - Increase in penicillin.

**Conclusions**

- In our pilot project, the VAST affected inpatient antibiotic use at both intervention sites though the changes differed between the sites.
- VAST implementation adapts to suit the specific needs and characteristic of the intervention site.
- Future directions will test implementing the VAST at additional sites and may test interventions aimed at specific outcomes (e.g. reducing IV vancomycin).

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