

Toilet IoT Sensor for Physiological Monitoring

About OutSense

OutSense is a startup company that has developed the first and only medical device capable of analyzing and diagnosing urine and stool from a sensor placed within a standard toilet.

The device, known as the SmartOS™, uses smart optical sensors and image analysis algorithms to deliver an unprecedented level of diagnostic accuracy. It is a true game changer in the healthcare industry since it allows caregivers to identify at a very early stage a wide variety of conditions such as dehydration, urinary tract infections, diarrhea, constipation, and blood in the stool and urine.

SmartOS™ Advantages



Samples gathered automatically, non-invasively, painlessly and discreetly. With no chemical reagent or active user intervention.



Continuous monitoring of stool and urine for early detection of irregularities.



Real-time analysis of results. No need to send samples to a laboratory or await a physician.



Caregiver alerted if results deviate from the predefined norm, enabling early treatment.



Highest level of analytical and diagnostic accuracy.



Data collected enables analysis of patient's trends on a regular basis.



Technology validated in preclinical and clinical studies.



Device interfaces with RFID recognition element or Bluetooth to provide individual results.



Simple installation and activation. Durable and built to withstand toilet conditions.



How OutSense Improves Care

Using the OutSense solution you can substantially improve the overall quality of life and life expectancy of your residents.

Use the latest technology to improve health- The device collects data automatically and continuously. It is not dependent on the resident's sense of pain, which might be impaired, or their decision not to share an ailment. The data collected enables you to identify unique patient trends and directly improve care. The technology doesn't burden the residents or the staff in any way. By adopting novel technology you can strengthen your facilities' reputation as a high quality care provider.

Increase care within the LTC facility - By detecting infections/diseases at their preliminary stage and treating them within the LTC facility, you can potentially lower the amount of residents that need hospitalization.



Fight Dehydration - Residents are more prone to dehydration because of changes in total body water, impaired thirst perception, medication etc. Dehydration is difficult to detect.



Reduce Urinary Tract Infections - In older adults, pain sensation is often impaired, and the infection worsens dramatically.



Early Detection of Constipation and Diarrhea -

Diseases such as Clostridium Difficile and Norovirus among older adults can lead to hospitalization and other serious health issues, including the spread of infectious diseases in LTC facilities.

How it works

Collected data is uploaded into a cloud and analyzed. The relevant information is sent to the healthcare provider who in turn treats the patient.

