



**UCK** Uniwersyteckie  
Centrum Kliniczne

**Effectiveness of using the RTLS class system  
in monitoring qualitative process criterion  
based on POC study performed  
at the University Clinical Center in Gdansk**

PRESS RELEASE, GDANSK, 02.03.2022

[WWW.SOFTGENT.COM](http://WWW.SOFTGENT.COM)

The ability to effectively and accurately assess the quality of provided medical services is nowadays one of the fundamental challenges faced by healthcare providers, and obtaining certification and accreditation is of colossal importance in terms of patient's trust in the service supplier. Although accreditation of healthcare organizations is a voluntary evaluation process aimed at improving the quality of services provided, its conduct is of great importance for the perception of the healthcare provider.

The Hospital of the University Clinical Center in Gdansk is an example of a healthcare institution that aims at continuously improving the quality of its medical services. Such quality is usually assessed using criteria related to specific standards. An example is the hand hygiene rules developed by the WHO [1] or CDC [2], the correct application of which confirms compliance with the quality criterion aimed at reducing the risk of nosocomial infections. The implementation of clearly and precisely defined recommendations in this respect is relatively simple, and training of medical personnel positively affects the level of awareness and responsibility [3].

The problem arises only at the stage of measuring the effectiveness of processes implemented according to the recommendations. In the case of hand hygiene, the appropriate level of disinfectant consumption should be proportional to the effectiveness of the hand disinfection process implemented in the organization. However, this indicator is so imprecise that it has motivated the UCK to look for technological solutions to increase the accuracy of monitoring the effectiveness of the disinfection process.



*"Enabling accurate monitoring of clean patient bed approaches is a challenge. We were looking for a solution using the latest technologies to automate the measurement of the intensity of clean approaches to patient beds, in order to verify the correctness of the metrics used in the process, based on the level of disinfectant consumption. We selected Softgent Sp. z o.o.'s solution for a pilot implementation at the Gastroenterology and Hepatology clinic."*

**Dariusz Szplit**

Head of the UCK Health Technology Assessment and Implementation Team

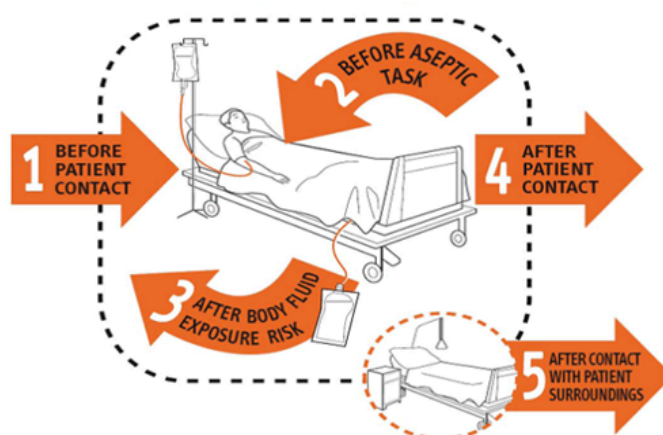
As part of the pilot project, the TRACKGENT system developed by SOFTGENT Sp. z o.o. was installed at the clinic, enabling determination of the real-time location of badges inside the building with high precision. For the purposes of the PoC study, several hospital rooms that include patient beds and disinfection stations were selected for a trial. Nurses were equipped with badges, and they were asked to execute a PoC scenario involving the use of the designated disinfection zones monitored by the system. The system automatically counted the medical staff's approaches to patients, classifying them as clean or unclean approaches - where each clean approach to a patient's bed required to be directly preceded by a presence in the disinfection zone. The reports were made available for analysis to optimize the hospital's processes. The data from the reports were also made available digitally within the Trusted Twin platform [4], so that they can be easily integrated into expert BI (Business Intelligence) systems operating within the UCK IT infrastructure.



*"During the 3 months of pilot operation in our clinic, we confirmed the high level of care offered to patients. This is proven by the high number of approaches to patient beds including so-called clean approaches. We also observed some areas for analysis and optimization."*

**Wioletta Mieloszyk**

Head Nurse at the UCK Department of Gastroenterology and Hepatology



**Fig.1** Hand hygiene and isolation procedures at the UCK in Gdansk

The data obtained during the PoC provide a basis for further analysis, including the quantity of disinfectant used, etc. Continuous monitoring allows for immediate reaction after detecting alarming inconsistencies with respect to quality-assurance processes and procedures.



*"The proven operation of the TRACKGENT system and access to a layer of data hitherto impossible to monitor, opens up many additional possibilities for the application of the system within the University Clinical Center. The location system with the offered precision can be used as a basis for monitoring other processes such as effectiveness of cleaning crews, location of couriers operating within the hospital or monitoring of patients admitted to the emergency department. UCK and SOFTGENT declare further cooperation in order to use modern technologies for improving efficiency of one of the most modern clinical hospitals in Poland."*

**Marcin Hasse**

CEO & President of SOFTGENT Sp. z o.o.

## References

[1] WHO Guidelines on Hand Hygiene in Health Care: a Summary

[https://www.who.int/gpsc/5may/tools/who\\_guidelines-handhygiene\\_summary.pdf](https://www.who.int/gpsc/5may/tools/who_guidelines-handhygiene_summary.pdf)

[2] CDC Guideline for Hand Hygiene in Health-Care Settings

<https://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf>

[3] Hand hygiene and isolation procedures in UCC of Gdansk

<https://uck.pl/content/download/Hand-hygiene-and-isolation-procedures.pdf>

[4] <https://trustedtwin.com/>