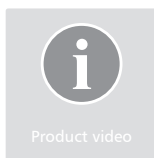
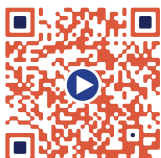




MEASURABLY IMPROVING HAND HYGIENE



Increase Hand Hygiene Compliance - Reduce Hospital Infections

>> Sustainable hygiene is a key factor in improving the quality of care, optimizing costs and strengthening the reputation of a medical facility. <<

Nosocomial infections are major challenges to our healthcare system: From a medical perspective, they threaten the success of treatment and cause additional suffering for patients. From an economic perspective, nosocomial infections raise costs due to longer hospital stays.

Hygiene experts agree: The most effective weapon to reduce hospital infections is hand disinfection. However, in practice, the recommendations leading to sustained hand hygiene are often only partially applied.



Healthcare for patients and staff

Infection Prevention

Sustainable hand hygiene is necessary for quality patient care, and thus for successful treatment. But not only patients benefit from implementing effective hygiene measures. It also affects the health of employees in the hospital. A high level of hand hygiene compliance can reduce the absenteeism of employees. And, in general, healthier employees are more satisfied.



Cost savings through shorter length of stay

Cost Optimization

In many healthcare systems in Europe and North America, treatments are billed according to Diagnosis Related Groups (DRG). If the treatment is completed without complications due to the quality of care and sustained hygiene measures, the patient may be released early. The hospital saves money and can generate a substantial profit margin.



Reputation Management: positive image through transparent quality

Positive Image

Transparency plays a major role in medical care: Patients make their own decisions about how and where they seek treatment, increasingly basing their decisions on the documented quality of care in a medical facility. In Germany, for example, hospitals are legally bound to regularly publish structured quality reports. So high standards of hygiene and treatment are important not only from a medical perspective. They also have a direct effect on the reputation of the medical facility - and ultimately on their economic success.

The Process

The OPHARDT Hygiene Monitoring System® ensures continuous and fully automatic detection of hand hygiene behavior: 24 hours, 365 days a year.

The system consists of:

- Dispensing systems with WiFi data transmission
The energy required for data transfer is generated in the dispenser by the user.
- Software for analysis of hygienic behavior

>> The OPHARDT Hygiene Monitoring System® is a complete hardware and software solution. The system supports medical facilities in capturing hand hygiene behavior, sustainably increasing hand hygiene compliance, and thereby reducing the number of hospital-acquired infections in the long run. <<

1 Record

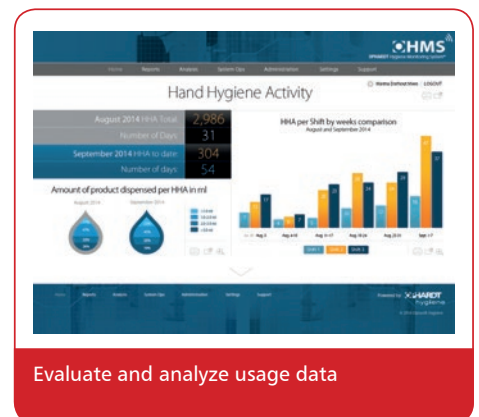
Each dispenser records the use of disinfectant by sensing when the lever is pressed. The number and timing of the hand disinfections are recorded, but not the identity of the users. The usage data is then automatically transmitted via WiFi to the central evaluation system.



Measure hand hygiene behavior

2 Evaluate

Practical analysis options are available to the user in the form of standardized reports. As an example, for any chosen time periods, the frequency of dispenser usage as well as dispenser empty time, may be compared. The evaluation results are graphically displayed and any vulnerabilities are quickly recognized and discriminated. Combined with the data from the hospital information system (HIS), further analyses are possible: Is there a relationship between dispenser usage frequency and the patient-staff ratio?



Evaluate and analyze usage data

3 Optimize

On the basis of the reports, optimization takes place with the goal of sustainably increasing hand hygiene compliance and thus increasing the quality of patient care. Differentiated staff training may be offered, health goals may be formulated, and work flow may be improved. On the hardware side, the number and location of the dispensers may be optimized.



Optimize hand hygiene compliance

Direct observation versus monitoring hand hygiene compliance

Until now direct observation is the most widespread technique used to quantify hand hygiene compliance. However, some systematic weak points are inherent in this approach:

„Hawthorne effect“:

The awareness of being watched often affects people's behaviour. This can result in artificially high hand hygiene activities and therefore, unrealistic hygiene compliance rates.

„Observer bias“:

The observer may have a bias either positive or negative towards the observed person. Moreover, they may not be proficient in standard observation techniques.

„Sample size“:

A sample size which is sufficient for statistical analyses and evidence requires a large number of cost-intensive observations.

>> The OPHARDT Hygiene Monitoring System® can effectively complement direct observation: The system allows for continuous measurement of hand hygiene behaviour. Results are not distorted by sample size, observer bias or Hawthorne effect. <<

OPHARDT Hygiene Monitoring System® at a glance

+ Complete solution

OPHARDT hygiene have more than 50 years experience in hospital hygiene. The OPHARDT Hygiene Monitoring System® is a fully integrated system combining hardware and software to offer hospitals and care facilities the most advanced hand hygiene compliance system ever developed.

+ Simple set-up and integration

OPHARDT Hygiene Monitoring System® can be easily integrated in every Wi-Fi environment. The reporting application is web-based requiring only minimum implementation effort.

+ „Green Technology“

The energy required for data transfer is generated in the dispenser by the user. No additional power supply is required.

+ Objective measuring

Continuous data collection and online analysis of hand hygiene activities without Hawthorne effect.

+ Reporting

OPHARDT Hygiene Monitoring System® provides a set of standard reports which can be customized according to individual requirements.

