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Review

Emergency Medicine in the RVH and the challenges it faces from a clinician's perspective

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BACKGROUND TO EMERGENCY MEDICINE IN BELFAST

The National Health Service (NHS) is an organisation providing services and treatments in Primary, Secondary, Tertiary care across a spectrum of specialties. Disruptive technologies, treatments and new ways of delivery require the doctor and manager to work in an ever changing environment. Belfast like many cities across the UK needed big changes in delivering Emergency Medical Services. Prior to November 2012 there were three Emergency Departments (ED's) within a one mile radius; The Royal Victoria Hospital (RVH), Belfast City Hospital (BCH) and Mater Infirmorum Hospital (MIH), each providing a 24/7 Emergency Service. This was not sustainable. A decision for rationalisation of the Emergency Departments was long overdue. Staffing, training and resourcing of the three units were problematic. The BCH ED closure was deemed the most politically and legally viable decision – (Trust status of the Mater Hospital would require new legislation and therefore it was decided in the short term to close the BCH ED). The MIH ED continued as an emergency department and faced the same challenges with staffing and service provision. Acute surgical and laboratory services have been since withdrawn.

When closure of the BCH ED department came in November 2012 the transition into the RVH ED resulted in a decline in the standard of care, patient safety and staff morale.

Some of the biggest challenges faced in the transformation were

1. Insufficient space to meet increased patient flow at RVH ED
2. Lack of timely diagnostics
3. Inadequate staffing in ED and Acute medicine.
4. Lack of robust Escalation plans to ensure patient flow
5. Poor understanding of strategies and risks between clinicians and managers

The RVH is a teaching Queen's University Belfast (QUB) Hospital, and Regional Trauma centre currently treating 88,000 new patients a year. (BCH: 42,000 and pre November 2011, the RVH: 48,000). Sixty nine per cent of the attendees are ambulatory and 31% are brought in by ambulance of whom 55% are admitted. (Figure1). Predictable capacity on high demand days, Mondays being the busiest, followed by Sundays, Saturdays and Fridays, would mean having 40 available beds to facilitate acute admissions. This means all inpatient ward rounds, diagnostics and discharge letters are undertaken in a timely fashion and staff are deployed optimally in preparation to process the new admissions.

Emergency Department, RVH,
BHSCT

Year 2013

	Numbers	%
Total attendances	82,007	100
Ambulance arrivals	25,083	31%
Admissions/Ambulance arrivals	13,868	55%

Fig 1: RVH ED statistics

It was not uncommon to have ED nurses and doctors constantly deal with a saturated infrastructure from trolley waits grinding the ED almost to a halt. (Figure 2 shows the RVH ED 12 hour breaches). However the resuscitation room always had to function, creating huge stress and strain on an already over overburdened system and staff. Patient care was compromised and delays lead to bad outcomes for some.

In a recent assessment of all medical inpatients lead by the Manager For Improvement with a team of consultants, found that up to 50 inpatients were waiting for either diagnostics or a health care package for discharge. None of these patients required an acute medical bed.

The challenges faced from the transformation are not solely related to structural changes but also share a commonality in the changing pattern of Emergency Medicine driven from demographic and technological changes and patient expectation.

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This transformation was followed in 2014 with the partial closure of peripheral ED departments in Lagan Valley Hospital and the Down Hospital. These closures were announced with little warning or planning, putting extra pressure on the RVH. No additional staff or diagnostics were made available and further burden was added to the challenges outlined above. This led to greater demand on staff and some consultant colleagues expressed concern regarding burn-out of trainees and consultant colleagues. One consultant had taken early retirement, two were on sabbatical leave and one went on long term sick leave. In addition maternity and paternity leave had to be facilitated.

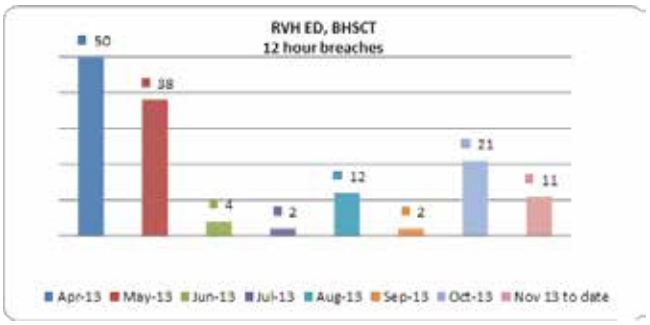

Fig 2. RVH ED 12 hour Breaches

In a recent British Medical Association survey, 80% of 1,000 respondents rated the pressure that they are under at work as 'high' or 'very high'. The 3 top stresses were – meeting patient's demands; lack of time and excessive bureaucracy.[1]

Surveys in the UK and the USA reveal the extent of the burn out issue. In 2012, a poll of 7,288 US doctors, 45.8% reported at least one symptom including extreme emotional exhaustion "and indeed depersonalisation". Those in the front line of care access such as Emergency Medicine were found to be at greatest risk.[2]

In 2009 in a report into Health and Wellbeing in the NHS, Dr Steve Boorman notes that the culture in which 'highly motivated staff do not always recognise the impact of their own health needs and where early access to care is erroneously considered to risk disadvantaging patients'.[3] The latest NHS sickness statistics for England showed that NHS hospital doctors took on average of just 2.8 sick days in 2012/2013 against the national average of 4.5 days according to the Office of National Statistics figures. Just 1.25% of hospital doctors were ill on an average day in 2012/2013; the lowest rate of any staff group.[4]

Dr Emma Sedgwick, Director of Professional Development at Coaching Specialist Health Care Performance estimates that burn out is a factor in 15-20% of doctors who seek her help with problems at work. "The intense emotional engagement doctors have with their work is an important factor in susceptibility to burn out. They are acutely conscious of the need to meet expectations of patient, colleagues, employers and the GMC and worry about letting others down". [5]

Studies have shown that burn out is particularly associated with the caring professions. The author of a 1998 US report reflected "medicine attracts idealists who want to help others but as professional demands increasingly impose on their available time and energy more is crowded into the limited working day". [6]

The head of the BMA Support Service - Doctors for Doctors, Dr Mike Peters believes that it's a growing problem in the UK too. "One big factor is the fragmentation in the way care is delivered. Doctors are working different shifts so there is not the same camaraderie. At the same time, less invasive techniques and shorter hospital stays mean the turnover of beds in hospital departments is higher and there is a limited opportunity to establish a rewarding relationship with patients".[7]

WHAT THE COLLEGE OF EMERGENCY MEDICINE WANT

An emergency department treats patients with complex conditions across a wide spectrum of pathologies, injuries and illness. Unlike the non-urgent sector it does not have the option to opt out. It must function 24/7 all year round and to be efficient and effective must have a mix of staff to deliver quality care. Poor care is costly, inefficient, erodes morale and makes recruitment difficult if not impossible. Why should the ED be the portal for all emergency and urgent care or can the differentiation take place in the community or DGH?

The College of Emergency Medicine (CEM) in July 2013 look at - Funding Emergency Departments: why the current system is failing our patients and what needs to be done about it. 'Care delivered in the urgent and emergency setting is increasingly important and complex. Existing systems fail to adequately fund current care and are not driving improvements in care. Fundamental change is needed so that resources are allocated to produce the most cost-effective outcomes. Recognise and drive the important role of senior medical decision making early in the patient's journey.'

CEM recommendations on staffing for the region are a minimum of 10 consultants per ED in Northern Ireland (NI). Of the 10 EDs in NI, the RVH is the only ED with more than 10 consultants. The CEM recommendation for the RVH as a Regional Trauma centre is 16 consultants. The acuity and intensity requires optimum deployment of consultants on a daily basis 7 days a week. Current allocation is shown in figure 3.

In addition the College launched 'CEM10' in the Autumn of 2013, (Figure 4) and argues the case for co-location of urgent care centres and hopes to achieve the support of the RCGP in campaigning to achieve this.[9] The NHS Confederation and the Secretary of State has recognised terms and conditions as inequitable for those who work in Emergency Medicine[10] They recognise the need as does the BMA for a contract for both trainees and consultants that better recognise the consequences of high frequency and high intensity out of hours work. The College has highlighted the absurd sums

Date	Consultants	Middle Grades	Junior Doctors
Monday 14/4/14	3 – (8am-1pm) 3 – (1pm-6pm) 1 – (6pm-12mn) 1 on call 12mn-8am	2 – (8am-5pm) 2 – (10am-6pm) 2- (12pm-9pm) 2 – (3pm-12pm) 1 – (10pm-8am)	2 – (8am-4.30pm) 1 – (11am- 9pm) 1 – (1pm-10pm) 2 – (4pm-12mn) 2 – (10pm-8.15am)

Date	Consultants	Middle Grades	Junior Doctors
Wed 23/4/14	2 - (8am-1pm) 3 - (1pm-6pm) 1 - (6pm-12mn) 1 on call 12mn-8am	2 - (8am-5pm) 2 - (10am-6pm) 1- (12pm-9pm) 2 - (3pm-12pm) 1 - (10pm-8am)	2 - (8am-4.30pm) 1 - (11am-7pm) 1 - (1pm-10pm) 2 - (4pm-12mn) 2 - (10pm-8.15am)
Thurs 24/4/14	3 - (8am-1pm) 2 - (1pm-6pm) 1 - (6pm-12mn) 1 on call 12mn-8am	2 - (8am-5pm) 2 - (10am-6pm) 2- (12pm-9pm) 2 - (3pm-12pm) 1 - (10pm-8am)	2 - (8am-4.30pm) 1 - (11am-7pm) 1 - (1pm-10pm) 2 - (4pm-12mn) 2 - (10pm-8.15am)
Fri 25/4/14	3 - (8am-1pm) 2 - (1pm-6pm) 1 - (6pm-12mn) 1 on call 12mn-8am	2 - (8am-5pm) 2 - (10am-6pm) 2- (12pm-9pm) 2 - (3pm-12pm) 1 - (10pm-8am)	2 - (8am-4.30pm) 1 - (11am-7pm) 1 - (1pm-10pm) 2 - (4pm-12mn) 2 - (10pm-8.15am)
Sat 26/4/14	2 - (8am-1pm) 1 - (1pm-6pm) 0 - (6pm-12mn) 1 on call 12mn-8am	1 - (8am-5pm) 2 - (10am-6pm) 2- (12pm-9pm) 1 - (3pm-12pm) 1 - (10pm-8am)	1 - (8am-4.30pm) 1 - (10am-6pm) 1 - (12md-9pm) 2 - (4pm-12mn) 2 - (10pm-8.15am)
Sun 27/4/14	2 - (8am-1pm) 1 - (1pm-6pm) 0 - (6pm-12mn) 1 on call 12mn-8am	1 - (8am-5pm) 2 - (10am-6pm) 1- (12pm-9pm) 1 - (3pm-12pm) 1 – (10pm-8am)	1 - (8am-4.30pm) 1 - (10am-6pm) 1 - (12md-9pm) 2 - (4pm-12mn) 2 - (10pm-8.15am)
Mon 28/4/14	3 - (8am-1pm) 3 - (1pm-6pm) 1 - (6pm-12mn) 1 on call 12mn-8am	2 - (8am-5pm) 3 - (10am-6pm) 2- (12pm-9pm) 2 - (3pm-12pm) 1 - (10pm-8am)	2 - (8am-4.30pm) 1 - (11am-7pm) 1 - (1pm-10pm) 2 - (4pm-12mn) 2 - (10pm-8.15am)
Tues 29/4/14	3 - (8am-1pm) 2 - (1pm-6pm) 1 - (6pm-12mn) 1 on call 12mn-8am	1 - (8am-5pm) 2 - (10am-6pm) 2- (12pm-9pm) 2 - (3pm-12pm) 1 - (10pm-8am)	2 - (8am-4.30pm) 1 - (11am-7pm) 1 - (1pm-10pm) 2 - (4pm-12mn) 2 - (10pm-8.15am)

Fig 3: RVH ED Clinician's allocation

spent on locums to prop up fragile rotas, which demonstrates that it is not arguing for a greater overall spend: indeed the reverse is true. If terms and conditions were equitable, recruitment and retention problems would be overcome; sustainability would return; patient experience and outcomes would improve and overall financial savings would be significant. Properly resourced Emergency Medicine saves lives and saves money. The Keogh review and Monitor acknowledge that consultant-delivered emergency medicine care is the best method of doing this.[11 12] The College in its negotiations with the relevant bodies, is building on CEM 10 and providing a manifesto and a road map to building a resilient Emergency Medicine system that is safe, effective, efficient and sustainable.

Transforming Your Care, the government paper emphasising the need for more treatments within the community and moving £83m of the health care budget to the community, played little part in reducing the attendances at ED.[13] The drive for integration must be greater than that of competition. If we are to deliver meaningful results and keep people safely out of hospital our conversion rate has to remain under 20%. This requires salient, timely diagnostics coupled with integrated pathways that deliver 7 days a week.

Fig 4

WHERE WE ARE AT

Failure to manage in any organisation leads to dire outcomes and strong leadership is a key factor in achieving results. Denial and failure to listen to staff and patient coupled with paralysis by analysis produces dysfunctional systems. Ownership is a key factor in business performance but yet the Emergency Medicine in Belfast Trust does not have its own Clinical Director (CD). Interim CDs from other specialties have held the post from November 2012 and whilst ticking certain boxes it did not provide the leadership required to deliver breakthrough performance.

Strategies to deliver safe care to circumvent obstacles and navigate a course to make the micro processes work at each encounter in the patient's journey through the system were never developed. Escalation plans were discussed but never worked. Trigger charts were developed and used to alert management of impending gridlock in the department. The in-house system had no strategy to respond to these triggers and ED was left to carry the risk. There is no point in proclaiming initiatives and schemes if they don't deliver meaningful changes. Studies show that overcrowding in ED increases mortality and morbidity.[14 15] Our 4 hour Performance is shown in Figure 5.

These events led to the RVH ED making headline news following Major Incident Call on January 8th this year. The issues surrounding the declaration of a major incident are affecting all ED's in Northern Ireland and nationally and they are not separate from the challenges affecting the Health Service throughout primary and secondary care. When a service is working at full capacity, when there is no give, no slack or redundancy in the system, then that system is forever balanced on the edge of an inability to copy, an inability to deliver and falter it will. To process patients in the ED and through the granularity of processes in the patients' journey, one needs to be able to have a place to which they can be discharged, whether that is an available bed within the hospital setting or the availability of a community-based package of care. Add to that, the issue of staff mix which should be consultant-led with well communicated strategies to build greater capacity and resilience across unscheduled care. There is a lack of ED consultants across Northern Ireland and indeed throughout the UK. This is an issue that has to be recognised. We need to be able to recruit and retain our ED consultants. Working terms and conditions must include a work life balance to firstly attract and secondly retain consultants. This means that in the long term, we need more effective workforce planning. There is increasing demand on the Health Service due to demographic changes, ageing population, new technologies and increased patient expectation. All this is occurring against a backdrop of increased financial constraint. Seven day working week must now be an integral part of health care delivery. Proper workforce planning with annualised working rota will bring about a resilient, sustainable and safe service and recruitment and retention will be become a thing of the past. Work life balance in a high stress working environment must remain the imperative of all health care institutions.

TEACHING AND TRAINING

Whilst Service delivery has its own importance, teaching medical students and training of junior doctors has to remain part of the primary function of all University hospitals including the RVH. We are here to empower and facilitate our students and doctors, to optimise their futures as Health Care Professionals. Emergency medicine provides a challenging environment in which the medical student and doctor in training can develop clinical acumen and skills that form the basis for further learning and growth in knowledge and skills.

We are deeply cognisant of a responsibility to care for, encourage, challenge and motivate our medical students and junior doctors to realise their full potential. Our caring imperative underlines our determination to do more for our

students and doctors than just impart knowledge. We must ensure that not only are our student and doctors strategically positioned at the frontiers of leading edge knowledge and skills but also they must have the competencies to contextualise that knowledge in terms of patient care. As consultants, the most rewarding part of our job is observing and supporting growth in knowledge, skills and attitude of the young doctor who go on to develop into mature practising doctors. We encourage feedback from our doctors and students such that we can inform and shape our approach to innovate and change. This requires adequate infrastructure, staffing and technology. Our future success is contingent on our ability to grow RVH's national presence and reputation as a centre of excellence in healthcare professional education and training.

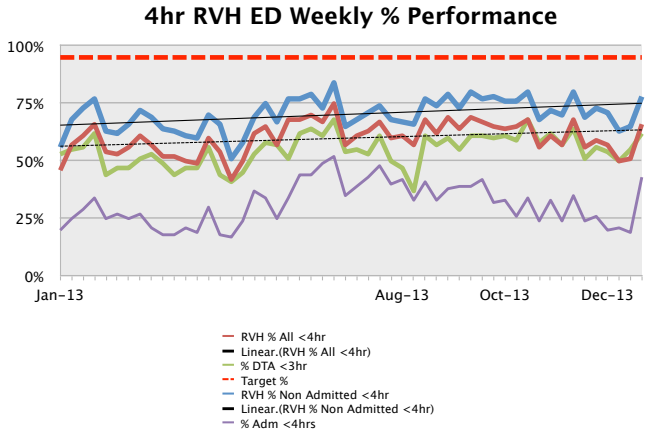

Fig 5. RVH ED Weekly Performance for Year 2013

SOLUTIONS

The solutions are as complex as the problems. In a recent interview, Tom Coffey, co-chair of the London Urgent and Emergency Clinical Network says 'that the clear responsibility for patients should rest with GPs and yes GP's could perhaps take back the responsibility for patient care OOH (out of hours) but not return to the old contract'.[16] However, he adds that the delivery of OOH care should be a shared responsibility with a combination of 111, co-location urgent care centres, Nursing homes/care homes having more proactive links and support from GP's, geriatricians and advocates to avoid 999 calls and ED attendances.

In the event of patients ending up in ED there should be better social care packages accessible 7 days a week and OOH. Better financial incentives for EM with readjustment of the tariffs to reflect the level of activity in EM. Consultant led ED service with senior medical decision making early in the patients' journey to avoid admissions and optimise patient flow.

THE FUTURE - NEXT STEPS FOR BELFAST TRUST;

Our speciality is evolving and the CEM is leading on the requirements and evidence that supports effective, efficient and safe patient care, which will promote the recruitment and retention of staff with the flexibility to meet future developments in healthcare, technology and patient volumes. We need to build on CEM work and what it means for the RVH. There is and has been a willingness to change but it has to be properly planned, managed and resourced. Opportunities must be created to bring together all stakeholders clinicians and managers to design, own and deliver pathways that make meaningful change. Such processes need to be continually challenged and reviewed.

Some of the challenges facing the RVH discussed above are being resolved a new RVH ED facility will open early next year this will resolve in most part the spacing challenge. Timely diagnostics is increasing within the RVH and this challenge will be largely resolved pending financial commitment to equipment and staffing. More consultant recruitment is in progress and the one year sabbaticals are coming to an end. This will alleviate some of the staffing challenges. However more debate is required on the annualised working rotas and the spectrum of conditions that ED will deliver. This debate is of the utmost importance to ensure that the specialty is attractive for recruitment and retention and there is a stream of capable and expert clinicians.

Robust escalation plans must be developed which reflect the risks and pressures of all stakeholders the Trust needs to hold workshops with all stakeholders to ensure that there is a shared understanding of the risks so that patient safety is ensured and a consistent quality of emergency care is delivered.

If we are to have a seamless system of health care delivery there cannot be finger pointing, group blame or counterproductive time wasting arguments.

Finally Belfast Trust must communicate a clear vision for a single Emergency Department that is ED consultant led, adequately staffed and optimally supported with timely diagnostics and patient flow 24/7.

The author has no conflict of interest

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