

Mini Review

Healthcare Policy and Catheter Associated Urinary Tract Infections

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Abstract

An increase in Catheter Associated Urinary Tract Infections (CAUTI) has prompted the development of infection control protocols in healthcare settings and changes in healthcare policy. The intention of these program and policy changes is to decrease the incidence of CAUTI and improve patient outcomes. Provisions in the American Medicare Modernization Act of 2003 and the Reduction Act of 2005 created the foundation for government funded reimbursement to be limited for healthcare associated infections. Since the establishment of this healthcare policy, interventions with the greatest impact on CAUTI rates have been identified through evidence-based research. Enacted healthcare policies for limiting reimbursement for CAUTI events has had an overall positive effect on the hospitalized patient population by decreasing CAUTI rates.

Keywords: Catheter Associated Urinary Tract Infection (CAUTI); Healthcare Policy

Introduction

Catheter Associated Urinary Tract Infections (CAUTI) account for over 35% of all Healthcare Associated Infections (HAI) reported in the United States [1]. Urrosepsis from an indwelling catheter leads to a significant increase in patient morbidity and mortality and generates an economic and financial burden on healthcare systems [2]. The increase in CAUTI incidence has prompted the development of infection control protocols in healthcare settings and changes in healthcare policy. The intention of these program and policy changes is to decrease the incidence of CAUTI and improve patient outcomes [3].

Policy

Provisions in the American Medicare Modernization Act of 2003 and the Reduction Act of 2005 created the foundation for government funded reimbursement to be limited for healthcare associated infections [4]. In 2008, the incidence of CAUTI reached almost two million cases per year and the Centers of Medicare and Medicaid Services (CMMS) deemed CAUTI a “never event” limiting reimbursement [5]. A never event is considered preventable. In one calendar year, CAUTI can add up to almost 100,000 hospital days and over 400 million dollars [6]. As a result of these enacted policies, hospitals in the United States have implemented various programs and protocols aiming to reduce this HAI. Preventative measures such as educational strategies, catheter avoidance, policies for catheter insertion, catheter selection, daily necessity review and limiting catheter days have shown success in decreasing CAUTI rates nationally and abroad [7].

The Centers of Disease Control and Prevention’s National Healthcare Safety Network (NHSN) is the most widely used HAI tracking system in the United States. It is used by CMMS to evaluate a healthcare institution’s progress in combating CAUTI. National surveillance data and public health research provide supportive evidence that HAIs are responsible for negative patient outcomes,

increased length of stay and major hospital debt [8,9]. Clearly based on this research data, CMMS needed to limit funding to institutions that did not reduce this preventable HAI.

Results

The goal of the CMMS policy was to provide a strong financial incentive for healthcare institutions to reduce the probability of patients acquiring urinary catheter infections by improving the quality of patient care [4]. Since the establishment of this healthcare policy, interventions with the greatest impact on CAUTI rates have been identified through evidence-based research. These interventions were bundled into protocol-based guidelines for catheter insertion to standardize care and to optimize patient outcomes [10]. A post policy study conducted by Peasah et al. (2013) concluded that the CMMS non-payment policy was significantly associated ($p < 0.0001$) with a decline in CAUTI rates.

Conclusion

The decline in the national CAUTI rate led to decreased healthcare costs and improved patient mortality and morbidity [11]. A higher standard of care has resulted in better patient outcomes. The enacted CMMS healthcare policy for limiting reimbursement for CAUTI events has had an overall positive effect on the hospitalized patient population.

References

1. Rebmann T, Greene LR. Preventing catheter-associated urinary tract infections: An executive summary of the Association for Professionals in Infection Control and Epidemiology. Inc, Elimination Guide. *Am J Infect Control.* 2010; 38: 644-646.
2. Leone M, Albanese J, Garnier F, Sapin C, Barrau K, Bimar MC, Martin C. Risk factors of nosocomial catheter-associated urinary tract infection in a polyvalent intensive care unit. *Intensive Care Med.* 2003; 29: 1077-1080.
3. Daniels KR, Lee GC, Frei CR. Trends in catheter-associated urinary tract infections among a national cohort of hospitalized adults. 2001-2010. *Am J Infect Control.* 2014; 42: 17-22.

4. Peasah SK, McKay NL, Harman JS, Al-Amin M, Cook RL. Medicare non-payment of hospital-acquired infections: infection rates three years post implementation. Medicare Medicaid Res Rev. 2013; 3.
5. Vacca M, Angelos D. Elimination of catheter-associated urinary tract infections in an adult neurological intensive care unit. Crit Care Nurse. 2013; 33: 78-80.
6. Gray M. Reducing catheter-associated urinary tract infection in the critical care unit. AACN Advanced Critical Care. 2010; 21: 247-257.
7. Nicolle LE. Catheter associated urinary tract infections. Antimicrob Resist Infect Control. 2014; 3: 23.
8. Control CFD. Public health focus: Surveillance, Prevention, and Control of Nosocomial Infections. MMWR Morb Mort Wkly Rep. 1992; 41: 783-787.
9. Humphreys H, Newcombe RG, Enstone J, Smyth ET, McIlvenny G, Fitzpatrick F. Hospital Infection Society Steering. G Four country healthcare associated infection prevalence survey 2006: risk factor analysis. J Hosp Infect. 2008; 69: 249-257.
10. Clearinghouse NG. Guideline attributes. 2014.
11. Leone M, Garnier F, Avidan M, Martin C. Catheter-associated urinary tract infections in intensive care units. Microbes Infect. 2004; 6: 1026-1032.