

# Preventing Potentially Avoidable Readmissions in a General Internal Medicine Division by Improving the Timeliness of Discharge Summaries

## Context

- ◆ Readmission rate within 30 days is a quality indicator emphasizing too early discharge or sub-optimal care and coordination.
- ◆ Some readmissions within 30 days are considered as potentially avoidable if not planned at discharge, caused by at least one diagnosis present during the index hospitalization.<sup>[1]</sup>
- ◆ Discharge summary is essential to ensure good transition and continuity of care.
- ◆ Exceeding delay in discharge summary dissemination can have an impact on unplanned readmissions, especially among complex patients.<sup>[2]</sup>

## Problem

In 2012, in our general internal medicine division:

- ◆ Readmission rate within 30 days was 18.55% for patients discharged to home.
- ◆ The potentially avoidable readmission rate was 9.79%, out of the confidence interval for the expected rate (7.12%-8.70%).
- ◆ Median delay for DS dissemination was 23 days.

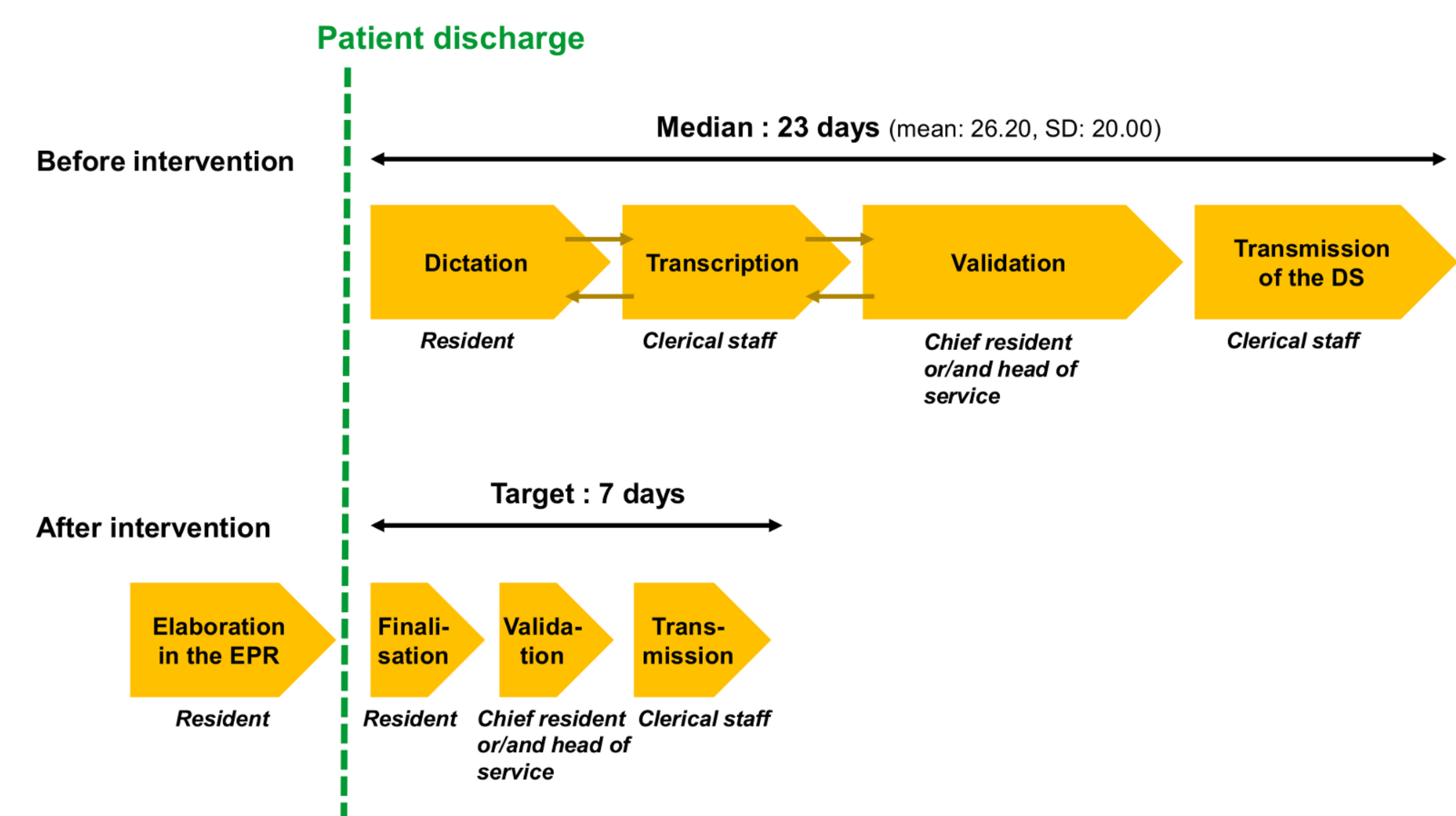
## Intervention

### Process Reengineering

- ◆ The process to produce the Discharge Summary (DS) was completely reengineered.
- ◆ Dictation and retyping would be banished.
- ◆ DS would be based on the list of medical problems in the electronic patient record (EPR).
- ◆ The list of medical problems would be regularly updated during the stay.
- ◆ Target to disseminate the DS : 7 days.

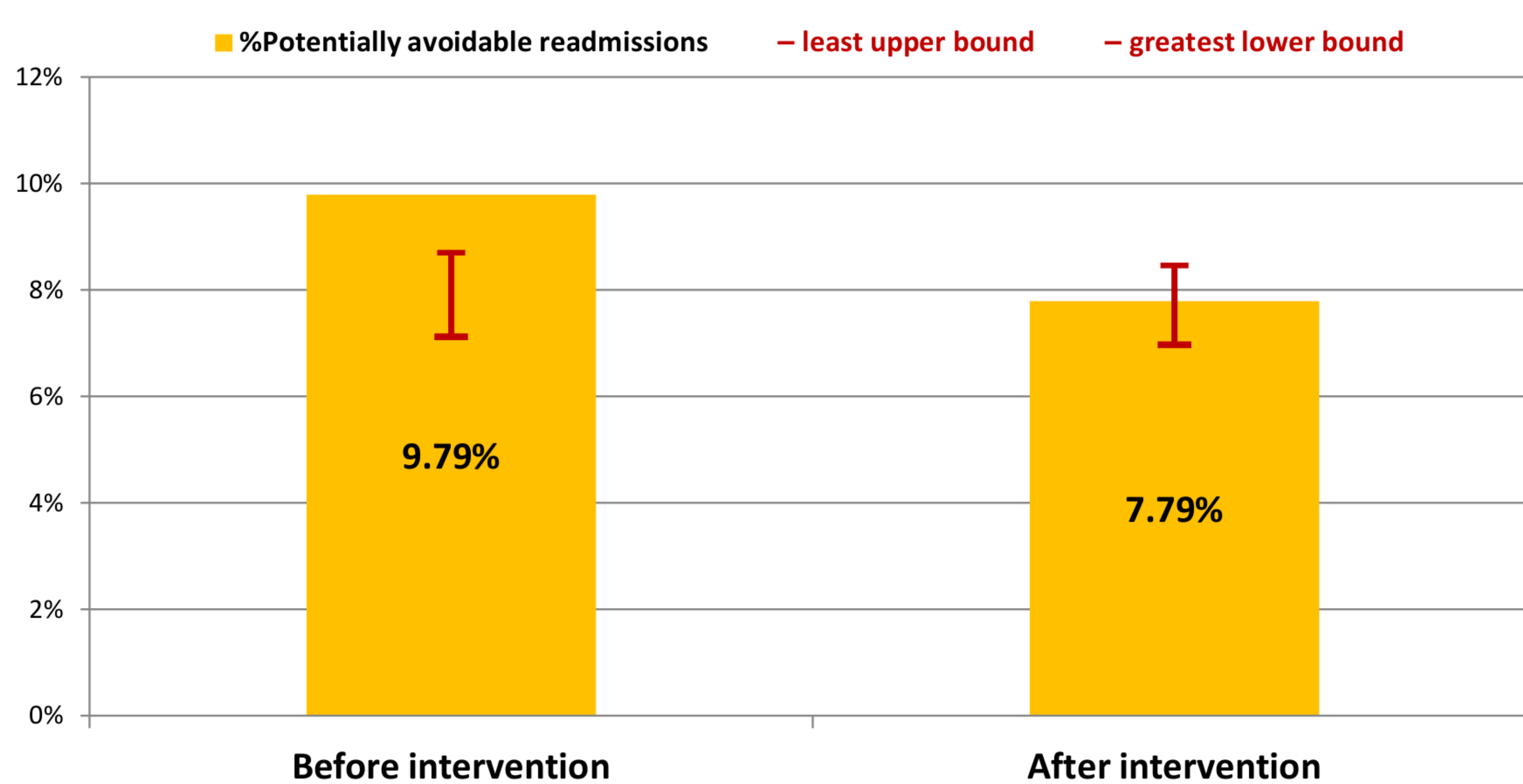
### Engaging staff

- ◆ Participative approach
- ◆ Project was supported by the Head of division.
- ◆ Regular feedback to the team with a recall of the importance to decrease delay.
- ◆ Pilot project during 2 months in a 25-bed unit, then spread to the 6 other units.



## Measurement of improvement

### Potentially avoidable readmissions rate



### Delay for dissemination

- ◆ After the intervention, the median delay for DS dissemination was 19.80 days (mean=22.20; SD=14.20) with a significant decrease of 3.20 days (Wilcoxon test  $p < 0.001$ ).

### Impact on potentially avoidable readmission

- ◆ The potentially avoidable readmission rate within 30 days for patients discharged to home showed a decrease of 2.00 % to reach 7.79%.
- ◆ The bivariate decrease of delay and of potentially avoidable readmission rate did not reach significance ( $p=0.13$ ).
- ◆ However the rate after the intervention is in the tolerance interval (6.97-8.46) for the expected rate, whereas it was outside of the tolerance interval before the intervention.
- ◆ This outlines an effective decrease of the potentially avoidable readmission rate when taking into account the characteristics of the patients and their readmission risk.

## Lessons learned

- ◆ Improvement of timeliness in DS dissemination is challenging and requests to involve all relevant staff members in the change and process redesign.
- ◆ Even if the quality of transition is multimodal, more timeliness in the DS prevents harm as unplanned readmissions. To combine process indicator (i.e. delay for DS) and outcome indicator (i.e. potentially avoidable readmissions) is relevant to keep clinicians' motivation to improve an administrative process.

### References

- [1] Halfon P, Egli Y, van Melle G, Chevalier J, Wasserfallen JB, Burnand B. Measuring potentially avoidable hospital readmissions. Journal of clinical epidemiology. 2002 Jun;55(6):573-87.  
 [2] Li JY, Yong TY, Hakendorf P, Ben-Tovim D, Thompson CH. Timeliness in discharge summary dissemination is associated with patients' clinical outcomes Journal of Evaluation in Clinical Practice 19 (2013) 76-79.