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Compensation for whiplash injury: an examination of the moral hazard effect

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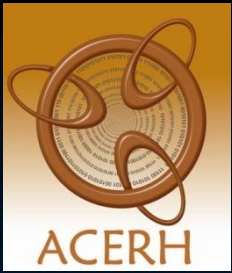


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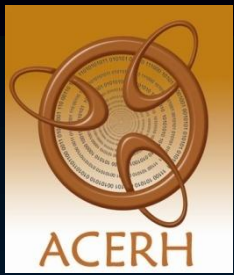
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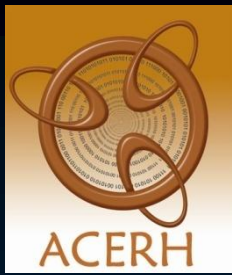
Overview of whiplash injury

- “Whiplash” (Crowe 1928) is a mechanism of injury
 - Refers to forces applied to the cervical spine and surrounding structures
- Range of clinical manifestations
 - Physical and psychological symptoms
- Diagnosis
 - Relies on self-report of symptoms in the majority of cases
 - No valid clinical signs, no “visible” structural pathology
- Prognosis
 - Most improvement occurs in the acute period, but neck pain persists in up to 50% of cases (Rebbeck 2006)
 - The reason for this high % of chronic cases has led to much debate



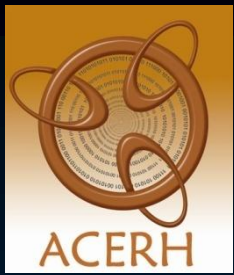
Chronic whiplash: the aetiological debate

- There is agreement that whiplash results in acute injury, but there is disagreement as to why symptoms persist
- 3 schools of thought about why symptoms persist
 - Physical / organic - structural damage
 - Psychological - the stress of the accident
 - Malingering / moral hazard - the insurance/ compensation environment coupled with asymmetric information about the extent of whiplash injury causes people to exaggerate their symptoms



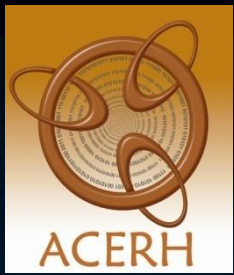
Characterising the competing interests

- **Consumers**
 - want affordable insurance premiums and a system that allocates compensation benefits fairly (social justice)
- **Injured people**
 - want to recover from their injury and (some of them) want compensation for their losses
- **Insurers**
 - want certainty re: number, size, and cost of claims so they can provision accordingly; commercial interests
- **Governments**
 - want a sustainable system of compulsory insurance; political and social objectives
- **Clinicians**
 - want to provide effective treatment; commercial interests
- **Lawyers**
 - want to advocate on behalf of others; commercial interests



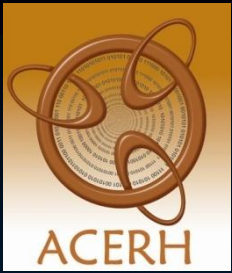
The hypothesis and related concepts

- Hypothesis: *The availability of compensation encourages people with whiplash to exaggerate their symptoms*
- Concepts
 - Economics literature → “moral hazard”
 - An imbalance in information between insurer and insured has the potential to benefit the insured either before (*ex ante* moral hazard) or after (*ex post* moral hazard) a loss event
 - In this context, there is potential for *ex post* moral hazard because the extent of the loss (i.e., whiplash injury) is difficult to verify, which creates an environment where claims can be exaggerated or falsified → explains chronic symptoms
 - Health literature → “malingering”
 - The intentional fabrication or exaggeration of symptoms motivated by an external incentive (e.g., \$)
 - Invention ↔ exaggeration



Reasons for the moral hazard hypothesis in this context

- Most common persisting symptom (pain) is subjective
 - Not possible to validate whiplash (asymmetric information)
- Prejudiced attitudes towards chronic pain
 - Medical model, acute pain model
- Most people with whiplash fit the psychiatric criteria (DSM-IV) for “malingering”
- Media portrayal of claimants as cheats
- Whiplash is lucrative
 - Professionals determine the extent / nature of services supplied
- ~10% CTP claims believed to be fraudulent, and sprains and strains are the most common reason for CTP claims
- Why does whiplash take longer to heal than other sprains/strains?
- “No whiplash” in countries without injury compensation schemes
 - But diagnosis / classification methods differ across jurisdictions



The legacy...

■ Health professionals

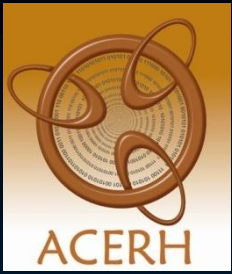
- Widespread belief in the “compensation effect”: ~35% of physiotherapists and ~60% of doctors think patients involved in litigation overstate their symptoms
 - attribute failure to alleviate chronic symptoms to compensation
 - avoid treating people with compensable injuries
 - denied treatment / decreased effort to find effective treatments

■ Insurers

- Minimise moral hazard (higher thresholds, lower caps, co-payments)
- Systematic under-compensation of whiplash injuries (USA)
- May use the argument to lobby for changes to compensation law / scheme design to reduce compensation benefits
 - preserves capital and reduces uncertainty about future insurer liabilities

■ Judiciary

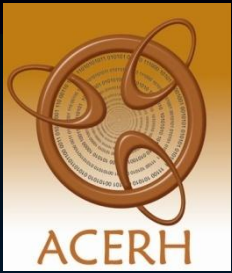
- More conservative judgments
 - sets a precedent for lower awards of damages



Testing the moral hazard hypothesis

Hypothesis: The availability of compensation encourages people with whiplash to exaggerate their symptoms

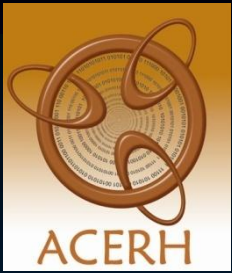
1. Look at changes in claims rate when benefits decrease
 - Other contexts, used as evidence of moral hazard ($\downarrow B \rightarrow \downarrow C$)
 - Does *not* answer the question of whether the potential for financial gain incites exaggeration of symptoms
2. Compare health status before and after settlement of a claim (are people really “cured by a verdict” ?)
 - Measure self-reported health in the presence (i.e., seeking compensation) and absence (i.e., received compensation) of an incentive to mis-represent health status (controls for moral hazard)



Compensation neurosis is

*“a state of mind, born out of fear,
kept alive by avarice,
stimulated by lawyers,
and **cured by a verdict**”*

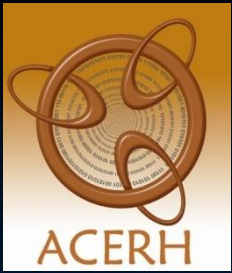
(Kennedy 1946)



12 studies compare pre- and post-settlement health

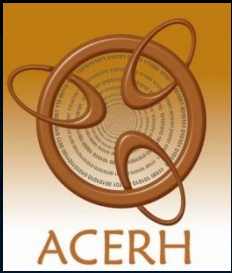
6/12	1yr	2yr	3yr	4yr	5yr
71% sx	36% sx	10% sx	50-75% sx		12% sx
	54% sx	45% sx			15% w
		75% w			62% sx
		97% sx			
		100% sx			

Empirical evidence does not support the hypothesis that whiplash is “cured by a verdict” / moral hazard is a problem



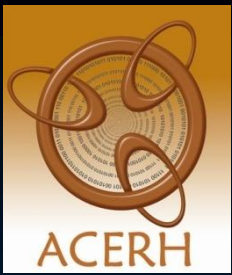
Dataset

- Source population
 - 1147 RTCs (rear end with only minor car damage) reported over 1 year period in the UK
 - Exclusions (age, head injury, hospitalisation)
 - Contacted by police within 2 weeks of RTC
 - 503 consented to participate in the study, which consisted of standard questionnaires administered at
 - Baseline to determine who had whiplash
 - 6 and 12 months for those with whiplash
 - 24 months for those who sought compensation

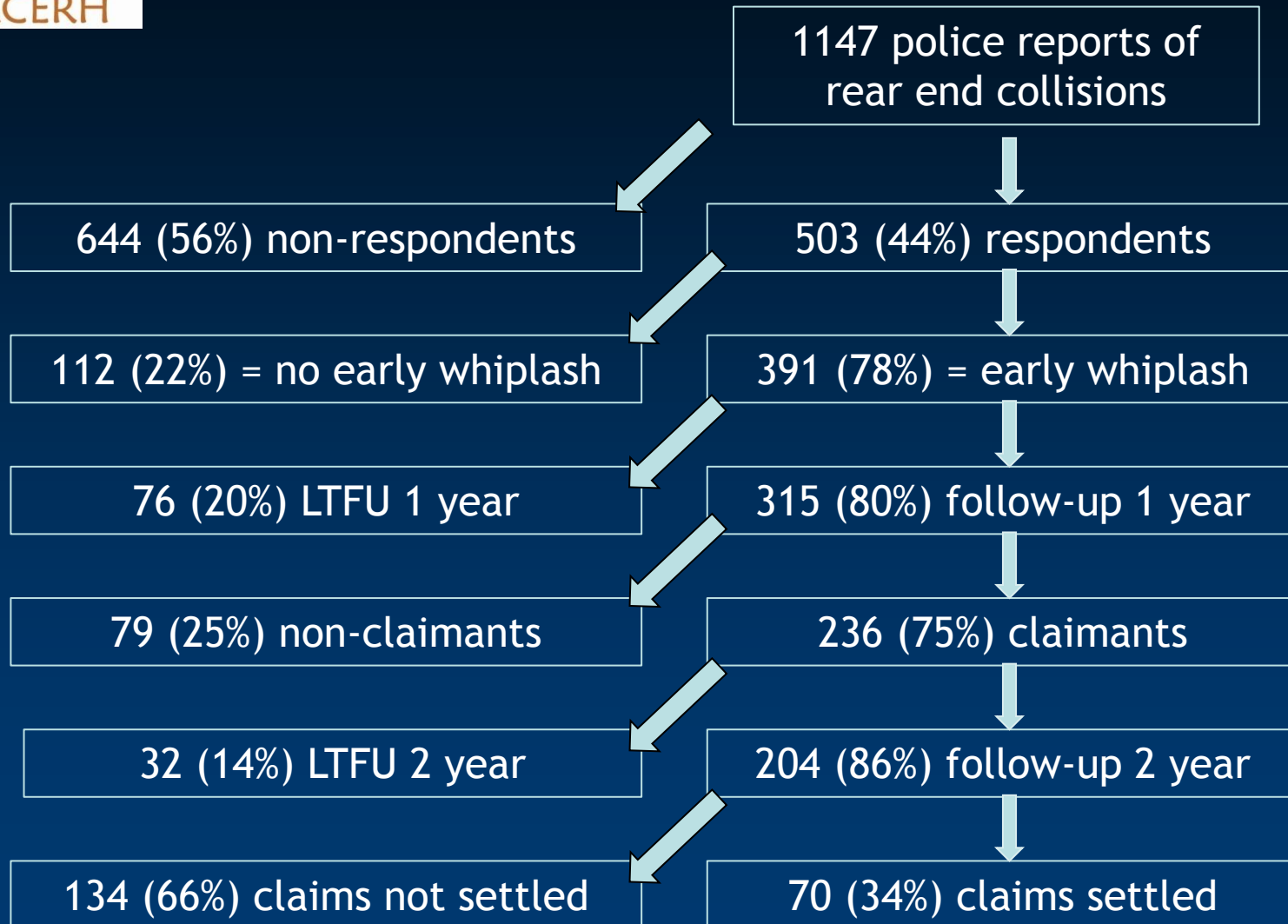


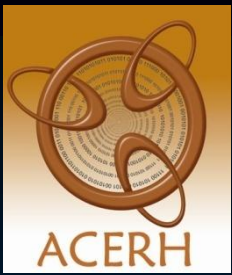
Variables

- Demographic variables
 - Gender, age, BMI, occupational class, married, smoker, previous RTC, previous neck pain, GP / ED attendance
- Accident variables
 - Car type/size/age, speed, headrest, damage
- Outcome variables
 - Symptoms: neck pain (VAS) severity (0,6,12,24); headache (0,6,12,24); dizziness, vision, sleeping (6,12,24)
 - Treatment; medication use (6,24)
 - Time off work (6,12,24)
 - Seeking compensation (12); settled compensation claim (24)

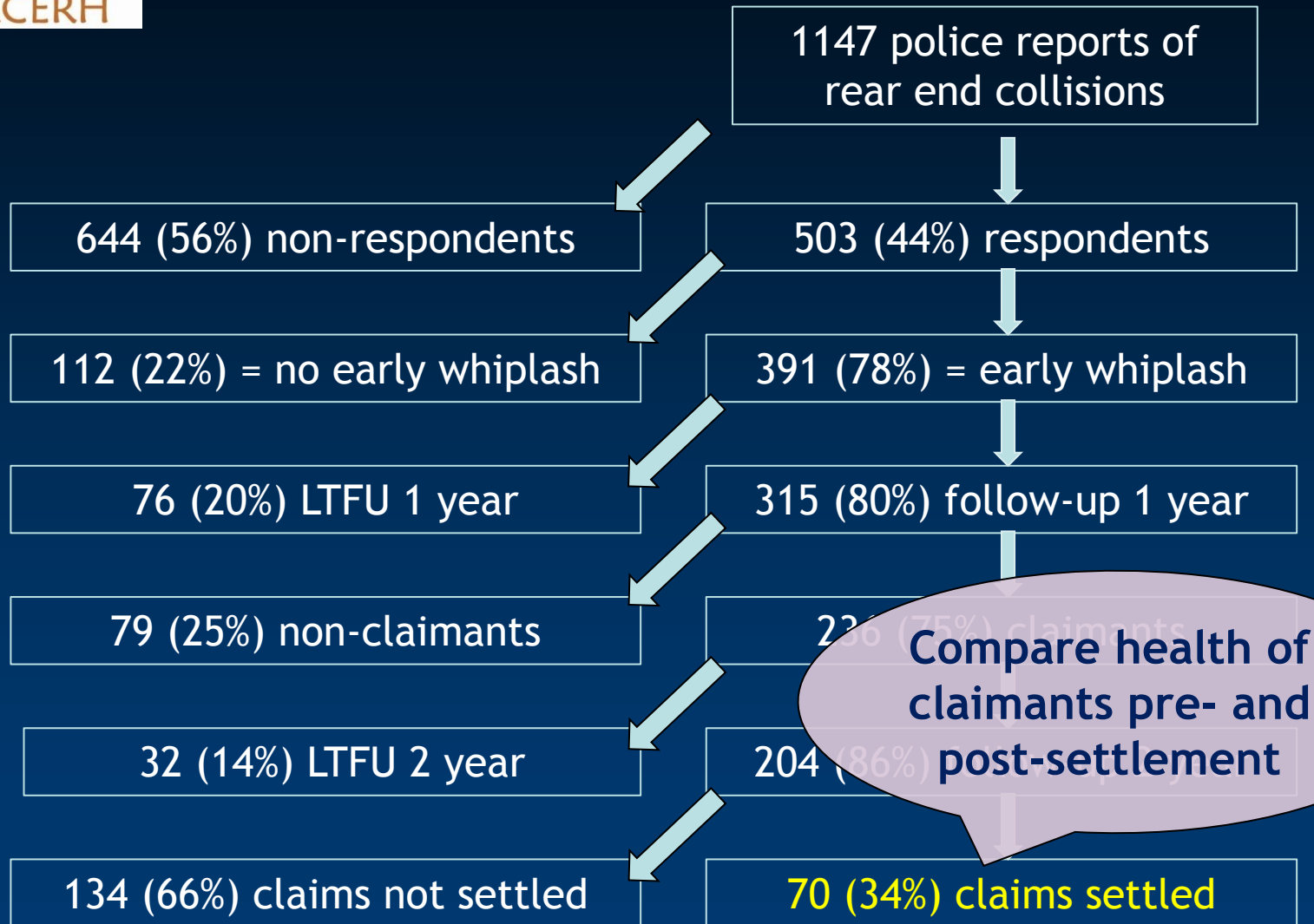


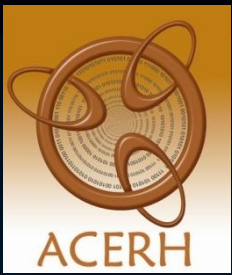
Cohort description



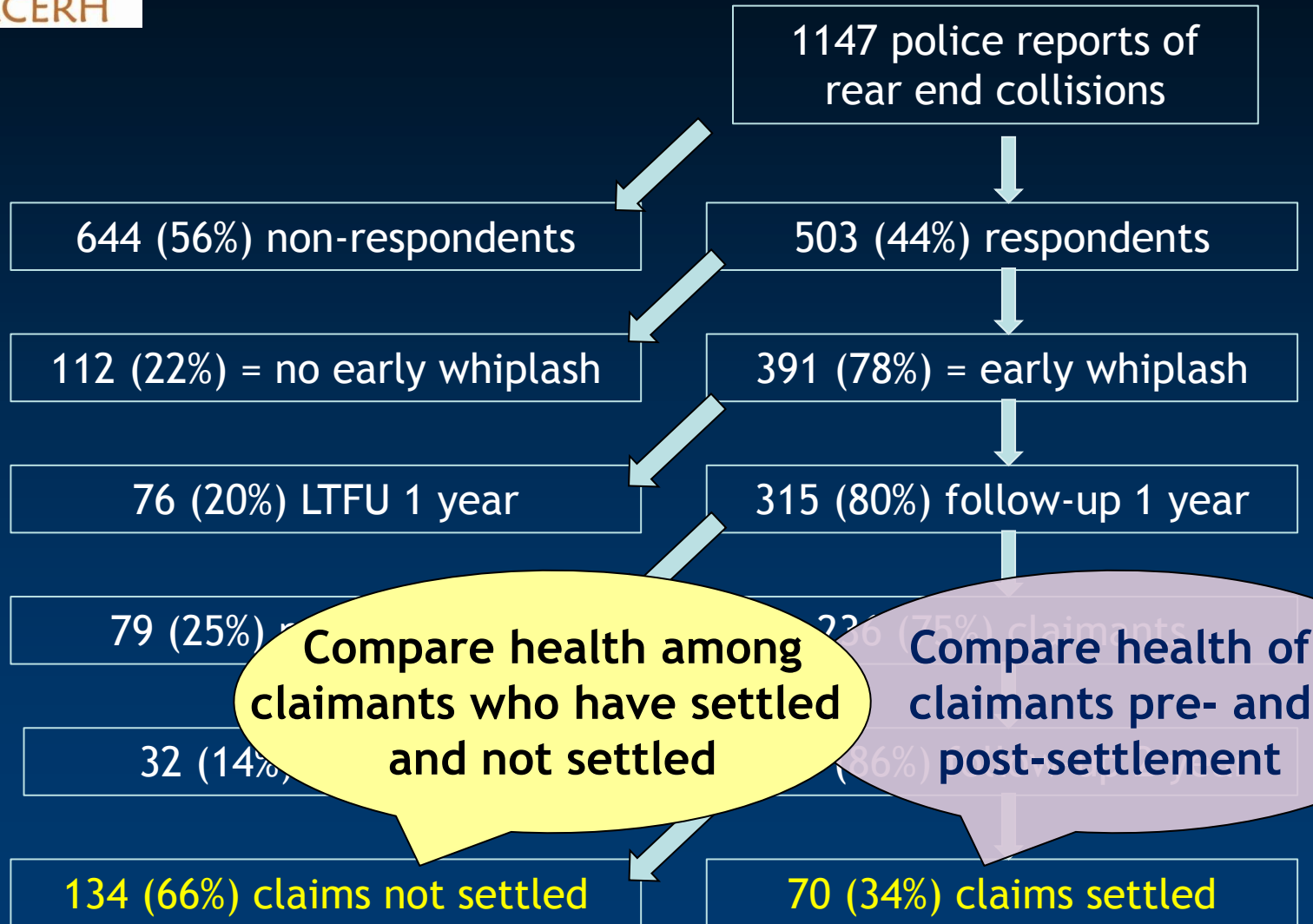


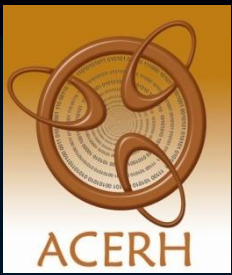
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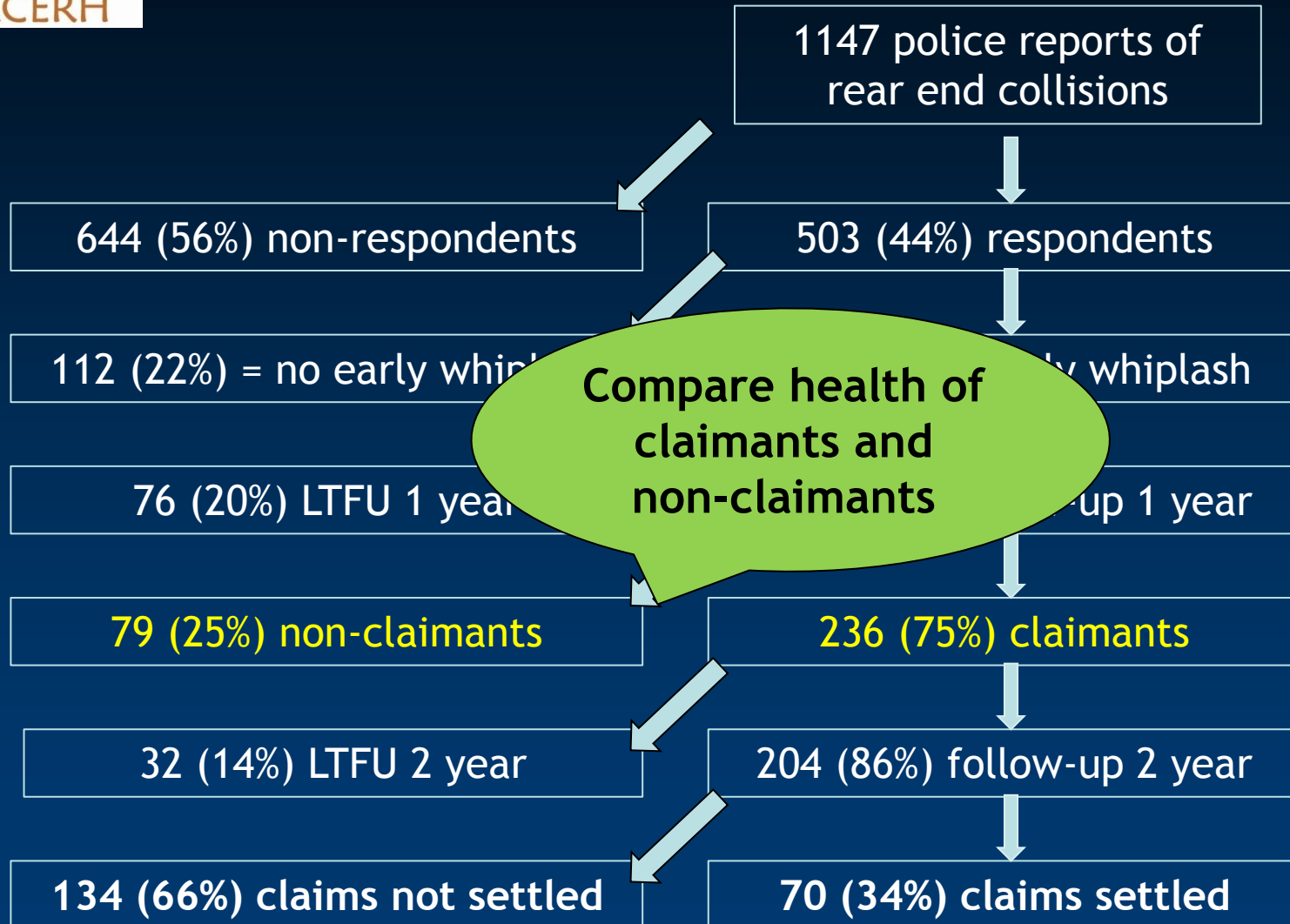


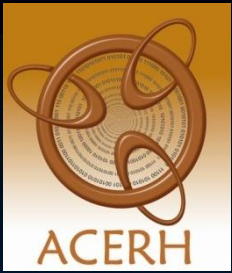
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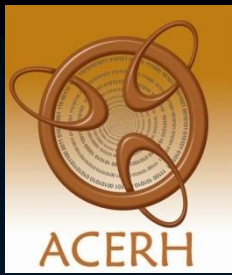
Cohort description





Testing the moral hazard hypothesis is complicated by...

- Problems with measuring the concepts
 - Cannot verify whiplash injury/symptoms
 - *among those who claim, not all will have a 'real' injury*
- The nature of the “intervention” (compensation)
 - Legal processes and laws are heterogeneous and subject to change, and decisions are case-specific
- The range of factors that affect the decision to claim compensation
 - People opt to claim for different reasons (not just \$)
 - *not all people with a 'real' injury will choose to make a claim*



Conclusion: Guilty until proven innocent ?

- So far, the argument that malingering / moral hazard is widespread among claimants with whiplash injuries is not well-supported, yet this belief is widespread, and may have consequences for claimants (i.e., decreased compensation benefits, decreased access to health professionals and to effective treatment) that may subsequently affect their health
 - We will do further work to test the hypothesis by comparing health status pre- and post-settlement
- *But*, until a valid diagnostic test is developed or a physical basis for whiplash is proven, the idea that people are “faking it” will probably always exist to some extent

Acknowledgements

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