

Contingency Management System

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This project is a Contingency Management web application. Though the application is developed as a support in treating drug misuse, the fundamental activities behind this application could also be used to promote many other forms of behaviour change via the underlying principles of operant reinforcement and behavioural economics. Contingency Management is a highly effective, evidence based, incentive centred, treatment for problem behaviours. This approach is most commonly used to strategically treat drug and alcohol addiction through offering tangible and meaningful rewards that are contingent upon agreed and targeted behaviour change. Whilst the Contingency Management approach is clinically highly effective the adoption of an automated web application will enable a determination of complex applied reinforcement criteria in 'real time' and improve communication between treatment staff and service users. The proposed system aims to automate a current paper-based system, removing the tedious and laborious act of manually processing a service user's treatment progression. As per international best practice advice this system aims to target two objective behavioural aspects: engagement in clinical activities and drug use.

A major benefit main of this system is the ability to minimise human error and bias in creating an automated approach to recording and calculating the patient's 'real time' reward status and entitlements (normally vouchers to a calculated monetary value and/ or "take away" medication privileges) in a far less laborious fashion than which is currently employed in many treatment facilities. A second benefit is the potential opportunity to generate reports about patient progress and accumulate outcomes research data, an important consideration in 'evidence based' clinical practice. This application could be employed in a range of facilities including but not limited to outpatient drug treatment centres, residential programme, prisons, the military and juvenile detention centres etc.

The web application which will be written in Java and connecting to MySQL database will employ a rule engine for applying the Contingency Management ruling criteria.