

# FIDENS CLINIC® TO PREVENT FALL IN ADULT PATIENT AT CAMPUS BIO-MEDICO UNIVERSITY HOSPITAL



De Leonardis A., Nobile L., Pensieri C., Alloni R.



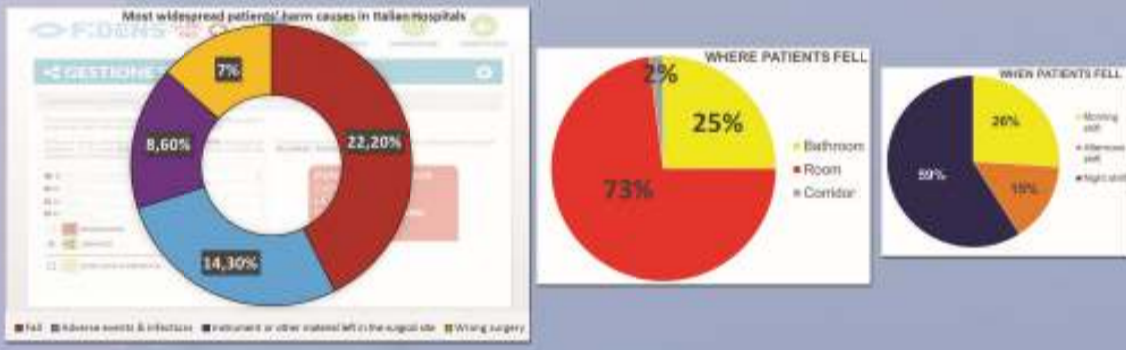
Despite efforts to identify high risk of falls' patients and intensify surveillance falls are not a rare event in our hospital. Many patients get out of their bed during the night without calling nurses and some of them fall in their bedroom or in the bathroom. Sometimes they are not able to call for help and for this reason aid sometimes is not as immediate as required. We started a pilot phase in June 2017 adopting Fidens in the geriatric ward. In this phase we collected patients' and nurses' feedback. From August 2017 we adopted the device in the 2 wards (Internal Medicine/Geriatric Department: 72 beds) with shared criteria and operative protocols.

### THE PROBLEM

Our incident reporting data show that patients' fall is a very frequent adverse event in our hospital (about 140 events/year). Nurses and doctors know the data and work to promote a safe environment and identify high risk patients. As medical department shows the higher number of fall, we decided to involve the nursing staff of this department in our study. Analyzing the incident report data, we realized that the first step of adverse event is that patient gets out of his/her bed without calling nurses or caregivers and despite nurses indication (mainly due to acute confusion or preexisting mental status disorders). We can prevent falls if staff is aware that patient is leaving his/her bed, so that they can quickly reach the room and help him/her before an adverse event occurs.

### WHAT IS FIDENS CLINIC®?

**Fidens Clinic®** is a simple device which detects if the patient gets out of his/her bed and in 8 seconds gives an alert. The mat allows non invasive monitoring, recording the pressure due to patient's body lying in the bed. When patient gets out of his/her bed, in 8 seconds the device sends a message to "Fidens Phone". The details of the patient (name, number of the room) are displayed on the I-phone so nurses can offer a suitable, targeted and prompt help to the patient.

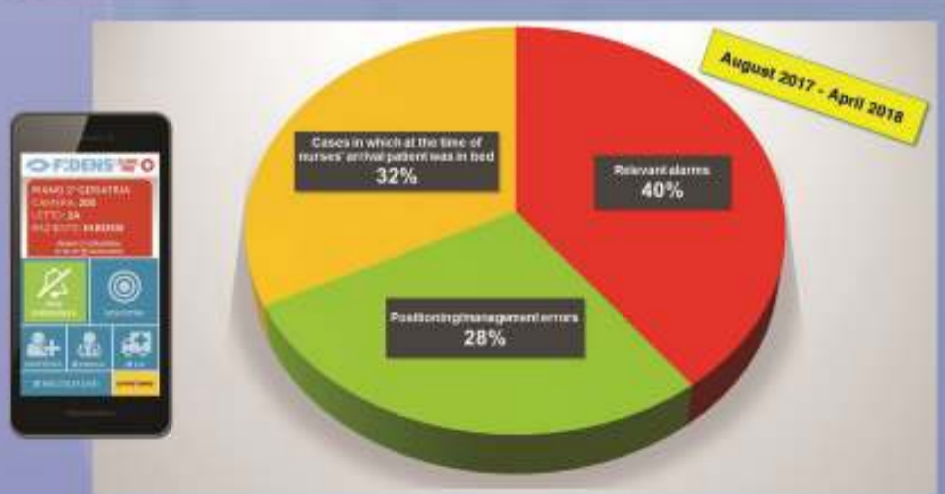


### INTERVENTION

We decided to use Fidens for patients with a high score at clinical evaluation (Hendrich scale) or patients who do not observe indications of doctors and nurses. Our aim is to define if Fidens Clinic allows to support the patient just after he/she got out of the bed, preventing falls and other adverse events.

### RESULTS

Fidens Clinic allows to store data on each event and we could revise the data of alerts from August 2017 to April 2018. We identified 3 groups of alert events: alerts related to significant events; patients in potentially harmful conditions when the nurses/caregivers reach the room. Alerts related to significant events: patients who fell in the short time between the alert by Fidens Clinic and the arrival of nurses/caregivers. Alerts not related to changes in patient's position in the bed. None of the patients monitored with Fidens has fallen.



### DISCUSSION

39.6% of Fidens alerts are related to patients in harmful situation (walking in their room, standing near the door of the room, trying get out of the bed – at risk for slipping, fall with damage, etc).

- 22% of patients were standing, close to the bed
- 45.5% of patients were sitting on the bed, trying to get up
- 31.5% of patients were climbing over the sides of the bed

**No patient fell to the ground.**

A large number of Fidens alerts are related to apparent disfunction of the devices; false positive alarms are related to insufficient expertise of the nursing team (inadequate positioning of the device, errors in device switch on/off, and so on); these alerts are more frequent in the first weeks of use of Fidens in the ward. How to explain alerts not related to significant events (when the nurse reaches the patient's room, he/she is lying in the bed)? Once Fidens Clinic was reset, no other alarms were recorded.

### LESSONS LEARNT

We need more time to involve more and more the nursing staff in using Fidens for all high risk patients. Despite evidence, we found some problem to obtain an extensive use of the device in the department, due to poor compliance.

### MESSAGES FOR OTHERS

Benefits for patients: higher level of safety, a more accurate patient monitoring. Benefits for staff: positive effect on complaints and a lower level of stress during night work. Caregivers appreciate Fidens and ask to use it at home.