



The Royal College of  
**Chiropractors**

Chiropractic Patient Incident Reporting & Learning System



# Ten years of online incident reporting and learning using CPIRSL

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# Background

- It was developed and launched in 2009.
- Currently accessible by all chiropractors in the UK and members of the European Chiropractors Union (ECU).
- [www.cpirls.org](http://www.cpirls.org) is a secure and anonymous online incident reporting and learning platform.



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# What can't CPiRSLs tell us?

1. The number of actual incidents that occur.
2. The rate of incident occurrence.
3. The full history and characteristics of each incident.
4. Reason an incident occurred.



# What can CPiRLS tell us?

1. Highlight the most common types of reported incidents.
2. Demonstrate the types of incidents associated with the most harm.
3. Help us to understand the why incidents occur.
4. Can reflect the safety culture of the profession.



# Objectives

- 1) To review the use of the CPiRLS database by the chiropractic profession over the last 10 years.
- 2) To report on the frequency of incident categories and patient harm.
- 3) To analyse the CPiRLS database to identify any key areas for patient safety improvement.



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# Method

## Part 1

Retrospective analysis of the database with frequency statistics to describe reporting trends including frequency of incident categories as well as level of harm.

## Part 2

Thematic analysis will then be used to identify themes relating to any contributory factors and subsequent learning.



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# Data Set

CPIRLS data over a 10-year period (April 2009 to March 2019).

Total incidents recorded = **268**



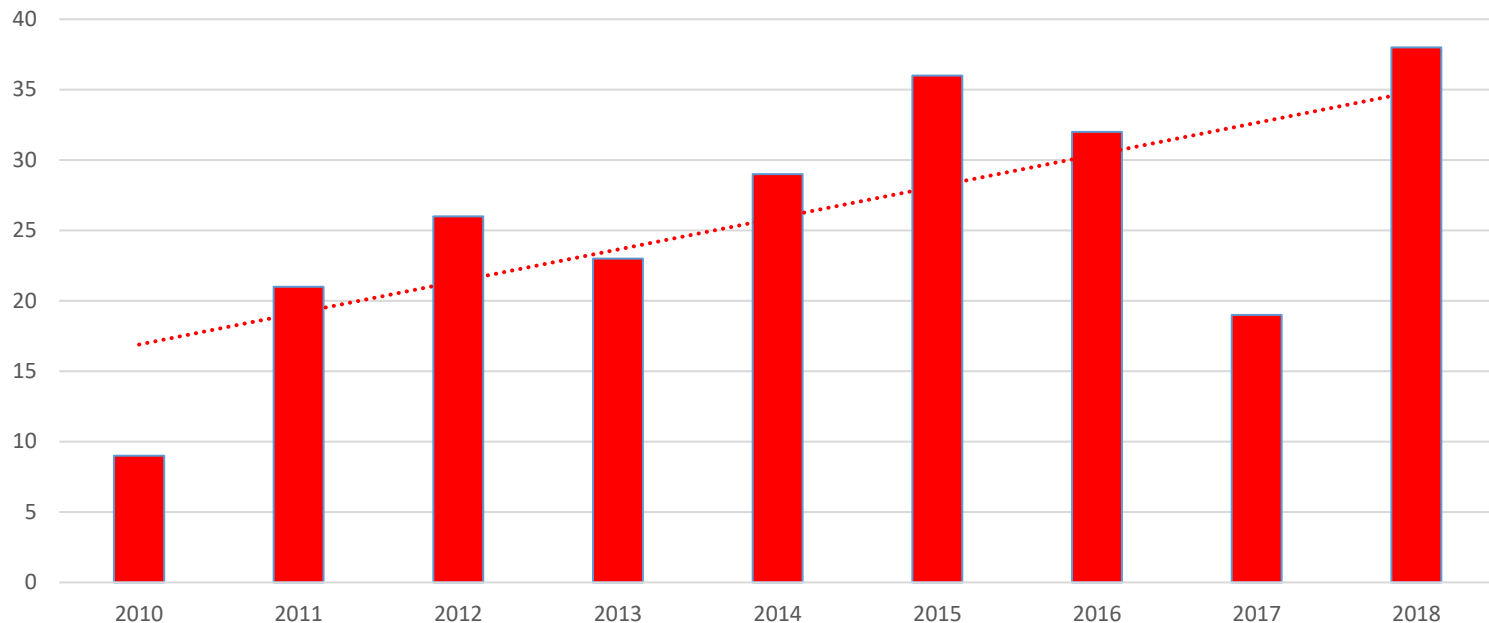
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# Number of Incidents Reported per Year

Number of Incidents Reported per Year (2010 - 2018)



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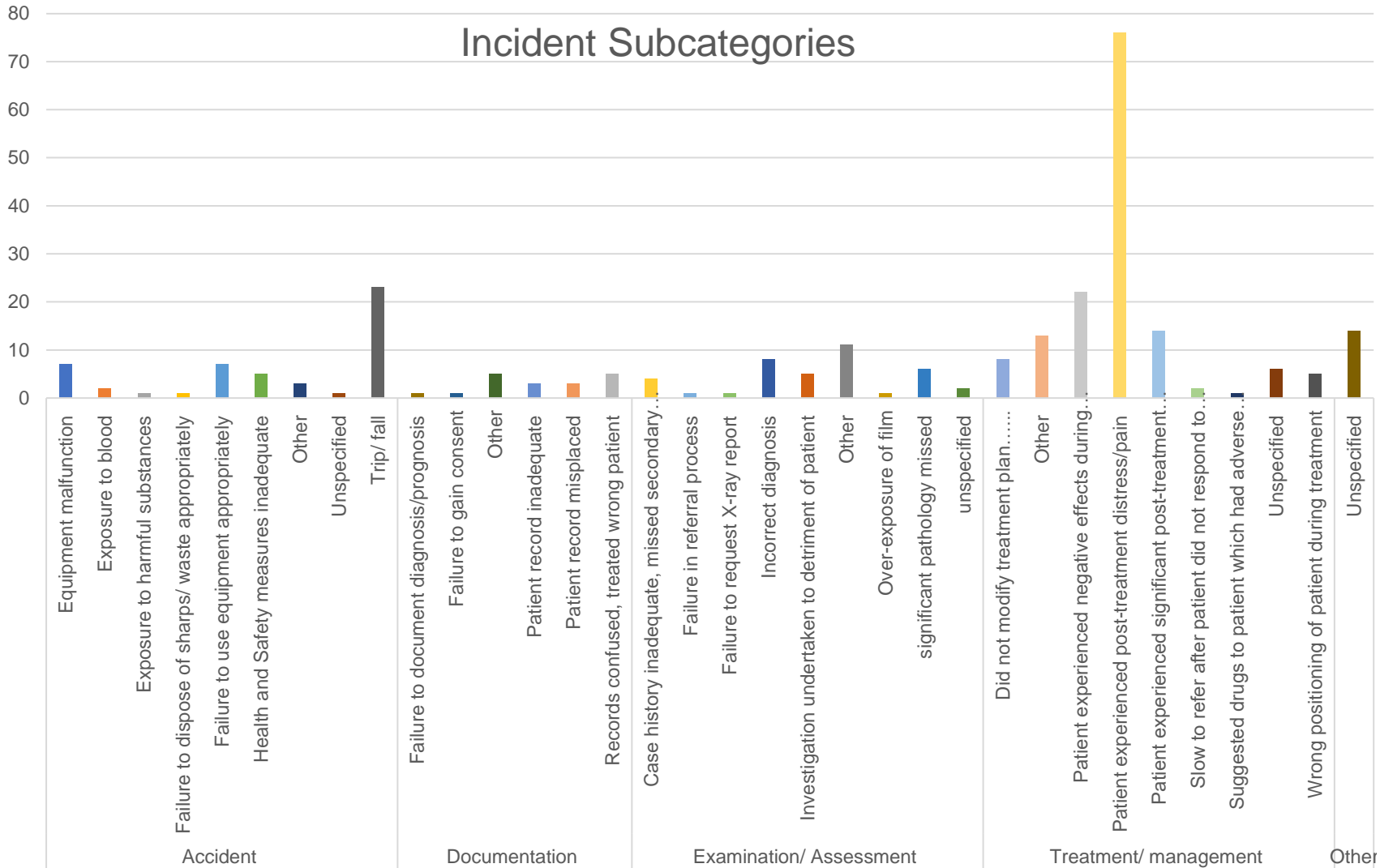


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# Incident Subcategories



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# Common Subcategories with > 5% of incidents

- Trip/ fall 23 (8.6%)
- Patient experienced post-treatment distress/pain 76 (28.4%)
- Patient experienced negative effects during treatment e.g. fractured rib/ clavicle 22 (8.2%)
- Patient experienced significant post-treatment effects e.g. neurological problem, disc prolapsed 14 (5.2%)
- Unspecified 14 (5.2%)

# New Subcategories with > 5% of incidents

- Fainting 15 (5.6%)
- Missing an underlying pathology 22 (8.2%)



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# Fainting n=15 (5.6%)

- A key word search ('faint' or 'passing out' or 'syncope').
- Most incidents (8) occurred during the examination phase.
- The majority (9) involved patients aged from 25-34.

# Patient experienced post-treatment distress/pain n=76 (28.4%)

Part of the data could be further categorised -

- *Acupuncture/ dry needling (9 incidents)*
- *Cervical spine post-treatment distress/pain (21 incidents)*
- *Pelvic girdle post-treatment distress/pain (21 incidents)*

# Cervical spine post-treatment distress/pain n=21 incidents

- 11 cases described neurological symptoms i.e. dizziness/ nausea/ lightheaded.
- 10 cases described pain.
- SMT was used in most cases 14 (67%).
- 16 (76%) = female, 5 (24%) male.
- The patients age range appeared evenly distributed.

# Pelvic girdle post-treatment distress/pain n=21

- Pain was the most common post treatment reaction.
- 10 (48%) linked soft tissue therapy.
- 8/10 patient were female.
- All patients were over 45 years old.

# Patient experienced negative effects during treatment n=22 (8.2%)

- In total 14 individual incidents suggest that a rib fracture was likely to have occurred.
- Although most patients require minimal treatment, rib fractures can have serious complications.



# Suspected rib fracture

- 10/14 female
- One patient aged 45-54 had known osteoporosis.

Patient's Age	Number of suspected rib fractures
Under 16	0
16 – 24	0
25 – 34	0
35-44	0
45 – 54	4
55 – 64	6
65 – 74	2
75+	2
<b>Total</b>	<b>14</b>

# Suspected rib fracture

- Involved prone (PA) thoracic and side posture manipulation techniques.
- Other techniques to the thoracic or lumbar region were only associated with soft tissue or joint injury.



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# Patient experienced significant post-treatment effects 14 (5.2%)

- Cauda Equina Syndrome (CES)
- Vascular events
- New/ increased radicular symptoms
- Shortness of breath
- Extreme dizziness
- Severe Migraine
- Deep Vein Thrombosis (DVT)

# Missing an underlying pathology n=22 (8.2%)

- Abdominal Aortic Aneurysm (AAA)
- Spinal pathological fracture
- Extremity fracture
- Vascular event
- DVT
- CES

# Patient Harm

- 81 (41%) of (red) incidents stated known patient harm occurred.
- Of these, 42 (51.9%) were described as avoidable and 51 (63%) state it is likely that the clinician's actions/ inactions were responsible for the incident.



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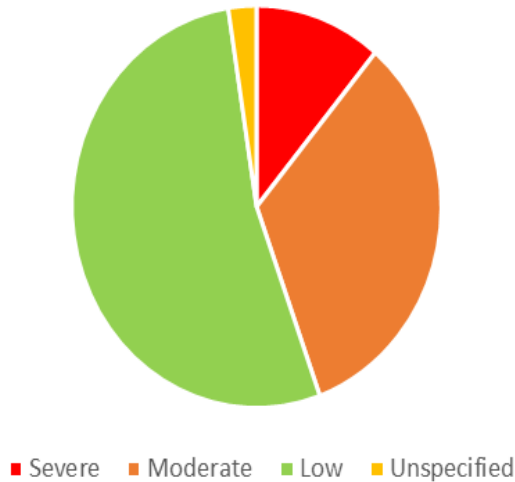


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# Severity of Patient Harm

Severity of harm from red incidents stating patient harm



Severe	9 (11.1%)
Moderate	27 (33.3%)
Low	43 (53.1%)
Unspecified	2 (2.5%)
<b>Total</b>	<b>81</b>

# Learning from incidents

- On most cases the emphasis is based on the reporting > learning.
- Some aspect of learning from the incident was only documented in 143 (53.4%) cases.
- 59 comments were present, relating to 39 incidents. All comments occurred prior to October 2015.



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# Limitations

1. Low levels of reporting.
2. Accuracy of data recording is limited with significant omissions.
3. Severity of harm data is not valid as no standardisation criteria is used.



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# Conclusion

- There is an increase in incident reporting over the last 10 years, however there appears to be lack of engagement by the profession.
- Learning is not documented in almost 50% of cases.
- Several important incident subcategories have been identified highlighting potential patient risk.



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Thank You

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