BACKGROUND

If medication for schizophrenia is discontinued, the relapse rate is 80% within 2 years. With continued drug treatment, only 40% of recovered patients will suffer relapses. Nonadherence affects 40% of schizophrenic patients.

GOAL

Create a long term anti-psychotic drug delivery system to aid with non-adherence.

PROPOSED DESIGN

Implantable device that releases a wirelessly controllable dose of Anesapine.

FEATURING

Bluetooth enabled microcontroller allows for tunable dosages.

Medication is administered from a piezoelectrically activated pump.

Reservoir holds enough Anesapine for 77 days of continuous release.

Battery life of over 6 years.

References: