Automated scale for real-time urine output monitoring

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Technology description

Summary

This technology is a scale capable of measuring urine output in real-time for accurate and rapid assessment of diuresis in patients with congestive heart failure.

Unmet Need: Real-time monitoring of urine output in patients with heart failure

Patients with congestive heart failure require frequent assessment of their urine output to monitor diuresis. Currently, inpatient assessment relies on ancillary staff to manually record urine volumes, which tend to occur at irregular intervals and are prone to error. Methods for monitoring of outpatient urine output are not readily available, making diuresis assessments for these patients exceedingly difficult. Therefore, a convenient and accurate method for monitoring urine output for both inpatients and outpatients could help to improve management of patients with cardiac failure.

The Technology: Simple, cost-effective device for assessing diuresis in inpatient and outpatient settings

This device is a simplified scale for monitoring urine output by tracking the changes in the weight of collected urine. This portable, yet versatile device can be used with Foley bags or handheld urinals for use in hospitals and patient homes. Furthermore, by providing automated, accurate urine output measurements in real-time, this technology can enable physicians to more quickly address and optimize patient treatment regimens.

Application area

Live monitoring of both inpatient and outpatient diuresis

Live monitoring of diuresis in patients with cardiac failure

Monitoring urine output for patients with renal dysfunction

Monitoring blood transfusion progress

Monitoring intravenous fluid perfusion progress

Advantages

Real-time urine output measurements

Applicable to both inpatient and outpatient monitoring

Simplified data interpretation

Automated and unbiased analysis algorithm

Enables faster, more accurate patient management and physician decision-making

Cost-effective

Institution

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