Health and Social Care Board

Tuesday 25th January, 2011

IMAS Report: an overview

In summer 2009, the Health and Social Care Board approached IMAS (Interim Management and Support) and asked them to share the improvement approach they use in English NHS organisations to see if this could be of interest to HSC organisations in NI. Following this approach, in December 2009 IMAS made a presentation to senior representatives of the NI HSC Trusts and the HSCB. It was agreed that IMAS support would be of value to HSC organisations.

The IMAS visit to the Royal Belfast Hospital for Sick Children was undertaken in February 2010, with a view to impart best practice suggestions for its urgent and emergency care programme for children, and to identify opportunities for improvement and modernisation. A letter detailing their observations from their one day visit was sent to the Belfast Trust in March 2010 and has been published with this overview on the Board's website. Joint work by the Board and the Trust has continued since then to address the issues identified by the visit. An agreed investment plan to further enhance the A&E service through the recruitment of additional senior medical and nursing staff is now well underway.

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5 March 2010

Director of Performance and Service Delivery
Royal Belfast Hospital for Sick Children

By email

NHS IMAS Intensive Support Team Visit

Thank you for inviting ___ and I to visit you and your colleagues at The Royal.

We are very grateful to everyone for their time and enthusiastic engagement during our visit. It was good to be able to meet so many front line clinicians both during our walk-through and at the meeting.

The aim of our visit was to review your Trust's urgent and emergency care programme for children, comparing it to known good practice, and to make recommendations for improvements and modernisation. We are aware, of course, of the differences in context and structures between the models in England and Northern Ireland. Having said that, at an operational level, the similarities are extremely striking, and it is our firm belief that most of the good practice that we are aware of is entirely applicable to the NHS in Northern Ireland.

Before giving you feed back and recommendations from our visit, we would like to outline some of the principles that we think are important to bear in mind when thinking about the modernisation of urgent and emergency care.

a. The majority of urgent care (>95%) is managed in primary and community care. Small changes in the proportion of care managed outside of hospitals can have disproportionate impacts upon secondary care. For example, if just 0.5% of all urgent cases shift from primary to secondary care, there will be a 10%

increase in acute care activity. Conversely, if primary care can reduce hospital referrals even by a small amount, this will lead to a significant fall in demand for hospital services. This 'gearing' impact of relatively small shifts in urgent care delivery is therefore very important and must be recognised.

b. The effective delivery of urgent and emergency care relies on the contribution of all parts of the system, not just the emergency department (ED). There needs to be an appropriate balance between 'front end' process improvements and to improvements in processes 'downstream' from these units. Without this balance, the anticipated gains from the changes to ED processes will not be fully realised.

c. We have found that whole systems urgent and emergency care improvement programmes need effective governance structures to ensure delivery. Without such structures, it is difficult to engage all stake holders or to hold them to account for the delivery of agreed objectives.

d. Initiatives around urgent and emergency care should be firmly focused on helping patients to 'get better faster and safer'. While the four hour standard is a means to this end, not the end in itself, we know that failure to achieve the standard means that many patients have an uncomfortable and sometimes unsafe wait for treatment.

Summary Findings

During our visit, we were impressed by the huge commitment and enthusiasm of clinical and managerial staff in all departments. In particular, it was apparent that there was a widespread commitment to team working, multi-disciplinary care delivery and a very real patient focus. Daily inpatient reviews and consultant delivered care were as expected in a paediatric hospital and clearly help facilitate timely discharge.

As well as these good practices, we also found considerable scope for further improvement. Indeed, there were examples of practices that we believe will frustrate the Trust's ability consistently to deliver safe, effective and timely care to its patients. Before summarising these, we would like to comment on the environment of care.

The children's hospital clearly requires redevelopment. The emergency department is cramped, with insufficient space to deliver modern care processes. The reception is uninviting and inappropriate in a children's hospital. The wards also lack space and most are far below the standards that should reasonably be expected in the 21st Century. Storage space is poor. We saw an incubator in a sluice. Having said this, in our experience, excellent care can be provided even from aging buildings with sub-optimal departmental collocations. With imaginative investment and active collaboration between managers and clinicians, difficult infrastructure rarely proves to be an

insurmountable obstacle to setting up good and safe processes of care. We therefore do not believe that our recommendations that follow should be 'put on hold' until after the hospital is redeveloped. Rather, the condition of the hospital offers challenges to which everyone needs to rise.

The most important areas that we feel you should concentrate on are:

1. The development of a specific and inclusive governance structure to propel delivery of an integrated programme of urgent and emergency care modernisation.
2. A radical rethink of the way in which the hospital's emergency department is organised and staffed.
3. Aligning the hospital to support the emergency department rather than leaving it to function in isolation.
4. A reconsideration of the way in which beds are configured.
5. Ensuring that the four hour standard is seen as a priority and understood as an indicator of whole system health, not just ED efficiency.

We will now go into these and some of the other issues we discussed during our meeting, in more detail. Our comments and recommendations should not be taken as an exhaustive agenda, but pointers to issues that we feel should be regarded as priorities for early improvement work.

1. Governance and Commissioning

We recommend that the Trust and its commissioners form a children's urgent and emergency care network. The aim of such a network would be to agree an overall strategy for integrated, whole pathway delivery of urgent and emergency care for children, and drive implementation of a defined set of objectives.

We would suggest that the network is led by the Trust's chief executive, with senior representation from acute and community services, as well as other stakeholders. There needs to be active involvement and engagement of commissioners and primary care clinical leaders. All stakeholders should agree to be accountable to the board for delivery of agreed objectives. You may find the Emergency Care Network Guidance published by DH of some use when planning your board.

An important objective will be for the Trust and its commissioners to agree a clear strategy and direction of travel for urgent and emergency care that is understood and owned by all stakeholders. This appears lacking at present and as a result, modernisation is dependant on the enthusiasm of individuals.

We recommend that your network develops a jointly agreed, high level description of what high quality, effective, end-to-end urgent care for children should look like. This should be written down! The description should

consciously be from a patient experience perspective. This should include a clear metrics strategy, with a small number of high level measures, underpinned by a number of project/service level measures that are aligned to deliver the strategic intent.

With the creation of a board and strategy, the commissioners will be in a much better position to play an active role in working with the Trust, both to define the overall strategic direction for urgent and emergency care for children, and to commission to achieve it. For example, should the agreed strategy be to reduce ED attendances, it may be necessary to commission new services, reduce investment in others and create new incentive structures. Simply paying for existing activity wherever it occurs will only perpetuate the status quo.

2. The Emergency Department

As currently configured, the emergency department has no prospect of ever being able consistently to deliver the four hour standard. A fundamental rethink is needed. Below, we give an overview of the main issues that we feel should be addressed, and then go to suggest some solutions. While these solutions may not all be possible within current space or staffing constraints, some will, particularly if addressed imaginatively.

2.1 Overview

2.1.1 At present, children are triaged into three categories: urgent, intermediate and non-urgent. There is often a queue to see the triage nurse. A small number of children are returned to their GP from triage without further ED intervention. When present, the ENPs see and treat appropriate patients, but there is no specific ENP service into which patients can be streamed from triage. All other patients wait to be seen according to priority. Waits can be long and there are frequent breaches. Due to the lack of cubicles, children are often returned to the waiting room following examination to wait for test results etc. Overall, current arrangements are inefficient and potentially unsafe.

2.1.2 Older children (aged 13-16) requiring admission are generally transferred to the general hospital, where they are cared for on adult wards. Some children as young as ten are also transferred depending on bed availability. This practice is considered unacceptable in England, Scotland and Wales, where children up to the age of 16 are cared for in dedicated children's wards. The Trust and its commissioners should create an appropriately sized adolescent unit, staffed by nurses trained in the care of children, and cease the practice of admitting children to adult wards.

2.1.3 Overall, medical staffing of the ED is poor. There are two consultants, two middle grades and eight junior doctors (five currently in post). Twenty-four hour senior cover (consultant or middle grade) is not possible given current numbers. As there is no locum cover for the consultants when they are on leave, there will be times when no consultant is available (other than by good will). Junior supervision is inadequate due to low senior numbers, and they will be seeing undifferentiated patients without the knowledge to assess and treat them effectively. This is unsafe.

2.1.4 The ED consultants provide follow-up clinics. This further reduces their availability 'on the floor' and does not concord with modern practice. While we were told that urgent clinics were provided by other consultants, the definition of 'urgent' was variously described as being able to see a new patient within 72 hours by one consultant and rather longer than this by another. In our view, 'urgent' should mean the same day or the following morning.

2.1.5 Turning to the nurses, there is one band 7 and three band 6s. There are also two band 6 ENPs. As there is a need to have a band 6 or 7 coordinator on duty at all times, the current establishment of four non-ENPs is insufficient. The two (1.8 WTE) ENPs can only provide a limited service, despite the fact that large numbers of presenting children will have minor injuries or illnesses that could be dealt with by appropriately trained nurses. We understand that there is a proposal to create a further ENP post, although this may done by re-profiling the overall band 6 establishment, rather than adding an additional post. As there are insufficient senior nurses available overall now, we do not feel that this would be helpful.

2.1.6 We were told that the emergency department had no porters or dedicated clerical staff. The pneumatic air tube system is unreliable and when it is down, there are long delays to get specimens to the laboratories. Even when the system is working, there are shortages of pods. There is no near-patient testing available. We were told that ED patients requiring imaging are not prioritised and often have to queue. Elsewhere, fixing these issues would be regarded as being a fundamental part of achieving the four hour ED target.

2.1.7 We were concerned to learn that each of the Trust's sites issued its own hospital number. As children are cared for on more than one site, this could have implications for child protection.

2.2 Streaming

2.2.1 The ED attendance pattern suggests that many patients/parents with primary care needs are using the ED in addition to, or instead of, their GP. It

will be very difficult to reverse this tide. A better approach may be to manage it effectively as a separate stream.

2.2.2 Consideration should be given to setting up a 'walk-up' service for patients with minor illnesses. Elsewhere, such services are staffed by GPs and/or appropriately trained nurses. The service should be integrated with the ED, with a common reception, but separate waiting and treatment areas. We feel there is an opportunity to use the current out patient facility directly opposite ED for this function. We saw and were told that this is a vey underutilised space in its current form. A 'see and treat' model should be used to prevent an unnecessary queue forming for triage. Protocols for reception staff should be used to direct patients to the right service, with red flags to ensure that sick patients are not overlooked. The four hour standard should apply to patients in this stream, with an expectation that they will be seen, treated and discharged within two hours. It is unlikely that the service will need to run at night, when primary care arrivals are very low - precise operating hours should be determined based on data.

2.2.3 We recommend that the Trust sets up a more comprehensive ENP service aimed at providing treatment to all children with minor injuries. The current model of triage / initial assessment is complex, 'long winded' and causes significant delays in flow. Triage ahead of treatment is unnecessary when the service is running (see 2.2.2 above), and when not in operation, triage should consist of a rapid initial assessment to stream patients rather than the current full assessment model. Reception staff should direct appropriate patients to the service, where they will be seen and treated in turn. Staffing numbers will depend on the hours the service runs. Arrival patterns suggest that arrivals peak from 11.00 to 19.00, so the service could run from 11.00 to 21.00 if resources are constrained. Three or four WTE ENPs should be enough to cover these hours.

2.2.4 With a stream for primary care/minor illness patients and one for minor injuries in place, the ED will better be able to manage the remaining patients within the 4 hour standard. All patients not streamed elsewhere should receive a rapid senior assessment on arrival, with investigations and treatment ordered. The department should have a clear professional performance framework in place, with clear timelines for time from admission to assessment (e.g. 15 mins); time from assessment to treatment/admission decision (e.g. 2 hours); time from decision to admit to admission (e.g. 3 hours). Where a specialty opinion is required, this should be provided within 30 minutes of request. All these standards need to be agreed by the relevant clinicians and monitored by the floor coordinator. The 'at a glance' board should be enhanced so that it is obvious at which stage of the pathway the patient has reached, including 4 hour breach time and intermediate standard breach times. Currently it is not fit for purpose.

2.2.5 To support the EDs performance framework, it will be essential to establish standards for response by supporting departments. Imaging will need to complete requests from ED without expecting ED patients to join the routine queue. They must be fast-tracked. Pathology requests must also be fulfilled rapidly. If the air tube is down, the Trust should deploy a porter to convey specimens. We would also suggest that the ED has a dedicated portering service. ED porters can be trained to maintain equipment, restock cubicles and also fetch and carry.

2.2.5 The very high numbers of 0-1 day length of stays in the Trust strongly suggest a need for a paediatric assessment unit (or 'clinical decision unit'), where patients can be admitted for up to 24 hours for assessment and treatment, prior to discharge home. Admitting short stay patients to specialty wards can prolong their length of stay and cause disruption to the wards. Admission decisions from ED to the assessment unit should be swift and based on protocols. We estimate that if all current zero length of stay patients were admitted to an assessment unit, nine beds/trolley spaces would be required (assuming average occupancy at 60%). With the addition of some chairs ambulatory pathways could also be initiated in this area, preventing further admissions. Ideally, such an assessment unit should be staffed by ED medical staff, with three consultant rounds a day. Specialist staff should 'in-reach' to the unit when necessary. Nurse staffing requirements will be one qualified and one or two untrained nurses per shift.

2.2.5 We were told that specialty clinicians do not routinely provide support to the ED when it is busy. In our experience, patient safety is greatly enhanced when non-ED clinicians work closely with the emergency department and provide direct, hands on support when the department is unable to review arrivals in a timely manner. Good escalation policies ensure that support is called upon when it is needed. One such model that would support this would be 'Senior Intervention Following Triage' (SIFT). We discussed this at the diagnostic session. SIFT supports the delivery of timely and safe patient focused care, prevents unnecessary assessments and directs patients to the most appropriate care within minutes of arrival. In these circumstances, a senior ED nurse could make a direct referral to admitting speciality teams and bypass the ED assessment phase.

2.2.6 The hospital should review the way in which its 'urgent' clinics are provided. Where ED clinicians are unable to be confident that a next day appointment or a home-visit by a paediatric nurse specialist can be guaranteed, they will default to admission. GPs who lack access to next day clinics or to 'hot lines', are likely to default to referring to EDs, often via the ambulance service. There are many excellent UK paediatric services that focus on ambulatory care and providing support and advice, with consequently low admission rates.

3. Bed Configuration

3.1 The hospital's medical beds are organised (broadly) as a single pool, and this is sensible given the small number of beds and large number of specialists using them. However, it is clear from looking at your length of stay profile that patients requiring short stays (0-3 days) are mixed in with more complex patients with >3day LOS. This is likely to lead to an increase in LOS as the tempo required to manage short stay patients is different to that of managing more complex, longer stay patients.

3.2 Our suggestion of creating an assessment unit would remove a proportion of these short stay patients from specialist beds. There might also be significant benefits to creating a pool of short stay beds (from within the existing bed pool) to manage patients with anticipated stays of up to 3 days. From the figures we have, 19 short stay beds would be adequate. These beds would need to be managed assertively, with regular patient reviews and effective case management. All patients would require an expected discharge date (EDD) with the nurses discharging them based on predetermined discharge criteria (which we understand is nothing new in the hospital). Where it becomes clear that a greater than 3-day stay is required, swift transfer to a specialty bed should be expedited, although patients should always be streamed in the first instance based on the initial assessment.

4. The Four Hour Standard

4.1 As we said at the meeting, we feel that the hospital needs to increase its confidence that it can and will deliver the four hour standard. In our view, your local expectation should be that you will achieve the standard 100% of the time, through improved processes, logical bed configuration, and the alignment of all departments to deliver it.

4.2 Trusts that regularly achieve >98% performance elsewhere have clear escalation policies that help them step up their performance when waits exceed predefined thresholds. They carry out routine, root cause analysis of four hour breaches, and investigate the causes of waits exceeding three hours. In particular, they focus on discharge at the backend of the hospital pathway, making effective use of EDDs and case management. We were made aware of instances at the RBHSC where children were waiting days for results when the test itself had not been ordered. Effective case management using EDDs would help prevent this.

5. ED Medical Staffing

5.1 We have said that senior medical staffing in the emergency department is low. The Way Ahead 2008-2012, published by the College of Emergency

Medicine, provides helpful guidance on staffing requirements for emergency departments. Whilst we appreciate that these guidelines are aspirational in many trusts even in England, the current staffing within RBHSC fall well below what we would consider safe and acceptable, and indeed are very low in comparison with other hospitals we have visited.

5.2 When considering medical staffing levels, it is important to be clear about the model of care that is required and the degree of direct, hands on care required from consultants. The model we propose above suggests a balance between primary care trained doctors, ENPs and ED consultants. We also propose formalised support from specialty consultants at times of pressure.

5.3 Whatever the model, it is important that senior clinical decision makers are available when the department is busy, and on-call when it is quiet. This generally means on-site consultant cover Monday to Friday 08.00 to 23.00 weekdays and at least four hours each on Saturdays and Sundays. Experienced middle grades should be available most of the time (50% of UK Trusts have achieved the desirable 24/7 cover to date).

5.4 For a department seeing 50,000 patients a year, consultant staffing outlined in 5.3 above would be around 5 WTE and middle grade cover around 8. While this clearly has cost implications, staffing must be based on the service to be provided and patient safety needs.
5.4 Finally, it must be clearly understood that simply increasing staffing levels in the absence of modernisation will be costly and disappointing. As well as the right number of staff, there must also be the right model.

We hope that this letter is helpful and stimulates both discussion and action.

We wish you success in your efforts to improve safety and care for the children you treat and admit.

With warm regards,

Yours sincerely,