

Short Stay Admission Process for Implementing Ventilation

A VRSS Initiative

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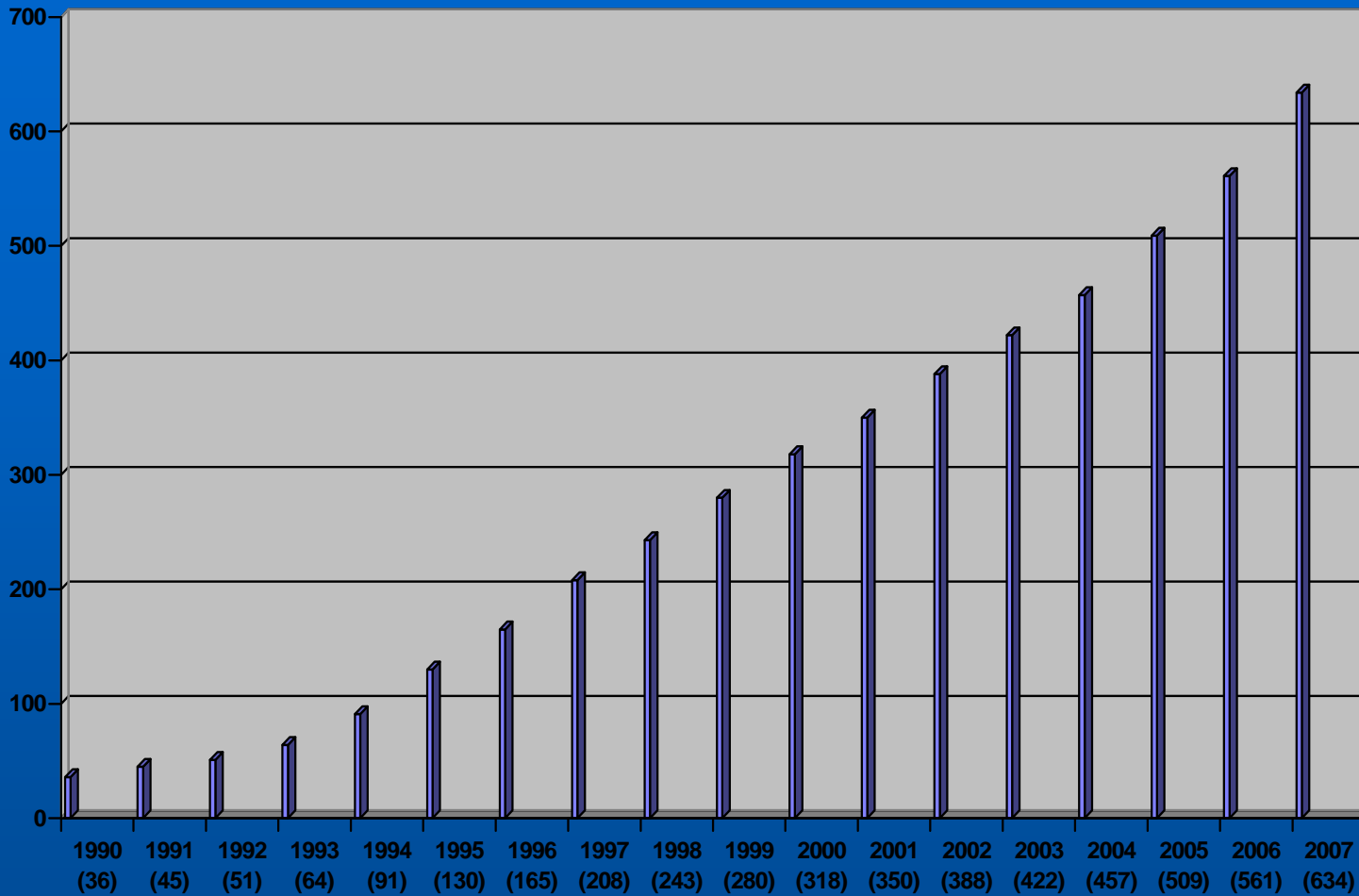


VRSS

- State Service - long term home ventilation
 - Assessment, medical, allied health
 - Implement new patients on ventilation
 - Organise home set-up and supports
 - Equipment provision
 - Support in community
 - Ventilator servicing

Conditions leading to ventilation

- 36% neuromuscular
- 32% obesity hypoventilation
- 18% other (eg bridge to transplant)
- 8% spinal cord injury
- 6% musculoskeletal



Victorian Respiratory Support Service: Net Annual Growth Rate 1st July 1990 to 30th June 2007

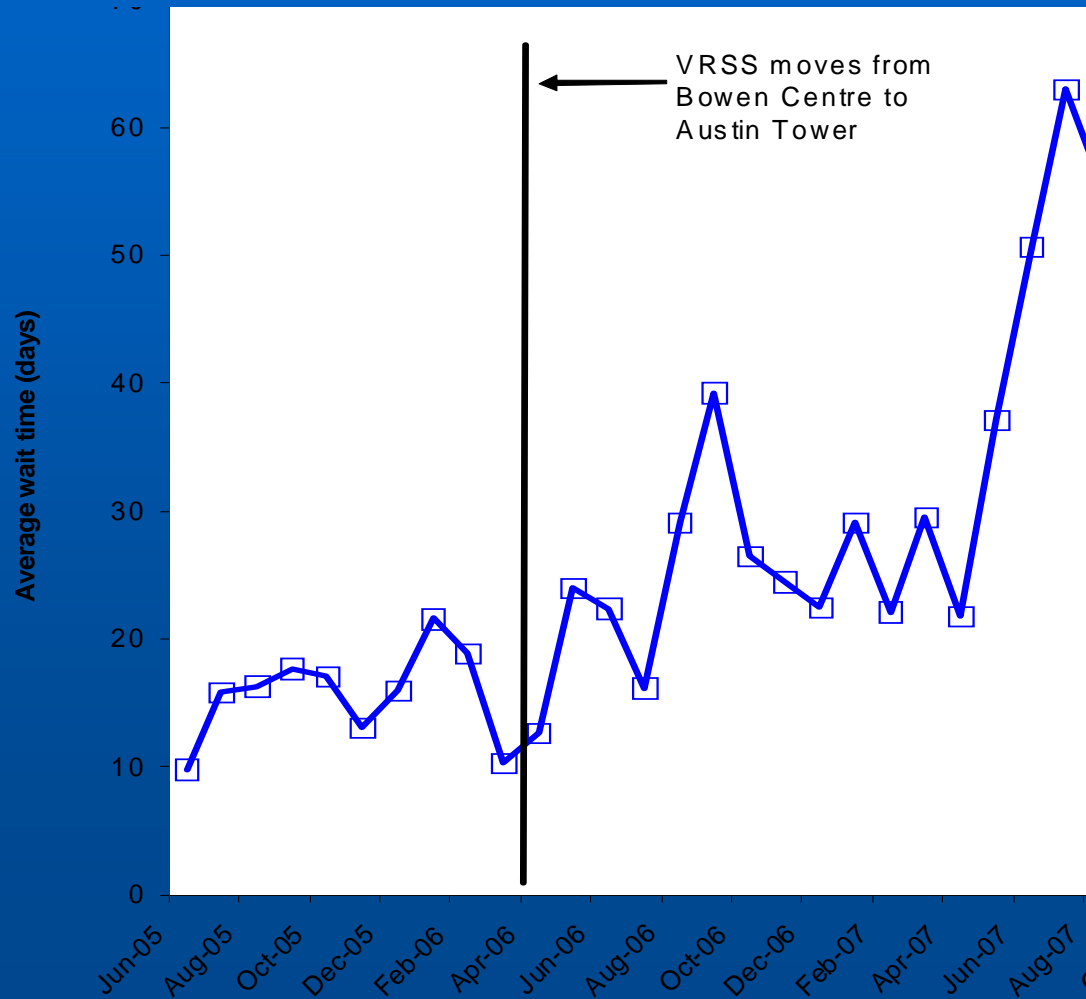
Historical Model for Commencing Ventilation

- 'Elective admission' 3-5 days
- Ventilation commenced
- Allied health assessment
- Sleep study before discharge

Factors Affecting Implementation

- Move to Austin Tower
- Limited access
- Established urgency categories
- Pursued replacement obsolete ventilators
- No sleep study
- Review options to commence ventilation

Admission Waiting Time



Short Stay Admission Process

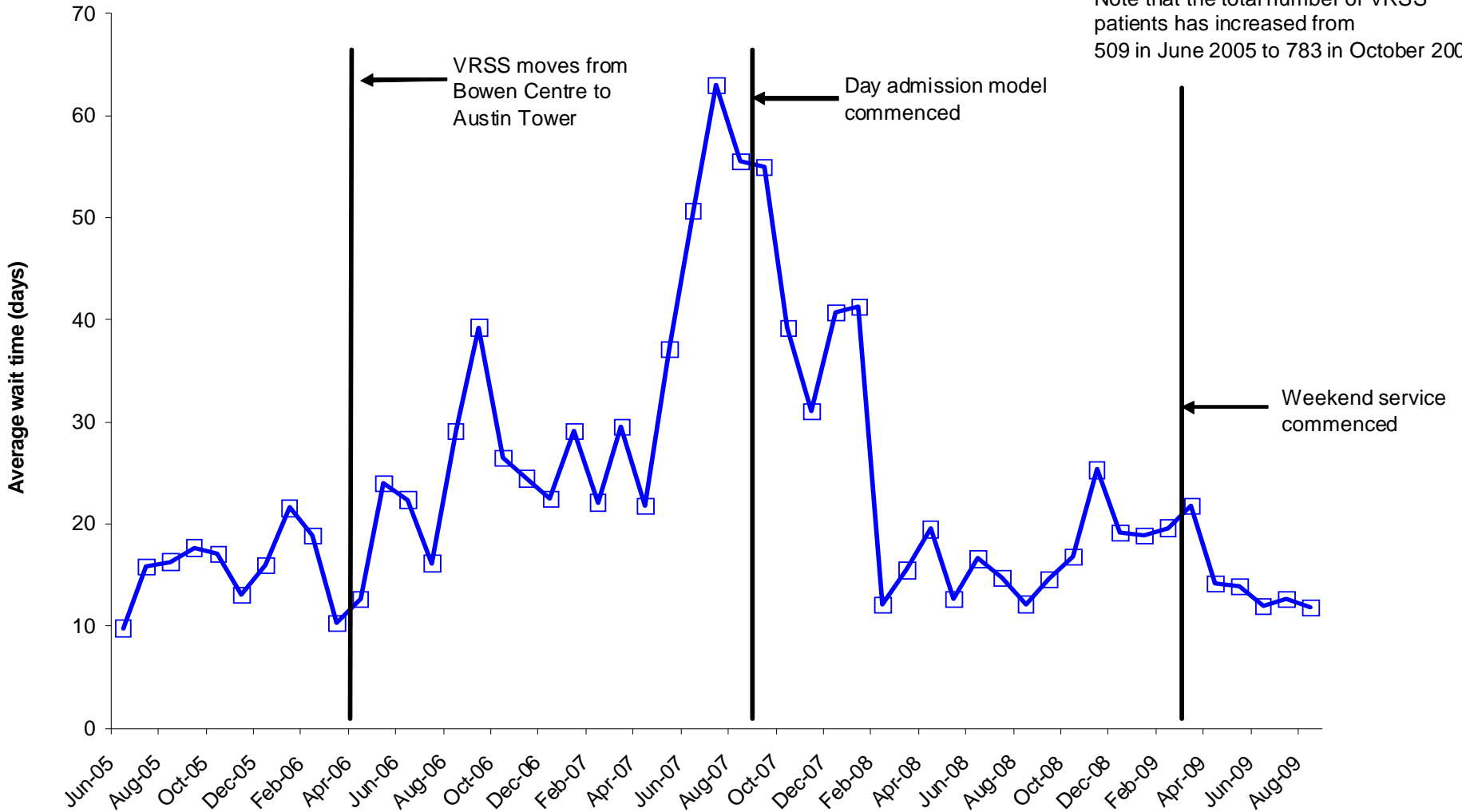
- Evaluate in clinics ascribe urgency category
- Suitability for short admission
- 2 short stay admissions
 1. Day admission for implementation and allied health review. Formal education
 2. Overnight admission and ventilation review
- Outpatient clinic and outreach follow-up

Selection Process

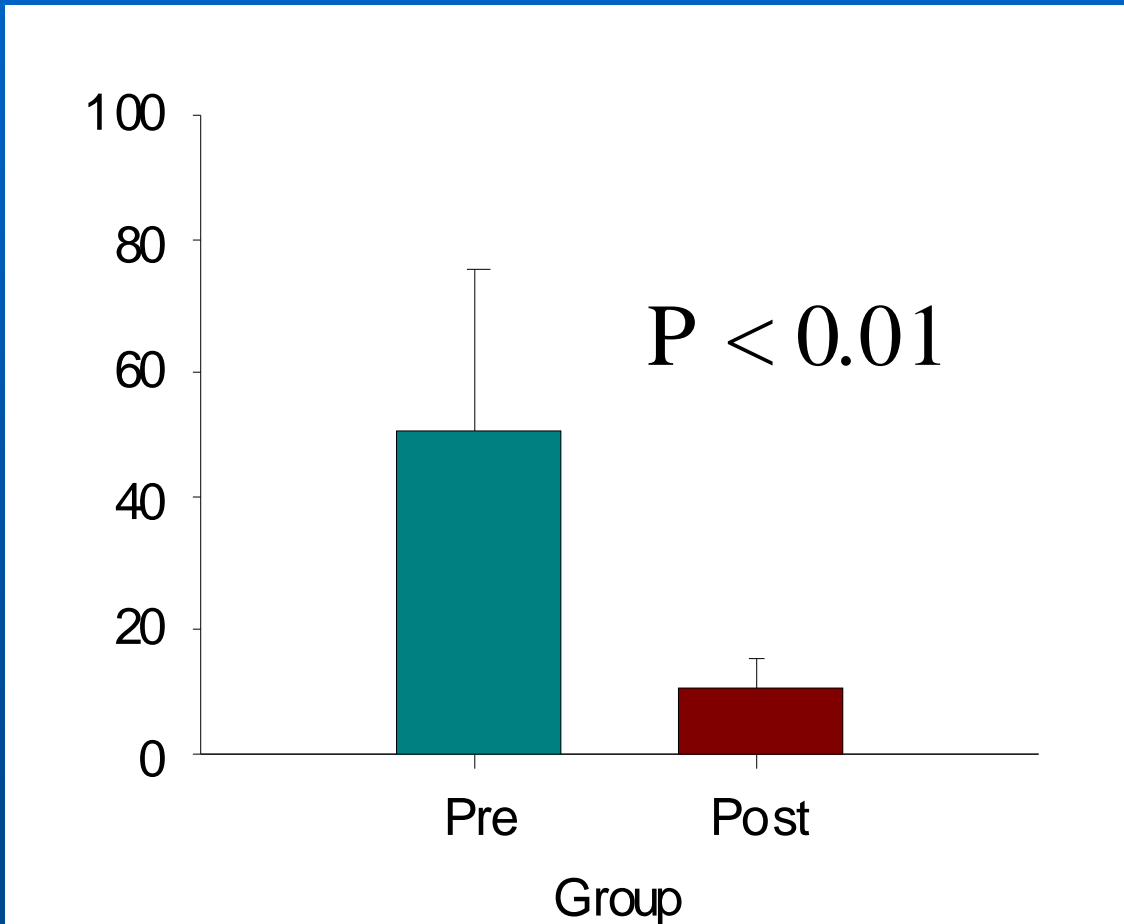
- Other procedures, eg insertion of feeding tube
- Country patient
- Normal cognitive state
- Nursing care requirements/carer availability

Average wait time for admission to the VRSS for implementation of ventilatory support

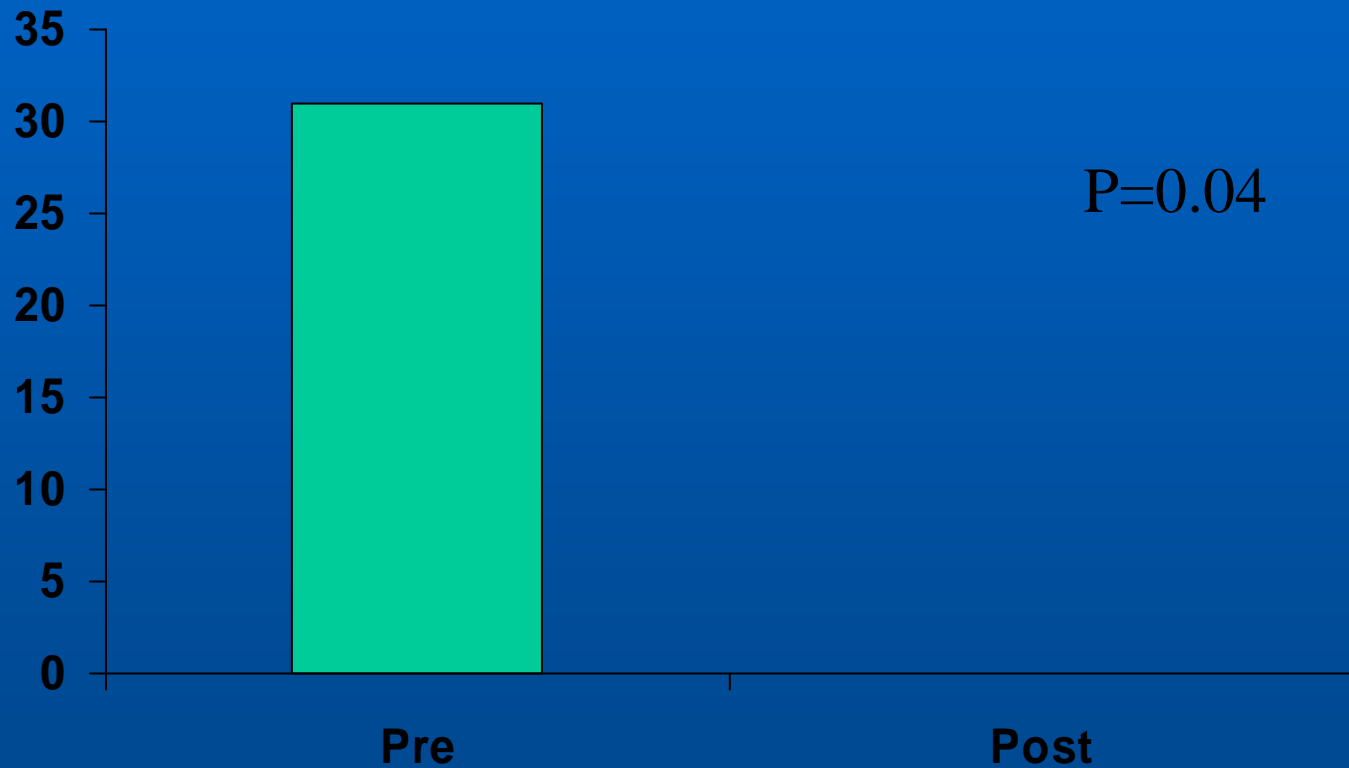
Note that the total number of VRSS patients has increased from 509 in June 2005 to 783 in October 2009



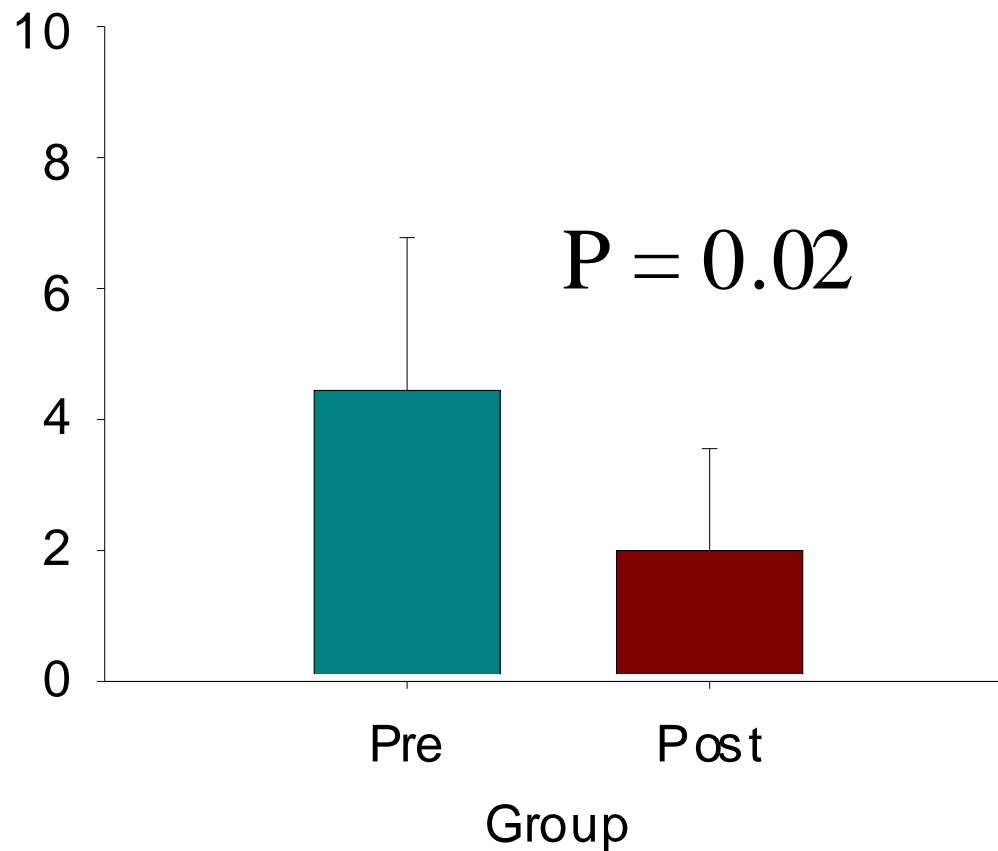
Waiting Time for Admission



Adverse Events on Waiting List (Death or admission)



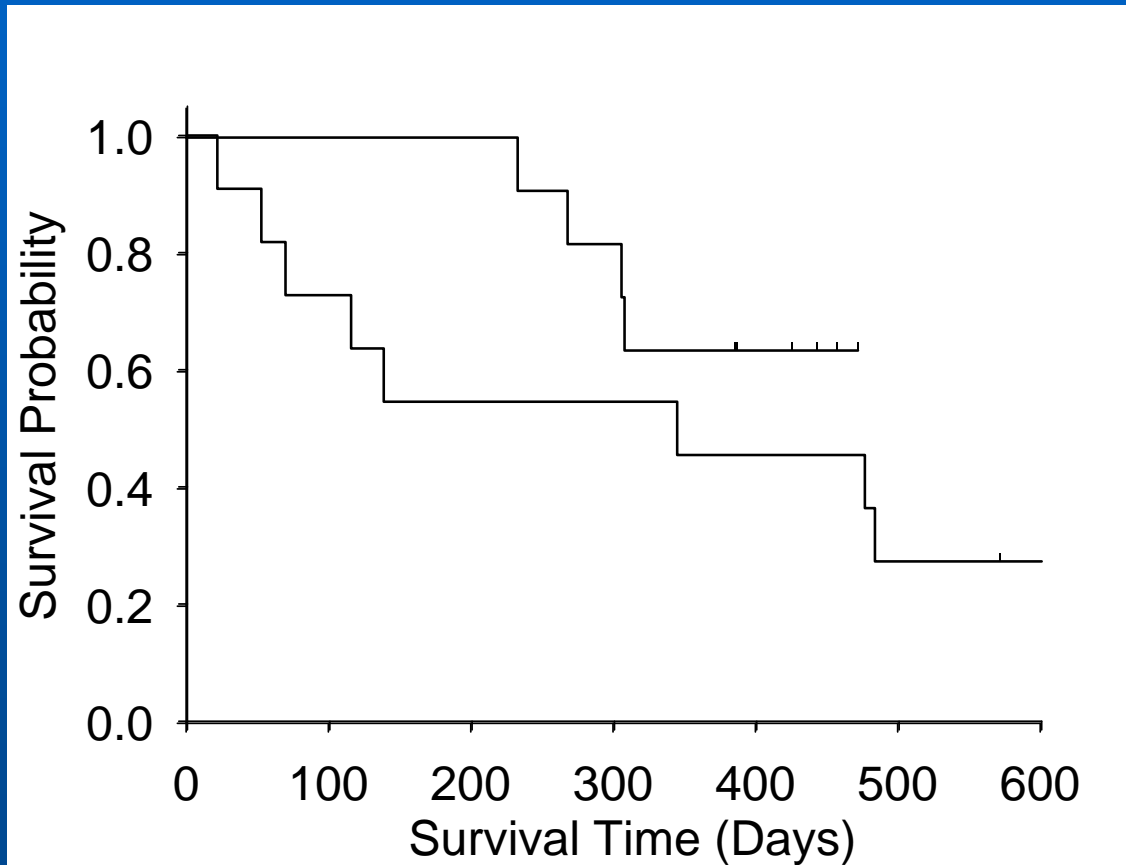
Hospital LOS



Effectiveness of Ventilation

	Pre	Post	P Value
PaCO ₂	48 mmHg	44 mmHg	0.46
Sleep Efficiency	60 (6.5)	48 (6.0)	0.19
Arousal index	10.8 (8.8)	12.8 (17.0)	0.79
Adverse event*	4/13	0/12	0.04

MND Survival from Referral



Clinical Outcomes

- Improved patient acceptance & control
- No detrimental effects
- Scheduling – patient and staff
- Patient education improved
- Increased out patient follow up
 - Allied health, phone calls
- Troubleshooting remote patients

Conclusion

- Short stay admission process (selected patients)
 - ↓LOS, waiting time, ↑patient acceptance
- VRSS admission waiting times
 - Remains long for some
 - Physically disabled requiring carers
 - Geographically isolated
 - Delay of interhospital transfer (from ICU)

Short Stay Admission Process- A VRSS Initiative

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