Infection Prevention and Control Programs in Nursing Homes: Results from a National Survey
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BACKGROUND
- Each year there are an estimated 1.6 to 3.8 million infections in nursing homes (NHs)
- Longitudinal trends indicate the prevalence of infections has increased between 2006 – 2010
- All NHs are required to have an infection prevention and control program (IPC) but there is wide variation in personnel dedicated to infection prevention, infection prevention training, and adoption of IPC activities
- Studies of IPC practices and procedures in US NHs are limited in number, sample size, and geographic location

OBJECTIVE
- To describe IPC programs in a national sample of NHs

METHODS
- Cross-sectional survey of 2514 randomly sampled free-standing, non-specialized US NHs with 30 – 960 beds conducted from December 2013 – December 2014
- Survey was completed by NH infection preventionists (IPs)
- Survey assessed key aspects of IPC programs in NHs based on current guidelines and recommendations
- Survey responses were linked to Enhanced Reporting (CASPER) data from 2012 – 2014 to evaluate facility characteristics and receipt of infection control deficiency citations during annual inspections
- Descriptive statistics were computed

RESULTS: CHARACTERISTICS OF PARTICIPATING NURSING HOMES
- 990 NHs completed the survey (39% response rate) and 988 surveys were linked with CASPER data
- Participating NHs were more likely to be nonprofit facilities (p-value=0.03) and located in the Midwest and Northeast (p-value <0.0001) compared with NHs that did not respond to the survey
- 341 NHs (35%) had received an infection control deficiency citation at least once between 2012 - 2014
- 309 NHs (32%) were involved in an infection prevention collaborative on the national, state, and/or local level

RESULTS: RESPONSIBILITIES AND CHALLENGES
- On average, IPs spent 29% of their time on IPC-related activities
- Most NHs maintained a paper list/log-book of residents with infections (75%) and/or a graphical map (28%) and/or a computerized tracking system (24%)
- NHs also conducted regularly scheduled IPC trainings on a weekly/monthly (29%) or quarterly (26%) basis
- IPs in 39% of NHs had received specific training in IPC

RESULTS: INFECTION IDENTIFICATION AND NOTIFICATION
- 49% of NHs used graphical maps to identify infections
- About half of NHs (49%) used daily surveillance, reporting, or tracking of infections
- 96% of NHs reported antibiotic use

RESULTS: INFECTION PREVENTION AND CONTROL TRAINING AND EDUCATION
- Most NHs conducted staff training on IPC topics at new employee orientation (75%) and/or when an IPC issue arose (72%)
- NHs also conducted regularly scheduled IPC trainings on a weekly/monthly (29%) or quarterly (26%) basis
- Most NHs provided IPC training and updates to staff using face-to-face training (97%) and by posting flyers in care areas (78%)
- About half of NHs (49%) used computer-based training tools

RESULTS: RESULTS: RESPONSIBILITIES AND CHALLENGES
- There is wide variation in NH IPC programs across the US
- IPs often have multiple responsibilities and specific training in IPC is lacking
- Future studies are needed to identify best practices related to infection prevention in NHs and for the development of evidence-based guidelines

ACKNOWLEDGEMENT
This project was supported by the National Institute of Nursing Research (RO1NR01687)

DISCLOSURES
MPM has served as a consultant to Christie, Dickinson and Company. The consulting work was not related to the project presented here. The other authors have nothing to disclose.