The development of the Respiratory service in a Regional Spinal Injuries Centre, during a period of major change.

Advanced Practice Development

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North West Regional Spinal Injuries Centre
Southport & Ormskirk NHS Trust

The Centre has 9 out of 28 NHS England Commissioned beds available for managing ventilated patients with Spinal Cord Injury. Classed as a level 2 facility.

Offers life long care, inpatient outpatient and domiciliary visits.

Invasive, non invasive and phrenic pacing.

North West Regional Spinal Injuries Centre
Southport & Ormskirk NHS Trust

The Centre admits people from Merseyside, Greater Manchester, Lancashire and Cumbria, Cheshire, parts of North Wales and the Isle of Man with a total catchment population of over 6.5 million, including the West Midlands for ventilatory support.

In addition the Centre is an internationally recognised Centre of excellence for the treatment of people who will require permanent mechanical ventilation following spinal cord injury.

Aim of the Project

The aim of the project is to evaluate and review the development of the new respiratory service with the Centre

Project Objectives

The project objectives are

Establish the state of the service and develop a Service Specification based upon local and national guidance

Establish a baseline of service activity prior to service redesign

Benchmark service with similar Units in the UK and Ireland

Establish what competencies are needed to deliver the service

Carry out a training need analysis of the 2 new staff based upon competencies needed to undertake their new roles

Carry out individualised self assessment of competencies needed to undertake the new roles

Facilitate the delivery of appropriate competency based training at beginning of and during project.

Repeat the training needs analysis at the end of the project

To evaluate the impact of the Service redesign on patient activity for inpatients, outpatients and domiciliary visits

Compare the competencies of the staff at the end of the project with the competencies needed to deliver the service specifications

Project Drivers

The reason for the development of the project is to ensure that the respiratory service at the centre is able to continue to run safely and effectively. The project leader was tasked with this remit.

Change Model 3: John Kotter's Change Model

CHANGE FACILITATION

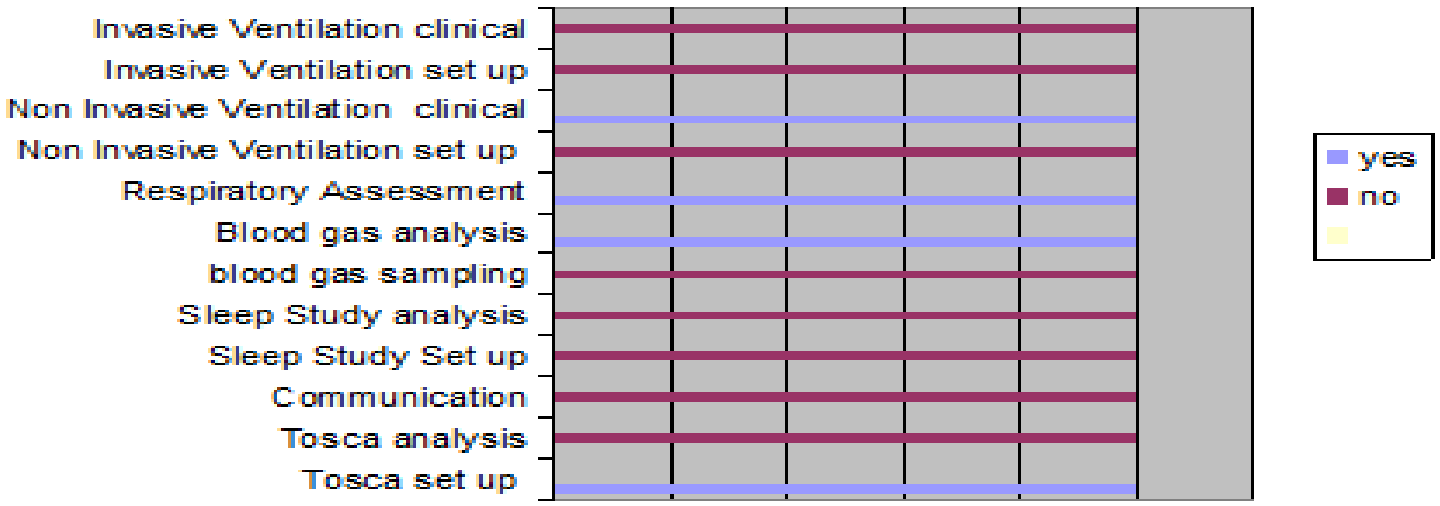
1. Establish a sense of urgency
2. Create a coalition
3. Develop a clear vision
4. Share the vision
5. Empower people to clear obstacles
6. Anchor the change
7. Consolidate and keep moving
8. Secure short-term wins


Admission Algorithm Ventilated Level3 Patients R.S.I.C.
Respiratory Patient Identified By Spinal Respiratory Team
INCLUSION CRITERA
Patient with SCI requiring ventilatory support (Invasive/NIV)
Tracheotomised but weaned for less than 7 days
Clinically Stable : CVS– e.g. no inotropic support
No evidence of acute or on-going sepsis
Spinal Fractures Stabilised or Halo—traction
Not in Multi Organ Failure (not requiring Hemofiltration/Haemodiafiltration)
Infection Prevention Status Obtained: MRSA,C-Diff, ESBL & VRE
Discussed at admissions meeting Named Spinal Consultant Identified
Named Spinal Consultant Informs ITU
Referring Hospital Informed of Acceptance
Follow admission protocol as per repatriation
Advised to contact ITU Daily
Inform RSIC with estimated admission date time
Admit to ITU Mon-Thur Before 15:00
Inform RSIC asap
Outreach from Spinal Medical/Respiratory Team on day of admission
Daily Outreach from RSIC
Planned transfer to RSIC when patient stable

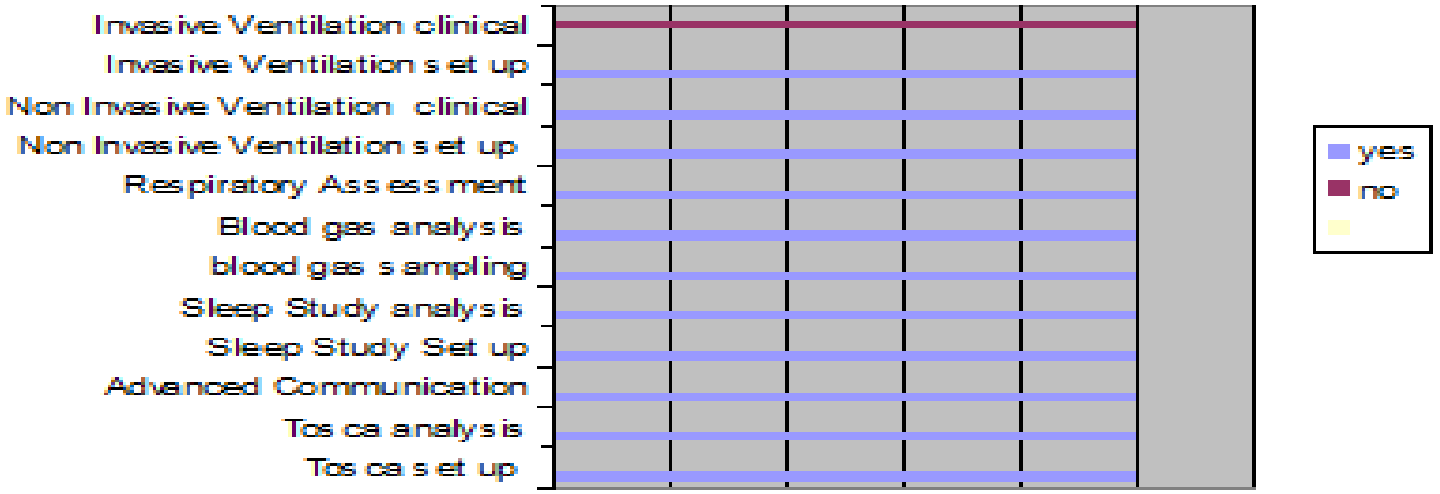
Table 1. Competencies derived from Service specifications

Number	Competency Description.
1.	Titration of invasive ventilatory parameters clinically
2.	Setting up of invasive ventilation
3.	Titration of non-invasive ventilatory parameters clinically
4.	Setting up non-invasive ventilation
5.	Respiratory assessment skills (Masters Level including diagnostics, assessment and examination)
6.	Blood gas analysis
7.	Blood gas sampling
8.	Sleep study analysis
9.	Sleep study set up
10.	Advanced communication course (in house)
11.	TOSCA (Transcutaneous carbon dioxide) monitoring analysis
12.	TOSCA (Transcutaneous carbon dioxide) monitoring set up

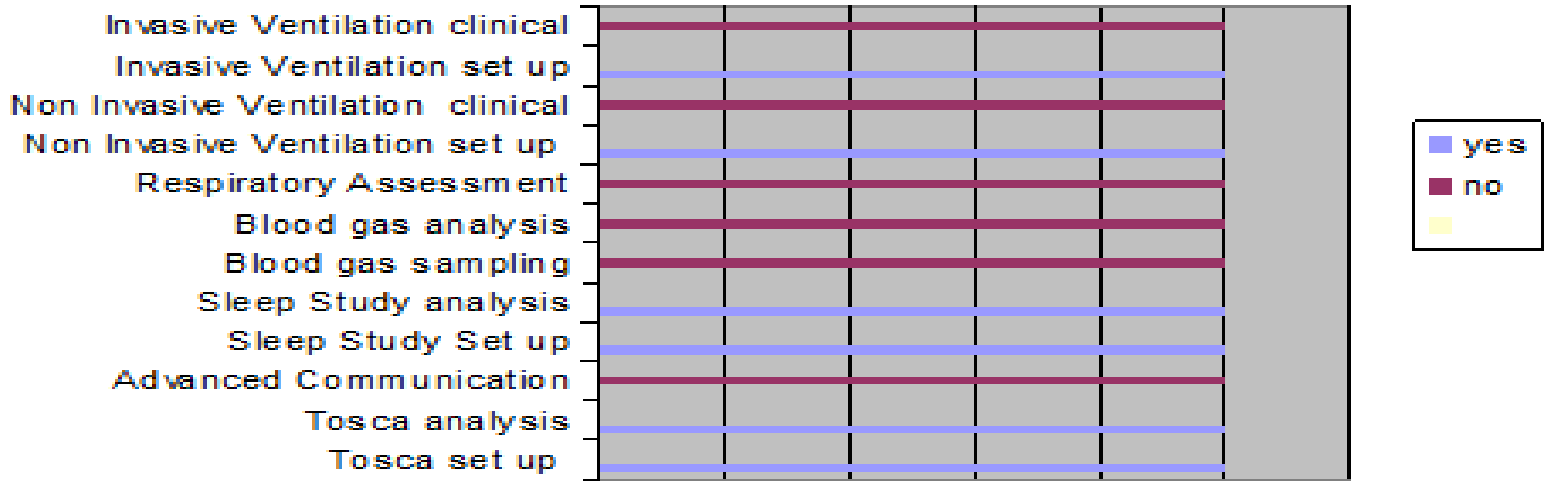
Practitioner A intial competencies



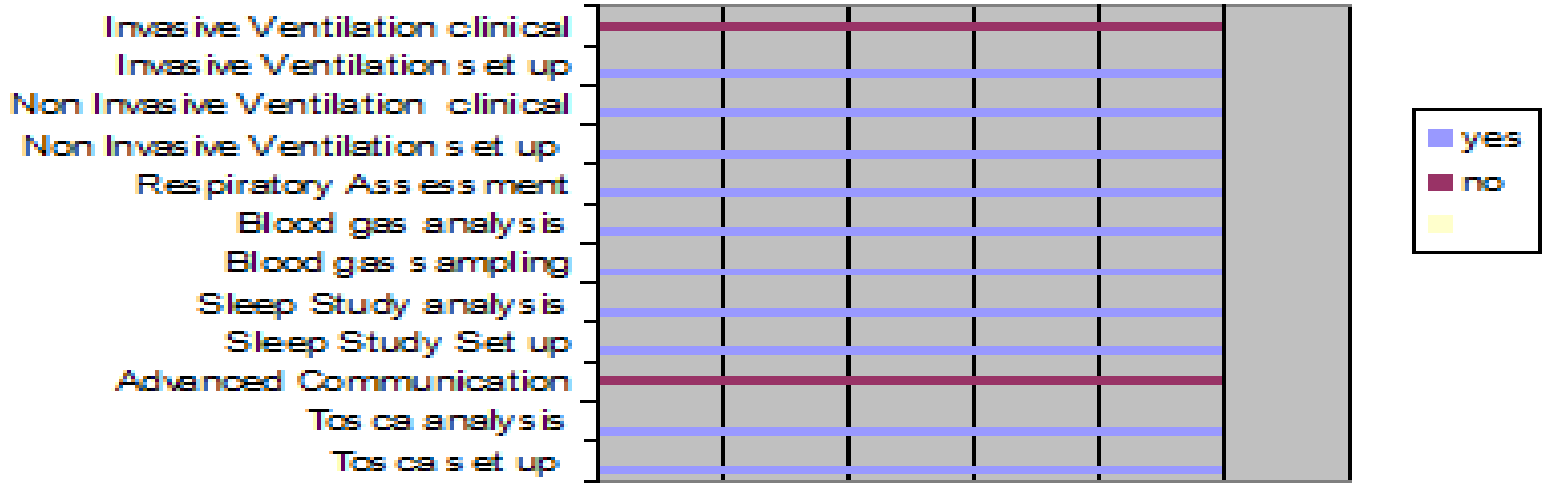
Practitioner A final competencies



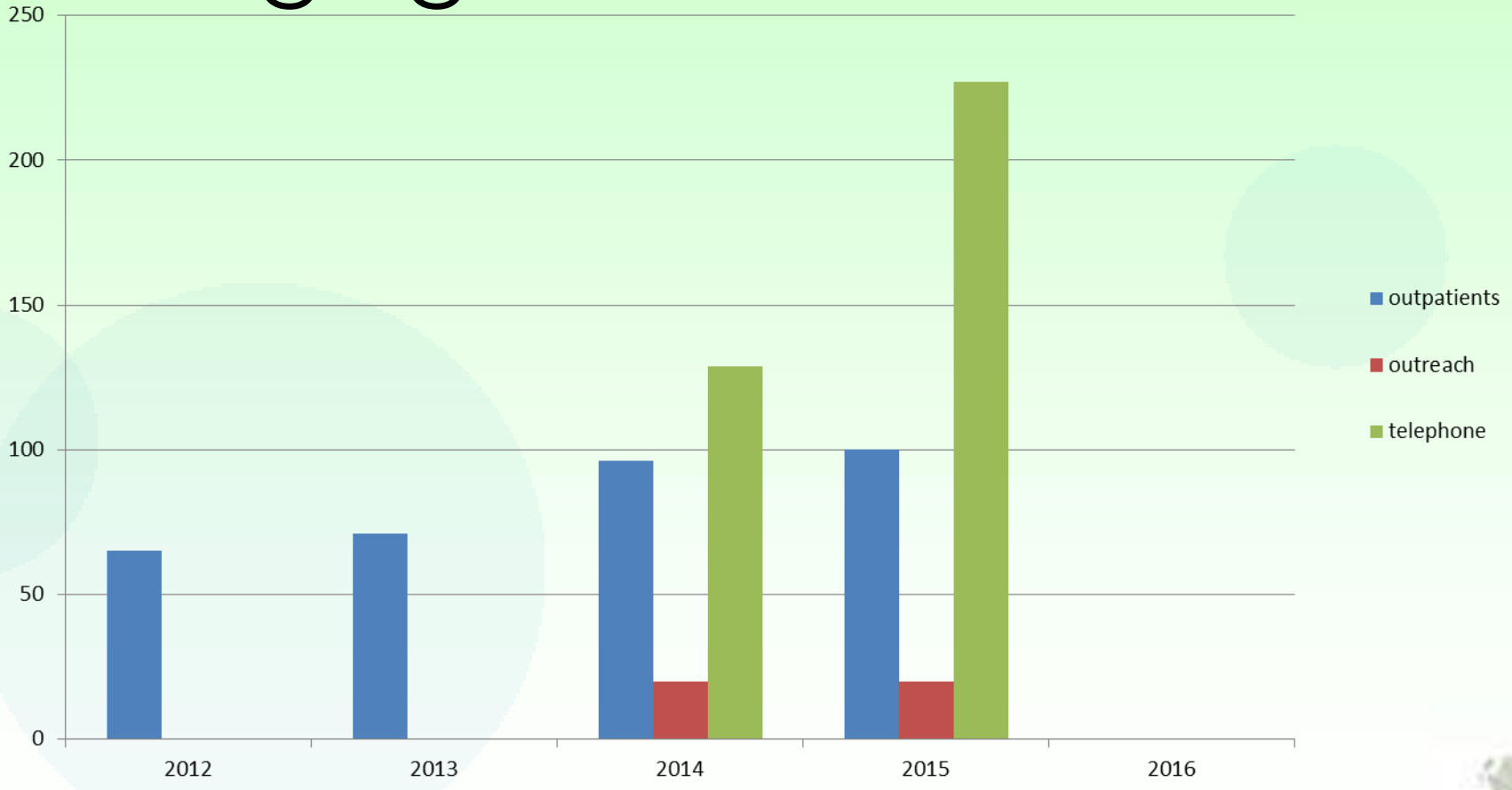
Practitioner B Intial competencies



Practitioner B final competencies



Working differently in a changing world



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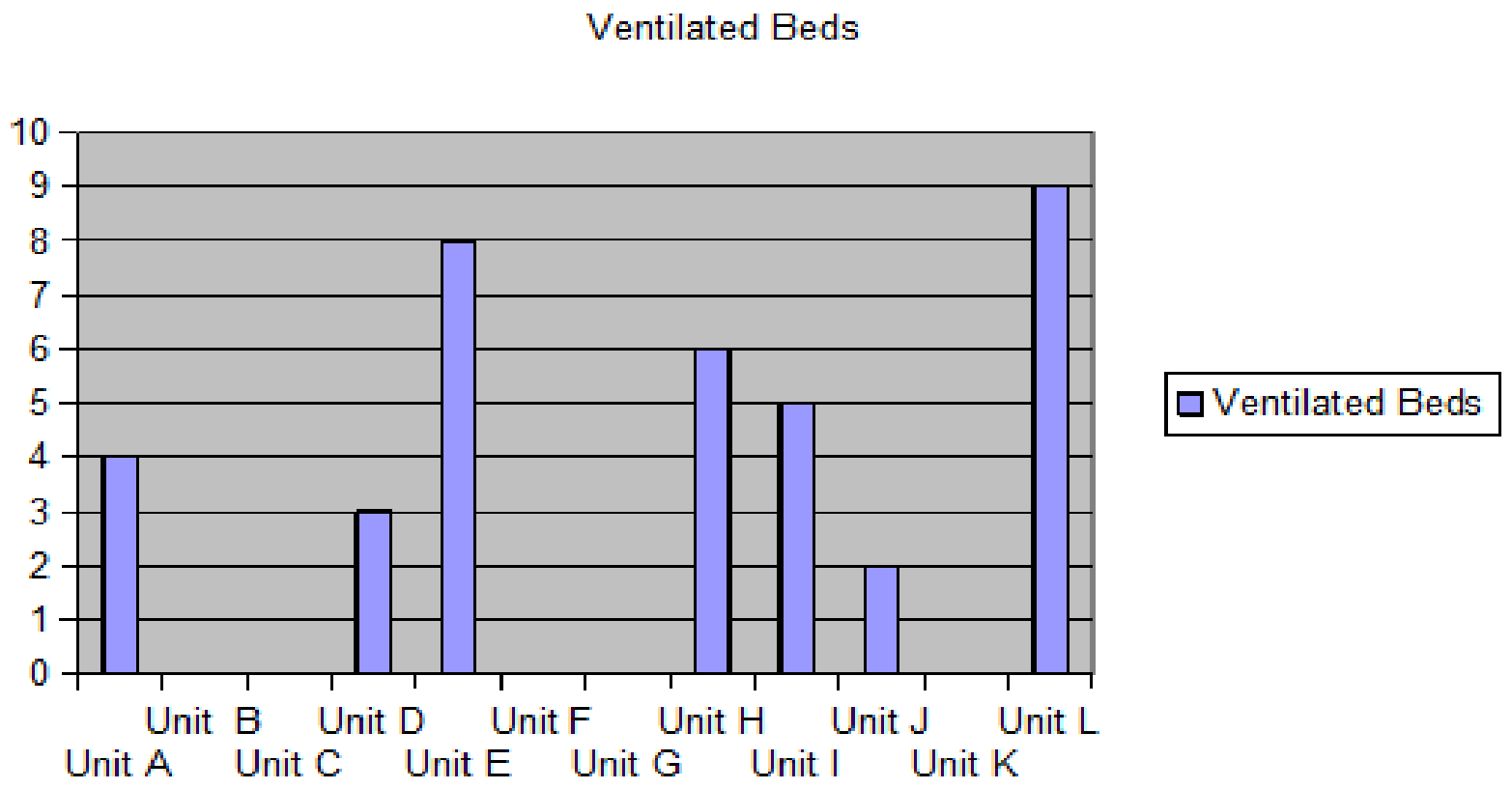
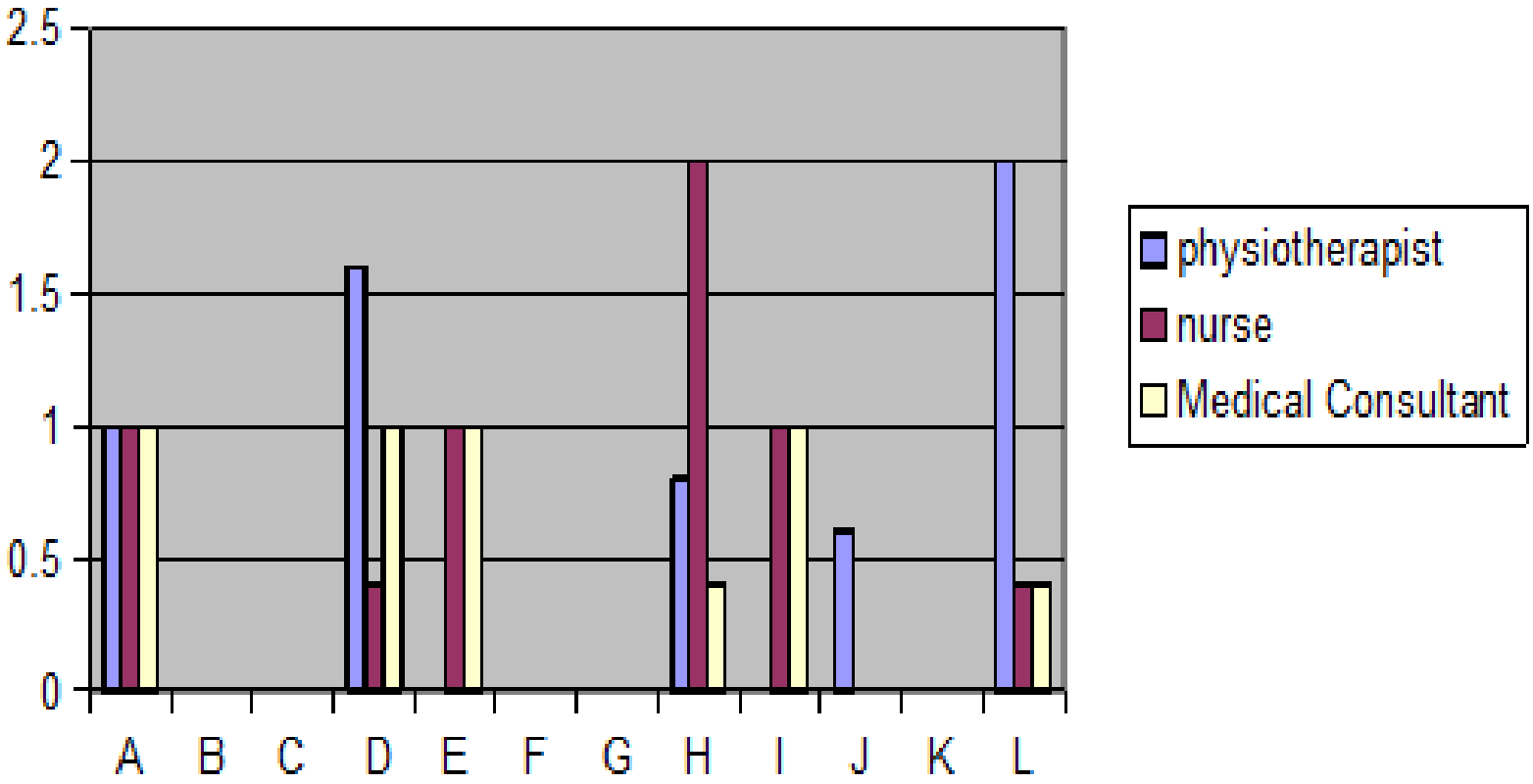

Ventilated Beds
10
9
8
7
6
5
4
3
2
1
0
Unit A
Unit B
Unit C
Unit D
Unit E
Unit F
Unit G
Unit H
Unit I
Unit J
Unit K
Unit L
Ventilated Beds

Dedicated Respiratory Staffing by Centre



Recommendations (Kotters 7th stage Consolidate gains and produce even more change and Kotter's 8th stage Institutionalise new approaches in the organisational culture).

- Review of current staffing within respiratory team to enable out of hours cover at evenings and weekends.
- Review of current staffing within respiratory team to include an enhanced multi-disciplinary team including Dietetic and Speech and Language Therapists as per service specifications
- Further extension of roles and duties and responsibilities for the non-medical staff within the respiratory team, including the project lead and the practitioners.

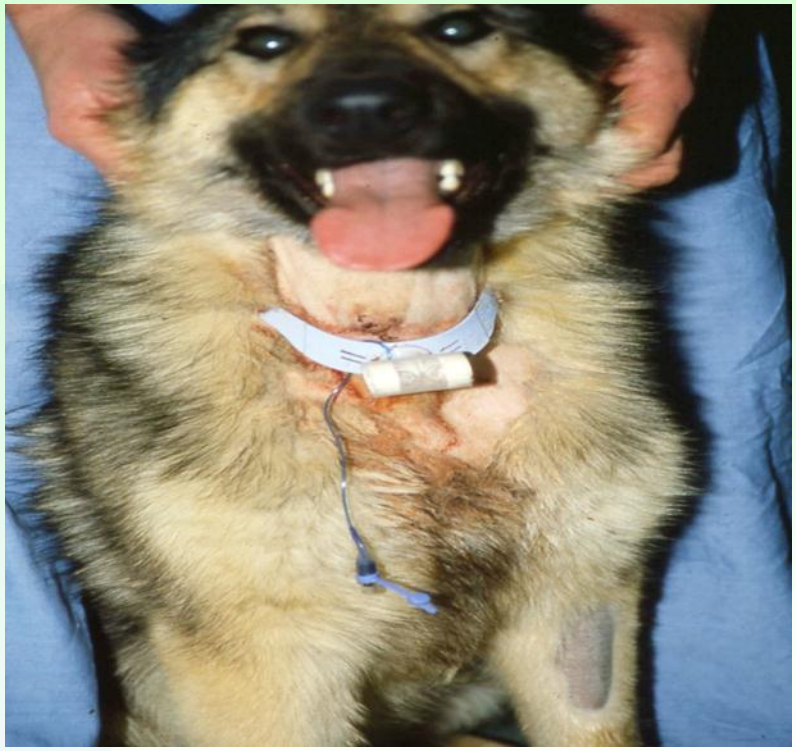
- Nursing Staff to rotate between RSIC and DGH ITU to improve working relationships and to enhance clinical skills.

- Develop a formal competency based training programme for nursing staff to continue appropriate weaning and respiratory strategies outside of normal working hours.

- Ongoing development of respiratory outreach services, domiciliary and hospital based visits.

- Continue to develop care pathways and SOPs.

Any Questions?



Summary

- The challenge is to keep the eye on the ball and continue to develop and push practice forward in times of flux and limited resources.
- Is this a model other Centres could use?