

Mobile Surgical Services

www.mobilesurgical.co.nz

'Share Mobile for Health' was a bold innovation, but after recently celebrating 12,500 operations in rural NZ, has proven a robust method of delivering healthcare to isolated communities. Patients are treated close to home, and rural health professionals are supported through a range of education and training.

Strong community partnerships are the key to the success. Rather than replace existing health services, we act as a catalyst for communities and rural health professionals to develop better rural health system.

Mobile Surgical Operating Theatre

The mobile surgical 'bus', which is 20 metres long and weighs over 39 tonnes, is a self contained day surgery centre. At the heart of the unit is a spacious, modern operating theatre, but it also includes a patient waiting area, surgical scrub room, recovery room, sterilising area and kitchen/staff area.

The bus travels through rural New Zealand on a 5 week cycle, conducting over 1600 elective day surgery procedures each year. Isolated communities have access to elective surgery in their local community, eliminating the need to travel many hours to large metropolitan hospitals.



Rural Health Professional Development

The surgical bus acts as a hub for the skills development of rural health professionals. Each day 4 rural nurses from the host site work on the 'bus' in roles of Scrub Nurse, Circulating Nurse, and Recovery & Discharge Nurses. These nurses first complete a training program, and are then supported on each operating day by the Clinical Nurse Manager, who travels with the bus. Rural GP's and rural St John Officers also frequently visit the bus to receive training from surgeons and anaesthetists.

Rural health professionals are often isolated from professional development and clinical training. To support these key rural health professionals, we have developed a Rural Health Professional Development Program (RHPDP). The program content which is customised for each training site, is delivered by 'virtual lectures' utilising broadcast quality, two way video conferencing system.



Video Conferencing & Telepresence

To facilitate the sharing of knowledge between health professionals, MSS provide interactive video conferencing links between two or more remote sites. The service which can connect primary, secondary or tertiary hospitals and conference venues either nationally or internationally can support remote medical consultation and remote procedural interventions.

The broadcast quality network uses microwave links at 4MB /second which up to 10 times the speed of traditional video conferencing.



Satellite Services

Traditionally MSS utilised microwave links for high quality connectivity. This solution required long and expensive contracts for fixed sites, and significant expense for itinerant links.

MSS in partnership with Bay City commissioned a mobile satellite van, which had the ability to deliver high quality video conferencing anywhere, anytime. Especially in rural or remote locations.



The van is equipped with iNetVu 1200 Satellite dish with iNetVu 7000 controller, and can operate from mains power, generator or onboard battery power. The van is also equipped as a mobile studio enabling MSS to have guest presenters conference to the rest of the network.

Since the unit was deployed 3 months ago the SATVAN has been used to deliver education sessions to 15 new rural locations. A number of conference broadcasts has also been completed including linking the Minister of Communications from the New Zealand Parliament to a broadband conference.