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Assessing the impact of infection prevention – an incremental cost-benefit analysis

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Publication date:
2016

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Dik, J-W., Lokate, M., Kirste, A., Hendrix, R., Lo-Ten-Foe, J. R., Postma, M., Sinha, B., & Friedrich, A. (2016). *Assessing the impact of infection prevention – an incremental cost-benefit analysis*. Poster session presented at 26th European Congress of Clinical Microbiology and Infectious Diseases, Amsterdam, Netherlands.

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Infection Prevention!

in: preventing outbreaks, saving money

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The threat of colonized patients

Patients colonized with micro organisms that can spread easily and cause outbreaks can be a serious threat for patient safety!

Numbers are rising

Year	Positive patients / 1000 admissions
2007	8
2008	10
2009	11
2010	13
2011	14
2012	13
2013	13
2014	14

Numbers of positive patients admitted and detected in the UMCG rose with more than 70%.

- Enterococcus* (VRE)
- S. aureus* (MRSA)
- S. marcescens*
- A. baumannii*
- K. pneumonia* (ESBL/CP)
- P. aeruginosa* (MDR)
- Norovirus

Increased outbreak risk

More colonized patients lead to an increased risk on outbreaks!

To keep up with the rising risk on possible outbreaks, money was invested each year; a.o. into more personnel for infection prevention.

More personnel for infection prevention

Over the 8 years, the use of hand alcohol, disposable items, and surveillance cultures went up.

Quality indicators improved

For each year the number of expected outbreak patients was calculated and compared to the actual number of outbreak patients.

160 outbreak patients were prevented

The prevented outbreak patients saved enough money to earn back the yearly investments into the infection prevention giving a return on investment of 2.1.