

NIJZ

Nacionalni inštitut
za **javno zdravje**

An ESTIMATION the COSTS of the FALLS with injury in hospitals

Dr. Alenka Borovničar

CONTENTS

- 1. NHS (National Health Service) Improvement, UK:
The incidence and costs of impatient falls in
hospitals, 2017**
- 2. Quality Indicator: The Falls in Slovenian hospitals**
- 3. The estimation the costs of the falls**
- 4. Data from a study performed in one general
hospital in Slovenia**
- 5. Conclusion**

1. NHS Improvement, UK: The incidence and costs of inpatient falls in hospitals, 2017

Wants to inform of the problem of inpatients falls regarding the safety issue, financial / economic saving and implementing the best practice to reduce the falls incidence

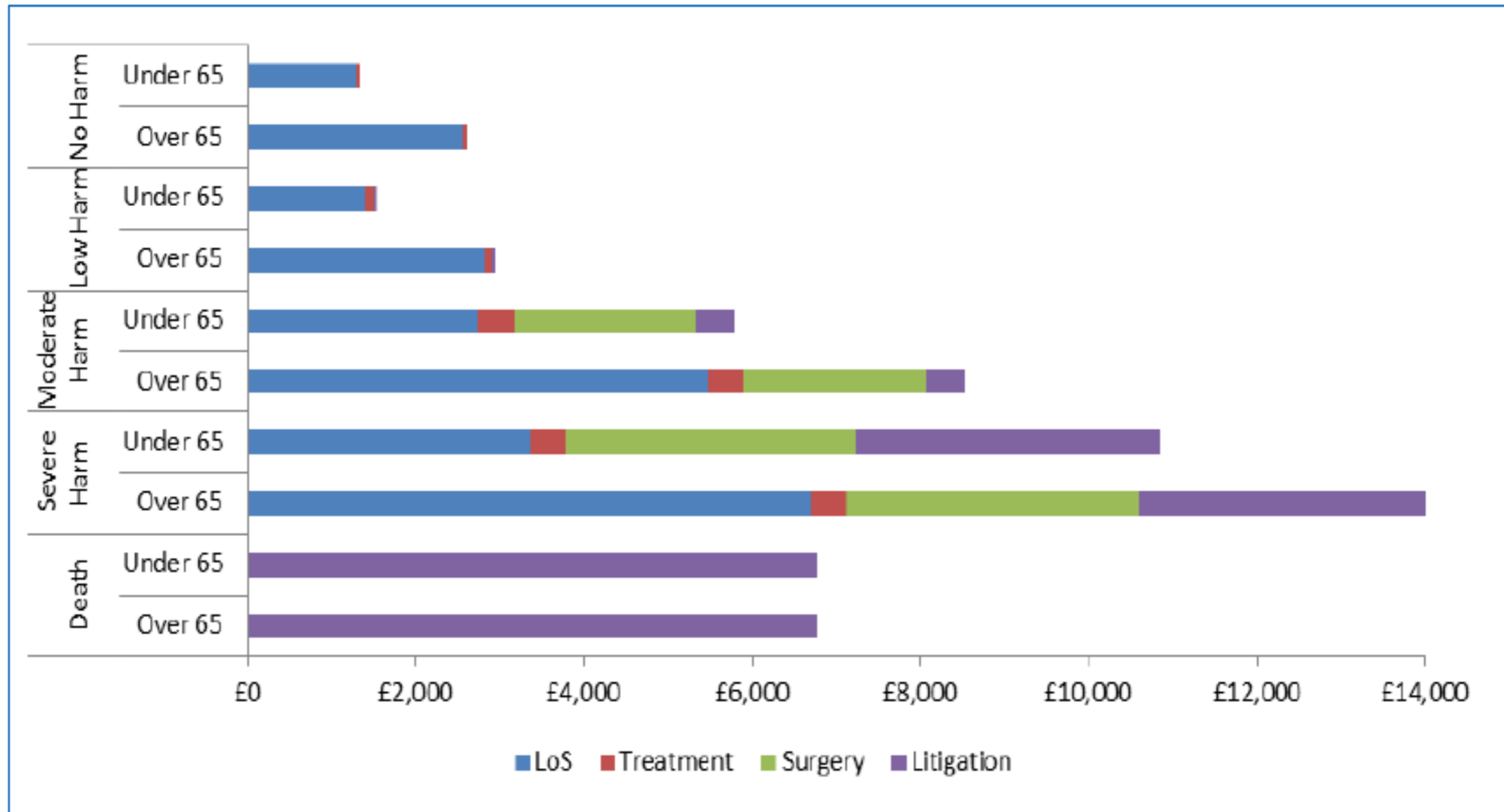
Table 3: Average estimates of the cost per fall by age

Severity of harm	Average cost per fall (£): Direct impacts only		Average cost per fall (£): Direct + indirect impacts	
	Over 65	Under 65	Over 65	Under 65
No harm	2,621	1,337	2,621	1,337
Low harm	2,903	1,495	2,949	1,540
Moderate harm	8,068	5,328	8,519	5,779
Severe harm	10,587	7,237	14,197	10,847
Death	0	0	6,769	6,769

Severity by harm is divided into the five degree of harm, more vulnerable persons are over 65 years old.

Reference: The incidence and costs of inpatient falls in hospitals ,July 2017;

Figure 4: Breakdown of all costs per fall by reported severity and age



There are parts of the cost per fall with no/low harm (length of stay), which need treatment, surgery and litigation with law inclusion

Reference: The incidence and costs of inpatient falls in hospitals, July 2017;

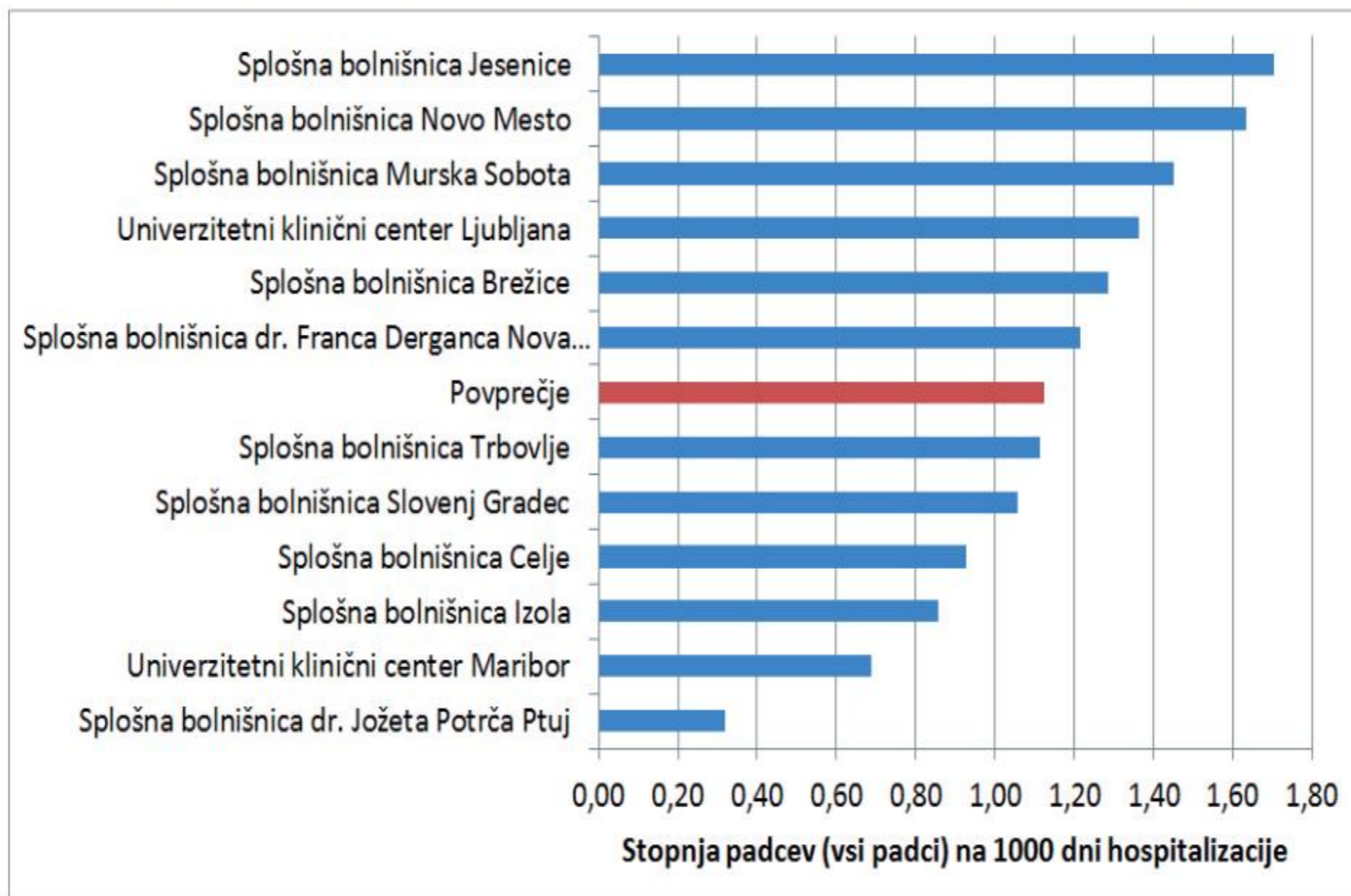
Based on all those assumptions, it was calculated the average cost of a fall at £2,600

Reference: The incidence and costs of inpatient falls in hospitals ,July 2017;
NHS Improvement

2. Quality Indicator: The Falls in Slovenian hospitals

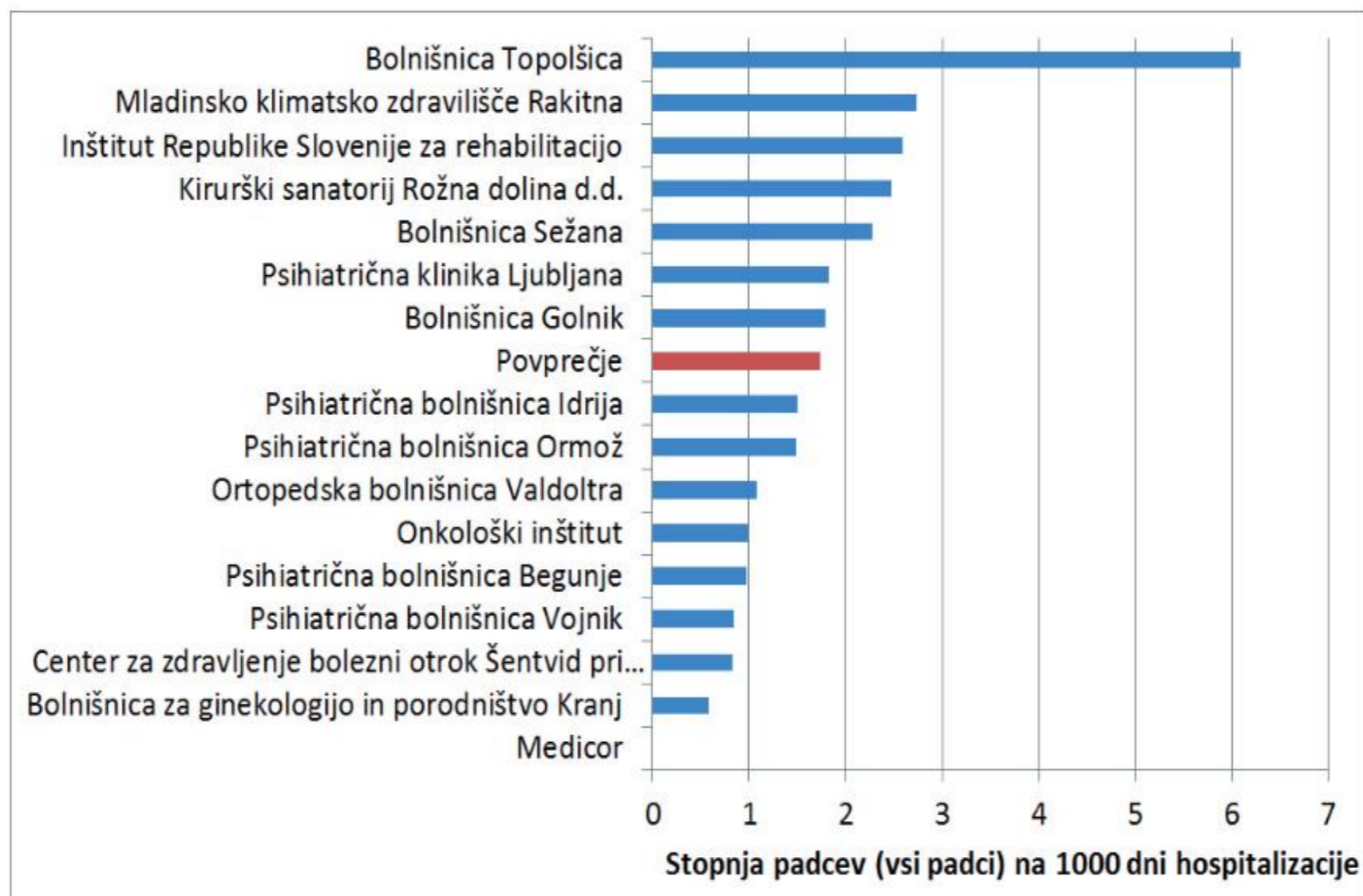
$$\text{QI} = \text{Ratio } \frac{\text{Number of falls} \times 1000}{\text{Occupied Bed Days (OBD)}}$$

Slika 34: Stopnja padcev po splošnih bolnišnicah v Sloveniji v letu 2013 na 1000 dni hospitalizacije



The falls rate per 1000 patient days is an average 1.1 in general hospitals in Slovenia (all falls), for the year 2013

Slika 36: Stopnja padcev po specializiranih bolnišnicah v Sloveniji v letu 2013 na 1000 dni hospitalizacije



The falls rate per 1000 patient days is an average 1.7 in specialized hospitals in Slovenia (all falls), for the year 2013

REFERENCE: Kazalniki kakovosti v zdravstvu, Poročilo: 2012-2013; Ministrstvo za zdravje RS

Tabela 5: Odstotek poškodb ob padcu (podatek smo začeli spremljati v letu 2013)

Ime izvajalca	Poškodbe pri padcih		
	Padci s poškodbami	Padci skupaj	Odstotek padcev s poškodbami
Bolnišnica Sežana	4	93	4,30
Bolnišnica Topolšica	2	180	1,11
Bolnišnica za ginekologijo in porodništvo Kranj	3	10	30,00
Center za zdravljenje bolezni otrok Šentvid pri Stični	0	6	0,00
Inštitut Republike Slovenije za rehabilitacijo	9	148	6,08
Kirurški sanatorij Rožna dolina d.d.	0	8	0,00
Medicor	0	0	
Mladinsko klimatsko zdravilišče Rakitna	0	13	0,00
Onkološki inštitut	24	61	39,34
Psihiatrična bolnišnica Begunje	0	38	0,00
Psihiatrična bolnišnica Idrija	8	92	8,70
Psihiatrična bolnišnica Ormož	2	58	3,45
Psihiatrična bolnišnica Vojnik	4	44	9,09
Psihiatrična klinika Ljubljana	14	295	4,75
Splošna bolnišnica Brežice	2	34	5,88
Splošna bolnišnica Celje	5	147	3,40
Splošna bolnišnica dr. Franca Derganca Nova Gorica	2	134	1,49
Splošna bolnišnica dr. Jožeta Potrča Ptuj	9	20	45,00
Splošna bolnišnica Izola	14	58	24,14
Splošna bolnišnica Jesenice	5	95	5,26
Splošna bolnišnica Murska Sobota	7	159	4,40
Splošna bolnišnica Novo Mesto	4	175	2,29
Splošna bolnišnica Slovenj Gradec	25	73	34,25
Splošna bolnišnica Trbovlje	6	35	17,14
Univerzitetni klinični center Ljubljana	215	743	28,94
Univerzitetni klinični center Maribor	17	249	6,83

The left column of the Table shows the number of serious injuries e.g. fracture, dislocation, injury of soft tissue, which need needlework or other surger procedure, head and spinal cord injury, death. The sum of the column is nearly 400 incidents (374), for the year 2013

3. The estimation the costs of the falls

- Based on the assumptions, from the NHS Improvement: **The incidence and costs of inpatient falls in hospitals, July 2017**; it was calculated the average cost of a fall at £2,600 ≈ 3.000 EUR which could be the average cost even in Slovenia.
- **According to data of Health Insurance Institution in Slovenia (HIIS)** the prices could be approximately:
 - Check of preparing for the surgery in the systemic anesthesia
 - Surgery
 - The price of rehabilitation
 - The length of stay
 - The immobility, loss of confidence
 - etc.
- **The result is: 400 falls x 3.000 EUR = 1.200 000 EUR (without of the falls with no/low harm)**

4. Data from a study performed in one general hospital in Slovenia

Tabela 4: Stroški zdravljenja zloma kolka v proučevani bolnišnici v letu 2011 v evrih

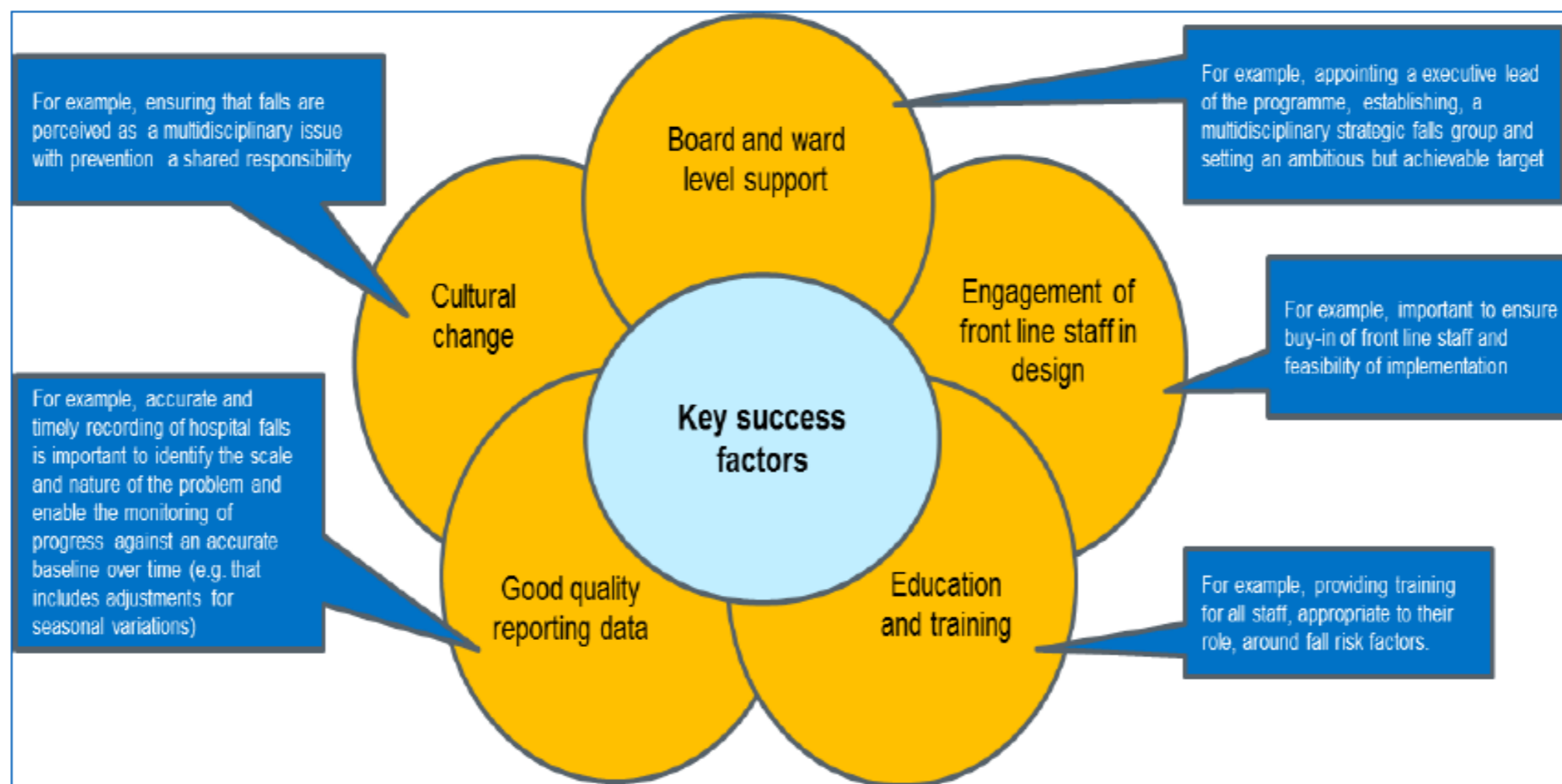
	Totalna endoproteza kolka (TEP)	Parcialna endoproteza kolka (PEP) zaradi zloma	Osteosinteza zloma vratu stegnenice
1. STROŠKI PORABE ZDRAVIL IN ZDRAVSTVENEGA MATERIALA			
Operacijska dvorana	1.864,99	869,00	317,00
Anestezija	114,44	88,25	88,25
Oddelk (za čas hospitalizacije)	89,66	89,66	89,66
SKUPAJ	2.069,09	1.046,91	494,91
2. OSTALI PREGLEDI			
Predanestezijski pregled	36,94	36,94	36,94
Rentgen slikanja	26,38	26,38	26,38
Laboratorij (ocena)	5,22	5,22	5,22
SKUPAJ	68,54	68,54	68,54
3. STROŠKI DELA			
Operacijska dvorana	868,75	868,75	868,75
Oddelk (za čas hospitalizacije)	1.346,05	1.346,05	1.346,05
SKUPAJ	2.214,81	2.214,81	2.214,81
4. OSTALI NEPOSREDNI STROŠKI			
na uro/operacijska dvorana = 39,28 evra	98,20	98,20	98,20
na dan/oddelek = 28,28 evra	282,80	282,80	282,80
SKUPAJ	381,00	381,00	381,00
SKUPAJ NEPOSREDNI STROŠKI	4.733,44	3.711,26	3.159,26
SKUPAJ POSREDNI STROŠKI	530,18	530,18	530,18
SKUPAJ CELOTNI STROŠKI	5.263,62	4.241,44	3.689,44

Vir: Interni podatki proučevane bolnišnice, 2012.

REFERENCE: http://www.cek.ef.uni-lj.si/u_diplome/rozman4692.pdf

5. Conclusion

Figure 8: Key success factors for successful implementation and sustainable results



IN BRIEF:

It is really important to reduce falls among the patients in the hospitals for safety reasons. There is a need to address all efforts for continuous evaluation data for the falls, improve staff education for that purpose and finally saving costs from reducing the number of falls.

Thank you for your attention !