

Establishing High Dependency Beds in ENT and Maxillofacial Surgery; the benefits so far....

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- **Introduce Me and where I come from.**
- **Contact me via RCN or direct via the Web site.**
- **Presentation should be downloadable by the end of next week.**
- **Talk about our experience in establishing and running two high dependency beds within the speciality.**
- **As much about change and philosophy of care as about high dependency.**
- **Ask questions as we go.**
- **Definition;**

“An area for patients who require more intensive observation and or nursing care than would be expected in a general ward. It would not normally include patients requiring mechanical ventilation or invasive monitoring”

(Edbrooke etal 1997)

The Service

- Centralised in October 1997.
- Serves a population of over 550,000.
- Treat over 4,000 patients per year.
- Some of the highest rates of Cancer and Heart Disease in Europe.

•Number of factors and service pressure led to the development of HDU beds.

•Prior to 1997 we in Monklands hospital were a small unit 24 beds and were fairly well staffed given the the throughput and bed occupancy.

•While major surgery was done the average were low around one case every other week.

•This all changed when the unit was centralised. The numbers of patients going through the department increased three fold.

•Centralisation of the service was a also staff driven change which many of the team were involved.

•Health wise in Lanarkshire we are well known for all the wrong reasons, topping the charts for heart disease, cancer and stroke.

The Unit

- 28 ENT Beds.
- 6 Maxillofacial Surgery Beds.
- 6 Paediatric Beds (In Paediatric ward).
- 2 Treatment Rooms.
- One Counselling Room (Due November, 2000).
- Two High Dependency Beds Since October, 1999.
- Specialty Based Pre-assessment Clinics.

Following centralisation of the service the above was how the ward looked. We now also have two HDU beds within the existing complement.

The development of high dependency beds was very much in line with the ward philosophy which encourages;

Multi-disciplinary working (documents)

Staff Driven Change

Patient Centered care

(Preassess, Counseling rm, Ownership)

Traditionally due to space and resources we were excluded from the main HDU unit. In many ways this was self defeating as we then became reliant on ICU or the nursing staff had to get on with it in the general ward.

Change Drivers

Staff Driven change due to a number of factors;

- Increase in activity and poor general health of the population.
- Increase in Major Head and Neck Surgery.
- High Demand for ITU Beds.
- General increase in acutely ill patients requiring high level of Nursing Care.

•Important to realise this was a staff driven change. It was the nurses who highlighted the problems and developed solutions to them.

•It became apparent that the patients being admitted were increasingly of poor health even many who were coming in for minor surgery exhibited multiple pathology.

•The level and volume of major head and neck surgery increased due to the wider catchment area, general number of cancer cases picked up and the appointment of a second head and neck surgeon.

•The level of acutely ill patients was also increasing, patients who required close monitoring such as Epistaxis, and Stridor.

•Knock on effect was on ICU where we required greater demand and usage of their facilities or often elective major surgery would be cancelled. This was upsetting and disruptive to the patient but not uncommon in other hospitals (Ryan et al 1996)

The Process

- Concerns Raised by Staff.
- Seek Support of Consultants, PAMS, Nurse Managers.
- Business Case.
- TIP and Healthboard.
- Highlight Potential Gains.

As mentioned the change process was started by the nursing staff who identified an increasing caseload that were not suitable for admission to a general ward. They felt they were unable to provide the care required and did not have the proper equipment to do this. Again this is not uncommon Dhond 1998 found evidence of a large unmet demand in general wards.

Other problems were highlighted which included poor implementation of pain scoring and uncertainty in successful pain control, increasing infection rates in major surgery patients and general bottle necks in the service.

The process began therefore by looking at these issues but focused on ways to increase the nursing time available to these patients and providing the equipment required for proper monitoring.

However, no one would give us money just for asking, believe me I tried. We had to show the gains we could make within the service.

Reviewing the literature there was a number of areas which we could impact on within our own hospital and unit via HDU, specifically ICU usage, quality of care, clinical effectiveness and safety.

Equipment and Location

- Beds from the existing complement.
- Nursing Staff 1:2 ratio.
- Medical Staffing, getting Anaesthetics on board
- Monitors, Beds, Pumps.
- Make the most of existing resources.

Everything is about compromise

One lesson I learned early on was that we were never going to get everything we asked for and some compromises were made. The beds came from redesignating two existing beds, money for alterations was limited.

The real place we made was in staffing achieving the 1:2 ratio that is generally deemed appropriate for HDU. Funding for 4 WTE E Grades was achieved and around 0.5 wte was picked up from the ward to cover sickness / AL.

This was important to us as the main plank of the proposal was the increase in nursing care available for the patients.

Following this we also managed to secure proper level of monitoring equipment which included two HP virida monitors capable of both invasive and non invasive monitoring. In addition there were IVAC pumps, electric beds, fix drip stands and equipment trolleys bought which were secured within the room. There were a number of people within the organisation who were less than happy about this as some had seen this as a back door to gaining resources. They really should have known me better than that.

Organisation and Development



Illustrates the need for realistic approach both in setting up the unit and in expectations of staff. Can't just jump in at the deep end.

Training

- Gradual Rise in Dependency, "Step Down".
- Initial Group From Experienced Ward Staff.
- Existing Critical Care Units Involved
- Six Week Programme.
- 12 Month Degree Level Programme on Offer Soon.

Cartoon Realistic goals.

We were not immediately going to be caring for patients which vastly differing conditions that we had been.

The training of staff was therefore done with the notion of a step down or intermediate care facility looking after patients who would have been looked after in the ward anyway all be it at a latter stage of their recovery.

The staff therefore undertook a six week high dependency course developed in-house which was put together by existing units including surgical HDU, Medical CCU, ITU and A&E.

In addition this was backed up by theoretical component from a range of sources.

Skills such as, venopuncture, canulation and IV therapy competencies were provided for though who required it. Most staff have already achieved this within the unit.

The philosophy was based on the notion that as confidence and competence increased so to does the level of dependence of the patient.

Shortly a 12 month degree program in critical care will be brought on line and staff will have the opportunity to attend if they wish.

Organisation and Development

- Led by Ward Nursing Group.
- Duty Schedules.
- Protocols and Guidelines.
- Skills Update.
- Nursing Indicators and Clinical Effectiveness.

I reinforce this but the changes was staff driven and the running of the beds were also handed over to the staff. The initial staff group during training were provided time to work on the documentation, policy and admission criteria.

The development of the beds also meant for all E grades, additional night duty which was not that popular. They were given the opportunity to schedule a rota for use this counts very much as work in progress (its rubbish)!!!!.

They also have the responsibility to identify areas that require skills updating or which they lack in competence to deal with. These issues have been few and have been dealt with in house.

Go to next slide

One of my main points I keep driving home is the need to develop nursing indicators to measure and demonstrate effectiveness. The beds are not cheap to run and we must show that they are making a difference. Up till now this has related to areas such as pain control, patient satisfaction and bed usage. Work is in progress measuring dependency levels etc.

Organisation and Development



Clinical effectiveness identifying and measuring outcomes very important.

Admission

Length of stay usually from 4 to 24 hours.

- Following Major Head and Neck Surgery.
- Require intensive monitoring.
- Stridor.
- Osteotomy
- Complex facial fractures

Admission criteria has been an area of contention as to how it should be formalized. To date we have not had that many problems main due to the fact that it is a specialty based and run service and agreement can normally be reached among the users. The main problem that has occurred is the staff can on occasion be reluctant to let the patients leave these beds .

This is sometimes due to bed problems within the main ward and due to the problem of boarding patients which is infuriating.

The beds are used solely for the specialty and tend to be used in the main for the above. And anyone who needs more than normal monitoring

The Benefits So Far....

(For Patients)

- Buffer between ITU and Ward, "Step Down".
- Increasing patient satisfaction.
- Proper Level Monitoring and observations.
- Necessary equipment / resources available.
- High Quality of Care Offered.

The beds are at an early stage at present and we are just beginning to get thing working as they should. Our initial audits show encouraging results but these at present tend to focus more on activity and quality issues.

Staff are now able to provide quality nursing time for patient who are not fit enough for the general ward.

We now have the facilities to offer proper monitoring of patients but just as important we now have the skills to interpret this information and act on it. (prior requests for monitoring all well and good if you know what to look for and could find a monitor).

We have yet to make the anticipated reduction in ICU bed usage but that is currently being addressed.

Since the beds have opened there have been no cancelled operations due to a lack of ICU beds.

Patients seem generally satisfied with the service and genuinely grateful for the extra care.

The Benefits So Far....



We have managed to offer patient centered care and truly individualized care often these are like buzz words or soundbites but I and the team feel we can genuinely say this happens.

The Benefits So Far....

(For Staff)

- Professional Development.
- Staff Led Change.
- Increased Job Satisfaction.
- Less stress / pressure on ward staff.
- Increase in Skills Level.

The benefits are not only there for the patient but also the staff. The staff within the ward have had the opportunity to develop there existing skills within the specialty. This is important because in Scotland we have zipo in terms of post registration ENT or Maxillofacial courses.

They have the time to do what they were trained to do without the demands of the rest of the ward on their time.

By removing the highly dependant patients from the ward population we have helped free up some of the bottle necks that occurred within the ward and the rest of the staff can get on with looking after the other patients in the ward.

By ensuring the high level of participation in the change process I feel we have given the staff the power to direct the development of the beds.

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The Future

- Keeping Staff.
- Appropriate Admissions.
- Guidelines and Protocols.
- Policy.
- Nursing Outcomes and Activity.

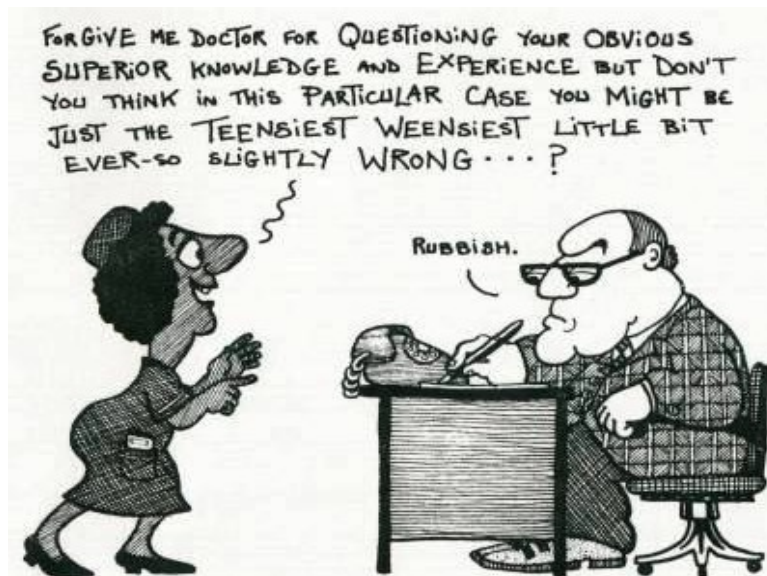
The same old problems are faced with a high level of staff it is often a battle to keep them where they are supposed to be. This has become increasingly problematic as other areas such as medical experience the traditional lack of beds.

Admissions / discharge protocols we don't always get it right and these are continually being reviewed.

Guidelines / policy are also the remit of the staff group and as issues arise they are discussed and added to the policy list most recently we have been talking over the advantages disadvantages of invasive monitoring and have started using the central line to electronically measure cvp readings.

Indicators for care and outcome measurement. Boring for many but I can't emphasize enough of vital importance to show how we are doing, the areas we need to improve and that we are effective in what we do.

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The development process has been encouraging because for me it has shown how well the culture within the ward has shifted and while occasionally we get some of this it is very rare.

Thank you

References

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