

Systemic fraud and abuse is a longstanding problem for insurers. Large and complex fraud rings among service providers exist and have evolved to beat the system. To counter this abuse the network of service providers should be monitored as a composite. Monitoring claims or service providers individually may not be sufficient to detect patterns of collusion. The EAGL toolkit within ClaimsGator is a powerful means for flagging suspicious associations in the service provider ecosystem.

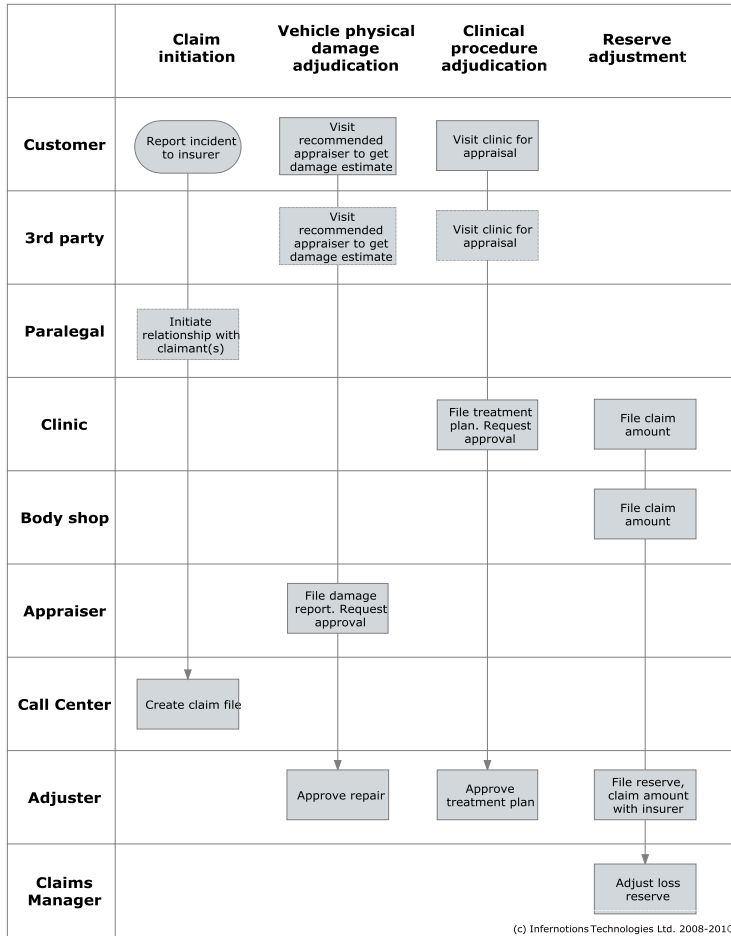


Figure 1: Summarized claims process flow for an insurer from the claim initiation through to reserve adjustment

Introduction

A client reported the following case study. The leader of an accident mill in a North American city would recruit four or more participants for every staged accident. Post accident the claimants would all visit the same rehabilitation service and be prescribed equipment such as neck braces or egg crate mattresses for their fake ailments. From the claimant to the equipment seller, all participants were complicit in the fraud and got a portion of the claim. The ring was broken once the insurer, with our participation, started linking the claims information across different entities back to the policy holders. The same principle has been expanded into a proprietary technology (EAGL) for monitoring an insurer's ecosystem. The **Entity Association-Graph Linkages (EAGL)** toolkit is now part of the ClaimsGator software and is used to isolate unusual behavioral patterns across service providers.

Scenario

Figure 1 on the left represents the process flow across the multiple entities involved in handling a claim originating with the policy holder. The participants include clinics, body shops, appraisers, BI adjusters, AB adjusters etc. The claims handled by these entities form a complex network of relationships that are farmed by the EAGL toolkit for suspicious behavioral patterns

Detecting suspicious associations using EAGL

Figure 2 on the right is a visualization of an eco-system of service providers. The EAGL toolkit mines this eco-system to identify associations on entities that converge on suspicious claims. The risk rating on each association is based on the volume of suspicious claims handled and the respective risks of the individual claims. Hence the red color coding in Figure 2 shows the association of highest fraud propensity. The service providers highlighted in amber are identified as entities of interest by virtue of their association with the high-risk entities. EAGL is a valuable tool in an investigator's suite for detecting accident mills that might otherwise work below the radar.

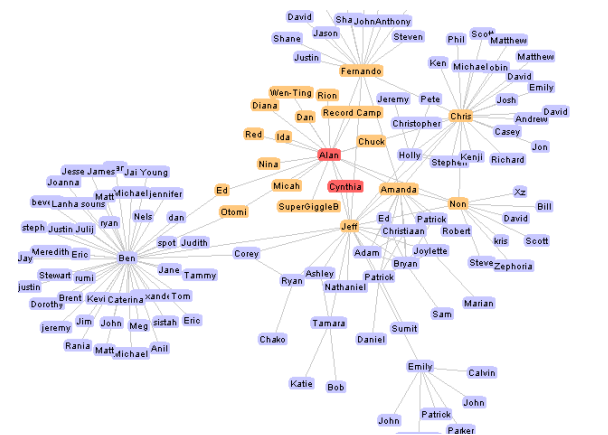


Figure 2: Visual representation of the service provider eco-system and the EAGL discovered associations color-coded on suspicion index