

THE LOGISTICS OF PERITONEAL DIALYSIS STOCK IN THE NORTHERN TERRITORY

Introduction:

Top End Renal Home Therapies Team coordinate the care of Peritoneal Dialysis (PD) patients in the Top End, which consists of an area of 245,000km². The PD patient numbers have grown from 16 to 47 since 2017. The logistics of arranging PD stock to be delivered monthly to remote locations can be quite hair raising. Challenges in the Top End include poor road infrastructure, high temperatures, wet season, flooding and cyclones. So how do we think outside the square to get things done in such a large area of land?



Map adapted by Nadine Tinsley



Kalkarinji Stock Delivery
Photo Nadine Tinsley

Methods:

In our unit we reviewed the time taken for PD stock to be packaged and delivered from provider to patient; together with the amount of stock required by the patient. Quantitative amounts were reviewed to assess the level of stock required according to lead times and emergencies. Qualitative feedback from patients and remote clinic staff was received and reviewed to implement any need to improve services.

Results:

Stock packaging and delivery involved collaboration of Top End Renal Home Therapies Team, Baxter and Northline Transport.

We evaluated:

- transport lead times;
- type of transport;
- transport connection days;
- communication between transport provider and patients; and
- amount of stock for different seasons and emergencies

We showed delivery of stock can be up to 3 weeks in transit depending on the location. Barriers to delivering the PD stock during the research were local contractor availability, transport connection days, king tides delaying landing of the barge, wet season rains and flooding blocking roads.



Maningrida Barge
Photo Bargeexpress.com.au

Case Study:

Our patients receive their stock after it has travelled 3032km by road from Adelaide to Darwin, it then travels out to remote communities by road or barge, to connect up to an awaiting ute or forklift to be delivered to the patient's home.

An example of this is our Dhulunbuy patient who receives her stock after it has travelled a further 480nm by barge from Darwin to Nhulunbuy and then by bush taxi 4WD to her home, 1 hour from Nhulunbuy.



Warruwi Stock Delivery
Photo Nadine Tinsley



Cahill Crossing Kakadu - Spot the Croc
Photo www.quintendol.com

Conclusion:

In response to this data we implemented service changes which resulted in improved service delivery, increased communication between all stakeholders and a significant reduction in stock depletion requiring emergency delivery.

Eposter presenter –

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