**Title:** Overtreatment in the market for dental services

**What is the problem you want to solve?**

In privatised health care markets, such as the market for dental care in Australia, doctor-patient relationships are characterised by an information asymmetry and a conflict of interest. The dentist diagnoses the patient’s problem and often also provides the treatment. While both the dentist and the patient has an incentive for the problem to be correctly diagnosed and sufficiently treated, the dentist can make higher profits by providing an unnecessarily complicated treatment to the problem (overtreatment), doing excessive diagnostic tests (over-testing) or charging for an expensive treatment while actually providing a cheap but sufficient treatment (overcharging). Lacking the necessary expertise, patients are unable to recognise when they are over-treated or over-charged. And if the patient is fully insured, she may not even care much as her problem is resolved while the cost is shifted to the insurer.

**Why do you want to solve this problem?**

The problem obviously negatively affects the patients and the insurance providers due to increases in health costs. However, dentists are also adversely affected as many patients avoid having regular check-ups due to their mistrust of the recommended treatments. Solving this problem will reduce health care costs, increase rewards for honest high quality care providers, and increase efficiency in the healthcare system.

**What do you envision as the ideal solution for this problem?**

**If you had unlimited resources**

Separating diagnosis from treatment would help solve the problem but is usually prohibitively costly. Making diagnostic tests/information easily accessible by alternative dentists would help but there are technical challenges as well as potential privacy issues.

**What sort of Open Source solution do you think can be created in 48 hours, by a small team of developers, designers and data analysts?**

Standard reputation/online review systems and competition (second opinions) don’t work in these markets. An anonymous feedback system where patients can report their suspicions about being over-treated/over-charged/over-tested and solicit alternative diagnosis can assist the solution. A rare example of a solution to a similar credence goods market is one by Uber, which uses a combination of GPS (which helps identify overtreatment), standardised pricing and a feedback/reputation mechanism. A similar solution would need to gather information from patients and dentists and give more confidence and power the patients in identifying whether they are overtreated/overcharged.

**What are the current solutions for handling this problem?**

Emphasis on medical ethics and self-regulation by industry associations and complaints handling by The Office of the Health Ombudsman or National Health Practitioner Ombudsman and Privacy Commissioner can be useful. However, while these services are effective for under-treatment they don’t address overtreatment effectively.