Chapter 38 Health Service Executive

Performance Measurement and Improvement in the HSE

Performance Measurement and Improvement in the HSE

38.1 The objective of the HSE is to provide services that improve, promote and protect the health and welfare of the public. Since 2007 the HSE has undertaken a process to align its reporting of performance at three levels

- measurement of progress in achieving the goals of its three year Corporate Plan on a twice yearly basis
- reporting to the Board and the Minister for Health on performance and achievement of the requirements in the Annual Service Plan on a monthly basis
- instituting a performance information and improvement system — HealthStat — piloted during 2008 and operational since the beginning of 2009.

38.2 This Chapter examines the third element of that process – HealthStat.

38.3 While historically, a lot of data in relation to the costs and activities of its 50 acute hospitals had been collected on a routine basis, this data was not collated, analysed and presented in a way that would allow for comparison of actual performance against targets or facilitate comparison between hospitals. HealthStat is the first attempt at providing integrated operational performance measurement. 36 hospitals are currently included in HealthStat. The intention is to extend the process to the remaining hospitals and to other service delivery arms such as services delivered in the Primary, Community and Continuing Care (PCCC)[124] settings.

38.4 HealthStat comprises a performance measurement system that produces indicators based on data collected from hospitals and a monthly Forum, led by the CEO of the HSE. It is attended by hospital management and clinical directors and the performance of individual hospitals is discussed based on the information produced. Improvement actions are monitored through an Action Log and progress on implementing previously identified actions is discussed at the beginning of each Forum meeting. The thinking is that this, together with the monthly publication of individual hospital results on the internet, encourages hospitals to work towards consistent performance improvement.

38.5 HealthStat is built around three key types of indicator, Access, Integration and Resource

- Access indicators are geared towards the measurement of waiting times for health services.
- Integration indicators are intended to provide insights into hospital throughput.
- Resource indicators aim to measure the resources used in supplying the services.

38.6 An overview of the system and details of the indicators included under each category are set out in Annex A.

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[124] The HSE has indicated that a suite of indicators designed to indicate the alignment between hospital and community based services, will be introduced.

Audit Focus

HealthStat is an important step towards the development of an effective performance management system in the HSE. It is recognised that it is at the early stages of development and will continue to be refined, enhanced and extended to other arms of the service in future years.

In this regard, the primary aim of the examination was to identify how HealthStat is working and make recommendations for improvements. As a result, and in light of its early stage of development, data presented does not identify individual hospitals but rather shows variations in performance between hospitals and, where appropriate, demonstrates the scope for improvements in particular areas.

The examination involved visits to a number of hospitals, consultation with staff involved in the development and production of HealthStat information and examination of documentation produced by the Forum.

Results of Performance Measurement

38.7 For the purpose of this examination six indicators were examined in detail. Two key indicators were reviewed in each category. The audit, in the case of each indicator selected, reviewed reported performance, identified apparent shortcomings and made suggestions for improvement. The indicators selected for investigation were

- access indicators — waiting time for elective admissions and waiting times for out-patient clinics
- integration indicators — day case rates and delayed discharges
- resource indicators — staff per in-patient bed and the public : private split of activity.

Access Indicators

38.8 Timeliness of provision of services is an important measure of the performance of the health service, gauging its capacity to meet the required demand. For the purpose of this examination two[125] access indicators were examined.

- Waiting time for Elective Admissions – The time patients wait for elective[126] procedures from the time the clinical need is identified.
- Waiting time for Out-patient Clinics – Waiting time for routine appointments in consultant led out-patient department clinics.

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[125] Waiting time for admission from Emergency Departments will be examined in a separate Special Report which will issue shortly.

[126] An elective procedure is a planned, non-emergency procedure. Unlike emergency procedures, which must be performed immediately, a required elective procedure can be scheduled at a time of the patient's and surgeon's choosing.

Waiting Time for Elective Admissions

38.9 The time patients wait for elective admissions is an important measure of the capacity of individual hospitals to deliver non-emergency procedures. A patient's waiting time starts when the clinical need is identified and ends when either an admission date is arranged or the patient has been accepted by a private hospital under the National Treatment Purchase Fund (NTPF).

38.10 The NTPF maintains a database of all patients waiting for elective procedures – the Patient Treatment Register (PTR). The PTR is based on information supplied by individual hospitals. While the database records the status of patients, the numbers reported excludes patients who are scheduled for a procedure in a public hospital, accepted by a private hospital under the NTPF or are otherwise unavailable for treatment. In addition, in line with international practice, the National Waiting List as reported by the NTPF comprises only those patients who have been waiting more than three months.

38.11 The data collected by HealthStat shows the numbers of patients (adults and children) waiting in defined time bands. The target set by the HSE is that adults will be waiting no longer than six months for an elective procedure and children no more than three months. A separate indicator is calculated for adults and children and the focus is on the extent to which the relevant target is being achieved.

Hospital Performance

38.12 As at the end of January 2009, a total of 37,200 patients were recorded as waiting for procedures[127]. Of those, 18,500 had been waiting more than three months and were included on the National Waiting List. Figure 130 sets out the length of time they had been waiting at that point.

38.13 In January 2009, 61% of children had been waiting longer than the target waiting time of three months while 21% of adults were waiting longer than the target of six months.

Figure 130 Patient Waiting Times for Elective Procedures, January 2009

	Number of Adults	Number of Children	Total
In excess of 12 months	1,900	500	2,400
6 — 12 months	5,000	1,300	6,300
3 — 6 months	8,600	1,200	9,800
National Waiting List	**15,500**	**3,000**	**18,500**
0 — 3 months	16,800	1,900	18,700
Total Patients[a]	**32,300**	**4,900**	**37,200**

Note:

a Excludes patients scheduled for a procedure in a public hospital, accepted by a private hospital under the NTPF or otherwise unavailable for treatment.

38.14 The ratings allocated by HealthStat based on achievement of targets (for hospitals that returned data) are set out in Figure 131.

[127] Data in relation to earlier periods is not presented since the numbers reported in HealthStat showed only those patients waiting for surgical procedures and excluded patients waiting for medical procedures, which accounts for approximately half of those waiting. This was rectified from January 2009 onwards.

Figure 131 HealthStat Rating – Elective Waiting Time Indicators, January 2009

HealthStat Rating	Adults	Children
	Number of hospitals	Number of hospitals
Target	< 6 months	< 3 months
Very good (within 15% of target)	9	1
Average performance with room for improvement (deviation from target of between 15% and 35%)	15	2
Unsatisfactory performance requiring urgent attention (35% or more below the target)	3	19
Total	**27**	**22**

38.15 Performance in this area was much poorer in relation to achievement of waiting time targets for children with the majority of hospitals rated as unsatisfactory and requiring urgent attention in this area.

Measure Shortcomings

38.16 The measure has a number of shortcomings in that

- While it reports how long the current patients have waited to the measurement date, it does not evaluate performance in ensuring that patients wait no longer than six months for elective procedures. As a result, it is not a true measure of the number of patients treated within the target timeframe.
- The NTPF guidelines state that all patients who are scheduled for a procedure in a public hospital or have been accepted by a private hospital or are otherwise unavailable can be excluded from the waiting list. In one hospital visited the total patients waiting reported to HealthStat in January 2009 was 1,741. There were an additional 766 patients who had received appointments to be admitted to that hospital who were excluded from the waiting list. The exclusion of patients scheduled for treatment in a public hospital gives rise to concerns about the accuracy of the measure due to the high risk of cancellation of these procedures under pressure from Emergency Department (ED) activity and delayed discharges.
- There were also differences between the hospitals visited in how patients who had received dates for admission to that hospital were classified. Some hospitals excluded patients who had received admission dates while others continued to record those patients on the waiting list. As a result, the statistics reported are not comparable.

Waiting Time for Elective Admission – Suggestions for Improvement

In order to get a true measure of hospital performance a waiting time measure for elective admissions should also be calculated for patients up to the point of treatment. This, combined with the existing measure, would give a more complete indication of the average time patients were actually waiting.

In the case of the existing measure, the HealthStat User Guide should define clearly the source data to be used. In particular, the guide should specify the category of patients who are not included in the calculation, such as patients who have received dates for admission in a public hospital or have been accepted by a private hospital under the NTPF.

Waiting Time — Out-patients

38.17 At the end of 2008, there were 175,000 patients on waiting lists for out-patient clinics. While 70% of them had been waiting less than a year, 19% had been waiting two years or more.

38.18 Out-patient waiting time is calculated by identifying the time to the next available routine appointment in each clinic. Waiting time for an out-patient clinic starts when the referral letter is received by the hospital and ends on the appointment date. The target waiting time for an out-patient appointment is 90 days. The measure is presented by speciality, and is calculated by aggregating the waiting time by speciality and dividing by the number of clinics in that speciality.

38.19 The measure does not show the actual longest time waiting for an individual clinic since waiting times are calculated as an average for each speciality. In one hospital, the longest waiting time for an individual clinic was 2,920 days (eight years).

Hospital Performance

38.20 The waiting time for out-patient clinics (by speciality) is set out in Figure 132. Between October 2008 and January 2009 there was no significant reduction in the national average waiting time for out-patient clinics or in the specialities with the highest waiting times.

Figure 132 Average Waiting Times (Days) for Out-patient Clinics, October 2008 – January 2009

Speciality	October 2008	November 2008	December 2008	January 2009
Orthopaedics	473	480	528	461
Otolaryngology	376	423	407	453
Ophthalmology	265	272	276	279
Medicine	166	192	186	160
Surgery	181	168	167	157
Other	140	138	128	119
Paediatrics	91	100	89	87
National average – All Specialties	**194**	**205**	**200**	**186**
Number of Hospitals which Reported Data	30	31	30	32

Measure Shortcomings

38.21 This is a relatively good measure of waiting time for out-patient appointments but in order to guarantee its accuracy some dysfunctional practices need to be addressed

- In one hospital some clinics were no longer accepting referrals in order to get the out-patient waiting lists under control.
- In another hospital the waiting times were established once and the task was not repeated. Therefore, the waiting time for out-patient clinics reported by that hospital is unlikely to be accurate.

38.22 The measure is forward looking since it identifies the time to the next routine appointment. It does not calculate how long those who have already attended as out-patients were waiting. It was not possible to establish this waiting time for the purpose of the examination.

Waiting Time for Out-patient Clinics – Suggestions for Improvement

Consideration could be given to calculating average actual waiting time for those patients seen by out-patient departments.

The practice of closing the out-patient appointments book in order to bring waiting time under control should be prohibited.

38.23 A project has been facilitated through the Forum to improve the performance of out-patient clinics. Details of the project are outlined below.

National Improvement Project – Out-patients

In June 2008, only three hospitals were providing out-patient waiting list information. Individual hospitals carried out significant work to catalogue waiting lists and now 38 hospitals are providing information in relation to out-patient waiting times. This is a considerable advance.

17 hospitals have conducted effectiveness audits to identify inefficiencies in the out-patient area that needed to be addressed. The main objective was to bring about more new attendance appointments. This called for improvement in clinic and appointment scheduling, communication with the patient and the day-to-day management of out-patient clinics. The audits identified the need for the development of standard operating procedures and a performance management system, including Key Performance Indicators and targets in relation to out-patients, along with monthly reporting of waiting lists and monitoring of performance. The need for national referral protocols in the high volume specialities was also identified in order to ensure that all out-patient referrals are appropriate and necessary. The issues identified and the suggested solutions fed into a national framework for out-patient clinics.

At July 2009, the framework had been drafted and is currently being validated by a number of hospitals. The framework emphasises the need for hospitals to

- focus on increasing new attendances through all clinics and reducing unnecessary follow-ups
- clearly report out-patient waiting time targets
- reduce the number of patients who do not attend
- reduce unnecessary GP referrals
- ensure nurse activities relate to clinical activity and increase the potential of nurses to see and treat new patients.

Integration Indicators

38.24 Integration indicators provide information in relation to patient throughput. Two integration indicators were examined in detail

- Day case rates — measures the proportion of patients' procedures conducted on a day case (as opposed to in-patient) basis.
- Delayed discharges as a percentage of bed-days available – measures the loss in capacity due to the inability to discharge patients who no longer require acute care.

Day Case Rates

38.25 The day case rate measures the proportion of procedures conducted without the need for an overnight stay. It is expressed as the number of procedures conducted on a day case basis as a proportion of the total procedures carried out. Maximising day cases improves the overall capacity of the hospital. It is also important from the patients' viewpoint as it minimises the length of stay for a patient.

38.26 Up to December 2008, this indicator was calculated on the basis of all procedures conducted. Since January 2009 it is based on a sample of 24 procedures[128]. HealthStat also produces information in relation to five specialities.

Hospital Performance

38.27 The target is that at least 75% of the basket of 24 procedures are carried out on a day case basis. Performance against this target in January 2009 is shown in Figure 133. Performance was well below target with 56% of cases being conducted on a day case basis.

Figure 133 National Day Case Procedures, January 2009

Speciality	Hospitals Carrying Out Procedure	National Average Day Case Rate[a]	Lowest Rate of Day Case in Individual Hospital	Highest Rate of Day Case in Individual Hospital
	Number	%	%	%
Cataract	10	72	3	100
Investigative Scopes	36	69	8	90
Inguinal Hernia	30	36	1	79
Varicose Veins	27	61	0	98
Tonsillectomy	18	1	0	25
Basket of 24	**36**	**56**	**22**	**82**

Note:

a The national average is calculated by measuring procedures carried out on a day case basis as a proportion of the total procedures for all of the hospitals who reported data.

38.28 There is a wide variation in day case activity with rates varying from 22% to 82% for the full basket of 24. This degree of variation is evident in all of the procedures reported except for tonsillectomy where the overall day case rate is lower than other specialities.

38.29 Forum meetings during 2008 and early 2009 were drawing attention to poor performance in this area and seeking commitments from hospitals to increase the proportion of procedures carried out on a day case basis. The day case rates for the 36 hospitals who reported at January 2009 are graphically displayed in Figure 134.

38.30 The HSE stated that it regularly reviewed the level of day cases as a key element of hospital throughput and the Forum investigated low performance in this regard as well as specific improvement actions for hospitals which included examining day capacity and clinical practice.

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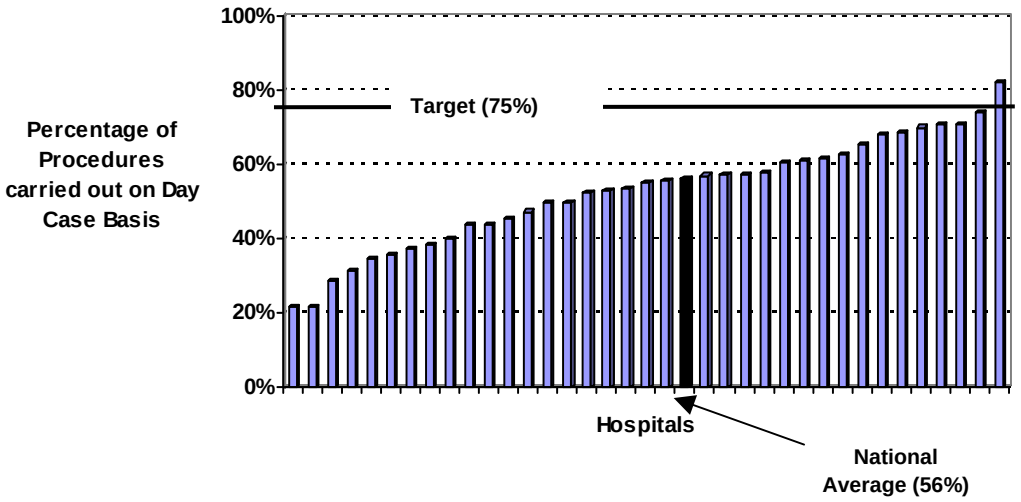
[128] The basket of 24 is an internationally recognised set of procedures that can be carried out as day cases on a regular basis, thus excluding those procedures that could not normally be carried out on a day case basis.

Figure 134 Day Cases as a Percentage of the Total In-patient and Day Case Activity – January 2009



Shortcomings with the Measure

38.31 A number of shortcomings were identified with this measure

- Procedures carried out in an out-patient setting are not included in calculating the day case rate. One hospital visited informed the audit team that a particular procedure, which they felt was a day case procedure, was regularly carried out in that hospital in an out-patient setting but could not be included in calculating the day case rate. In this respect, performance is potentially understated.
- Another hospital felt that the basket of 24 procedures was not representative of their day case activity, as some of the bigger volume day case procedures in that hospital were not included.

38.32 The HSE stated that the day case basket of 24 procedures was internationally accepted and the proportion carried out in individual hospitals would reflect their overall caseload mix. It added that its objective was to carry out as much care as is possible in a non-acute setting. However, it was of the opinion that any procedures conducted in an out-patient setting did not involve the level of acuity (anaesthetics, theatre, clinical team, etc.) of a normal day case procedure.

Day Case Rates – Suggestions for Improvement

There is a need to fully investigate the characteristics of those hospitals with very high performance in this area to establish the reasons for this, distil the lessons learned and disseminate the findings in a structured way so that hospitals with poor performance can consider implementing similar practices. A comprehensive identification of good practice would greatly assist the nine hospitals with day case rates of under 40%.

Delayed Discharges

38.33 A delayed discharge occurs when a patient no longer requires acute care but cannot be discharged from hospital. This mainly occurs due to lack of suitable step-down facilities, home care facilities or rehabilitation placements.

38.34 The measurement of capacity lost through delayed discharges is important because of its effect on other functions within the hospital system. Delayed discharges can contribute to ED admission waiting times, elective admission waiting times and causes cancellation of elective appointments.

38.35 Delayed discharges are measured on the basis of the number of bed-days lost as a percentage of the total bed-days available. The HSE informed me that at present no target had been set for delayed discharges as they have a high dependency on services provided by the PCCC in the community[129].

Reported Delays in Discharging Patients

38.36 The level of delayed discharges is set out in Figure 135. For the period October 2008 to January 2009 an average of 5.6% of available bed-days were lost due to delayed discharges. Seven hospitals reported no loss of bed-days while the remaining 29 reported losses of between 0.1% and 23.7%. The hospital with the highest level of loss of capacity due to delayed discharges was significantly higher than all of the remaining hospitals. Within the remaining hospitals the range was 0.1% to 13% and the adjusted national average was 5.3% after excluding this outlier.

Figure 135 Number of Hospitals with Bed-Days Lost Due to Delayed Discharges October 2008 – January 2009

	Hospitals			
Percentage Bed-Days lost to Delayed Discharges	**October 2008**	**November 2008**	**December 2008**	**January 2009**
0%	8	9	9	8
0.1 – 2.5%	10	9	8	7
2.6 – 5%	6	6	7	9
5.1 – 10%	6	6	4	6
10.1 – 20%	5	5	7	4
> 20%	1	1	1	1
National average	**5.5%**	**5.1%**	**6.3%**	**5.4%**

38.37 Between October 2008 and January 2009 there has been a slight improvement in delayed discharges across the 36 hospitals. Individually, 14 hospitals experienced improvements in the level of delayed discharges and eight hospitals experienced no change, but the reduction was negated by increases in 14 other hospitals during the period.

38.38 The HSE stated that between 2005 and 2008 there had been extensive development of long-term care, home care and rehabilitation capacity which contributed to reductions in delayed discharges in hospitals. However, financial constraints since Autumn 2008 had resulted in reduced capacity in this area.

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[129] The HealthStat indicators currently under development for the PCCC will cover this aspect of performance.

38.39 The HSE is of the view that since the patients are medically fit for discharge, it would be more appropriate to provide data on this measure to the local health officers and it is currently included in the HealthStat pilot for them.

Shortcomings in Measure

38.40 While this is a relatively good measure of the capacity lost due to delayed discharges, it suffers from some drawbacks

- There are differences in how bed-days lost are calculated among hospitals. Some hospitals count each delayed discharge from the date the patient became a delayed discharge and other hospitals count each delayed discharge as being delayed for seven days of the previous week, regardless of when their need for acute care ceased.
- There was a lack of uniformity across the hospitals visited in terms of the beds included in calculating bed-days available. In addition, instances were noted during the examination where the bed-days available reported in HealthStat could not be reconciled to hospital records. The number of bed-days available had been calculated correctly and could be reconciled to local records in two of the hospitals visited. In the remaining two, HealthStat had overstated the number of bed-days available by 14% thus reporting better performance under this measure than was actually the case. The bulk of the difference was due to incorrect interpretation of the beds to be included.

Delayed Discharges – Suggestions for Improvement

The indicator should be defined more clearly, in particular, setting out how bed-days available are to be calculated.

Consideration should be given to adopting a target for this indicator. As HealthStat evolves it would be desirable to link this indicator with other indicators affected by this phenomenon. This could give insight into the extent to which delays in other functions of the hospital are being caused by delayed discharges. Other factors which would need to be taken into account in any such review include the timing of pre-admission testing, the extent of admission on day of surgery, the length of acute stay and the extent of day care utilisation.

Resource Indicators

38.41 Resource indicators are useful in measuring efficiency and productivity. Two resource indicators were examined in detail

- Staff per in-patient bed – this measures the number of staff required in relation to each in-patient bed.
- Public : Private split of activity – measures the proportion of hospital activity devoted to treating public patients.

Staff per In-patient Bed

38.42 In principle, a measure of whole-time staff per in-patient bed is an important productivity measure allowing for resource comparisons between hospitals. The number of staff per in-patient bed is further broken down by category of staff between nursing, medical/dental, health and social care, other patient care, general support and management/administration. Targets were not adopted for this indicator. Rather, averages for all hospitals were shown as a means of comparison with peers. This measure is no longer reported in HealthStat.

Reported Performance

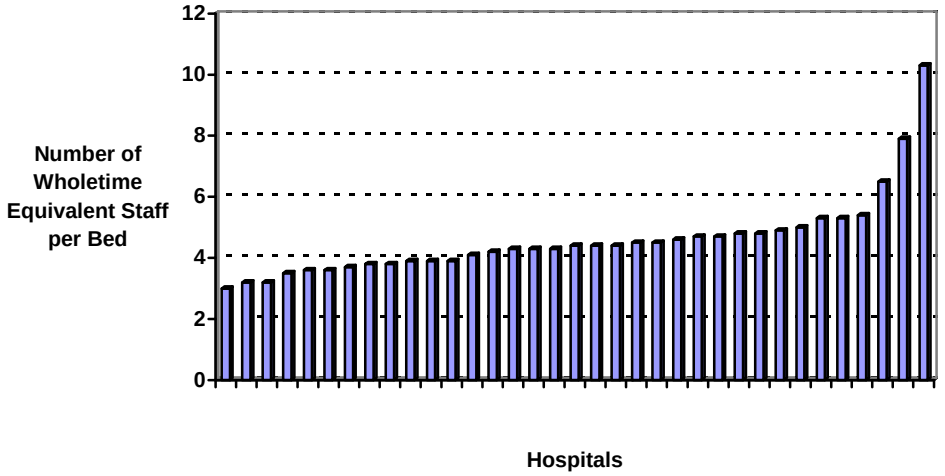
38.43 This indicator was reported by HealthStat up to December 2008. Thereafter, its use was discontinued. The HSE informed me that this decision was taken for a number of reasons

- There were continued discrepancies on bed count.
- Two hospitals did not report whole-time equivalent staff per bed from October 2008 to January 2009.
- It was considered that the measure, as presently constituted, did not incentivise good use of resources since it penalised hospitals that made increased use of out-patient departments, medical assessment units and fracture clinics in place of in-patient beds.

38.44 The whole-time equivalent staff devoted to each bed was in the region of 4.5 nationally for the months of October 2008 to January 2009. In January 2009 the levels ranged from three whole-time equivalent staff per in-patient bed to 10.3 per bed. These levels were largely consistent with the previous three months, October to December 2008.

38.45 The range of whole-time equivalent staff per bed in January 2009 is outlined in Figure 136.

Figure 136 Whole-Time Equivalent (WTE) Staff Per In-patient Bed – January 2009



Note: The total WTE staff includes all staff working in the hospital in the following categories: medical and dental, nursing, health and social care, management and administration, general support and other patient care. Staff numbers are expressed in terms of WTE irrespective of grade.

38.46 The level of variation between hospitals for the categories of staff is outlined in Figure 137.

Figure 137 Whole-Time Equivalent Staff Per Bed by Category for January 2009

Category	Hospital with Lowest Overall WTE per Bed	Hospital with Highest Overall WTE per Bed	National Average
Medical / Dental	0.3	1.2	0.5
Nursing	1.4	3.8	1.8
Health & Social Care	0.0	1.9	0.6
Management / Administration	0.3	2.1	0.7
General Support	0.2	0.9	0.6
Other Patient Care	0.8	0.4	0.3
Total all Staff Categories	**3.0**	**10.3**	**4.5**

Shortcoming of the Measure

38.47 Information on how efficiently a hospital is being staffed is important. This measure had some shortcomings in this regard. In particular, in the calculation of this measure, all staff were included yet only in-patient beds were used. As a result, hospitals with significant day case, out-patient and emergency activity would be disadvantaged since staff employed on these functions are counted while the beds are not.

Staff WTE per Bed – Suggestions for Improvement

While the measure has been abandoned, a replacement productivity indicator that takes due account of the complexity or mix of patients in the hospital needs to be evolved.

A revised measure should be adopted taking account of the need to incentivise hospitals to optimise the use of resources. It may be necessary to apportion staff between in-patient, daycase, ED and out-patient care with separate productivity indicators for each.

Public : Private Split of Activity

38.48 The management of the public and private components of activity is important in the context of the implementation of government policy that at least 80% of activity in acute hospitals is public activity. As indicated in Chapter 37 its management can also impact on whether income from private patient maintenance is optimised. A further factor is ensuring that

- consultants remunerated entirely by salary treat only public patients[130]
- other consultants operate within the limits of private practice set in their contracts (See Chapter 39).

38.49 The indicator measures the split of hospital activity (measured by in-patient and daycase discharges) between public and private patients and is further analysed between day cases, elective and emergency in-patients. The target is that at least 80% of all activity should be public activity.

[130] Their enhanced salary levels are negotiated on the basis of this.

Reported Performance

38.50 The national average for public patient treatment activity was 78% in January 2009 and that percentage has remained relatively stable since October 2008. However, the performance between hospitals varied from 45% in one hospital to 94% in another hospital. The level of public activity for January 2009 is detailed in Figure 138 in respect of 35[131] hospitals.

Figure 138 National Public Rate of Activity, by Speciality January 2009

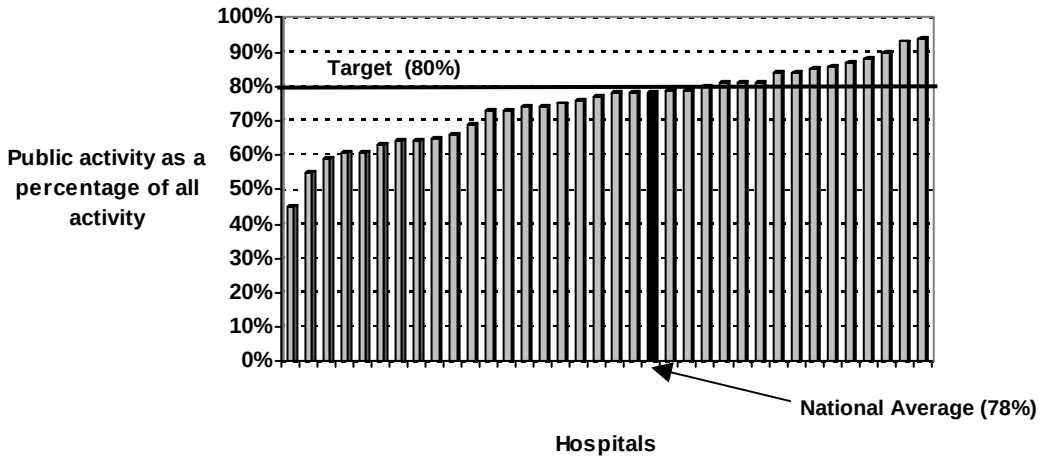
Speciality	Number of Hospitals[a]	National Average %
Ophthalmology	12	87
General Medicine	29	81
Other	23	80
Otolaryngology	16	77
Paediatrics	21	75
Orthopaedics	23	72
General Surgery	30	72
National Average – All Specialities	**35**	**78**

Note:

a While the percentages are broadly indicative, caution is necessary in their interpretation because not all hospitals carry out all procedures reported.

38.51 The range of public activity by hospital is set out in Figure 139 below.

Figure 139 Public : Private Split January 2009



38.52 Examination of the underlying data in respect of the individual hospitals revealed that, in general, no one speciality was influencing the percentage of public cases. The overall percentages of public activity for individual hospitals mirrored the pattern for the specialities for that hospital.

131 Two hospitals – Merlin Park and UCHG merged in January 2009.

38.53 With a high level of variation and with approximately half of all hospitals rated by HealthStat as having either average or poor performance, there is scope for more focus on this issue at the Forum. In January 2009, 15 hospitals were rated as poor performers requiring urgent attention, three were rated as having average performance with room for improvement, while 17 were satisfactory.

Shortcoming of the Measure

38.54 This indicator, as currently calculated, does not take account of the complexity of cases as it is based on discharges as between public and private patients.

Public : Private Split – Suggestions for Improvement

The measurement of the public private split would be improved through the use of weightings in order to give a better picture of the complexity involved in the cases treated by individual hospitals.

There may be a need, following final completion of contracting arrangements with consultants, to set an adjusted national target which takes account of consultant categorisation.

38.55 The HSE have stated that, from September 2009, it hoped to present this indicator in two parts, one being the overall public : private split for hospitals and the other being a comparison of public : private split with agreed limits in relation to individual consultants arising out of Consultant Contract 2008 weighted for complexity using casemix[132].

Getting Value from Performance Measurement

38.56 Ideally, a performance measurement system should be balanced and cost effective, that is, the indicators selected should cover all aspects of performance and the cost of collecting the required information should not be prohibitive. However, information production is not an end in itself and is only useful if it is used to drive performance improvements. Future steps to improve the process might include

- further integration of indicators to give a joined up view of performance
- developing relevant cost and activity indicators
- further enhancement of arrangements for good practice transfer by adopting more structured approaches to the transfer process
- linking performance measurement with the value for money drive
- enhancing data collection and verification procedures.

Integration of Existing Indicators

38.57 Currently, information in relation to each indicator is shown separately. It is acknowledged that their presentation in 'dashboard' format enables the links between individual indicators to be explored at management level. However, it would be useful, in order to deepen the information presented for discussion, to integrate on a periodic basis, a number of measures in order to allow

[132] Casemix standardises each care episode into standard units of care. A weighting is applied to each diagnosis according to the severity and complexity of that diagnosis. These weightings allow for comparison of units of care across hospitals with differing mix of patients.

for a review of hospital performance in a holistic manner. This could provide useful insights into the relationship between different aspects of hospital performance.

Development of Cost and Activity Indicators

It would be useful to further link inputs with outputs in order to give an indication of how efficiently resources are being used to deliver the required service. These indicators could help gauge efficiency and when used in conjunction with reporting by hospital type would allow for comparisons over time and between comparable hospitals. Enhanced indicators might include

- Cost per Patient Discharged
- Activity per Whole Time Equivalent Staff.

38.58 Over time, they could be refined through the application of casemix weightings to more accurately reflect activity levels.

Cost per Patient Discharged

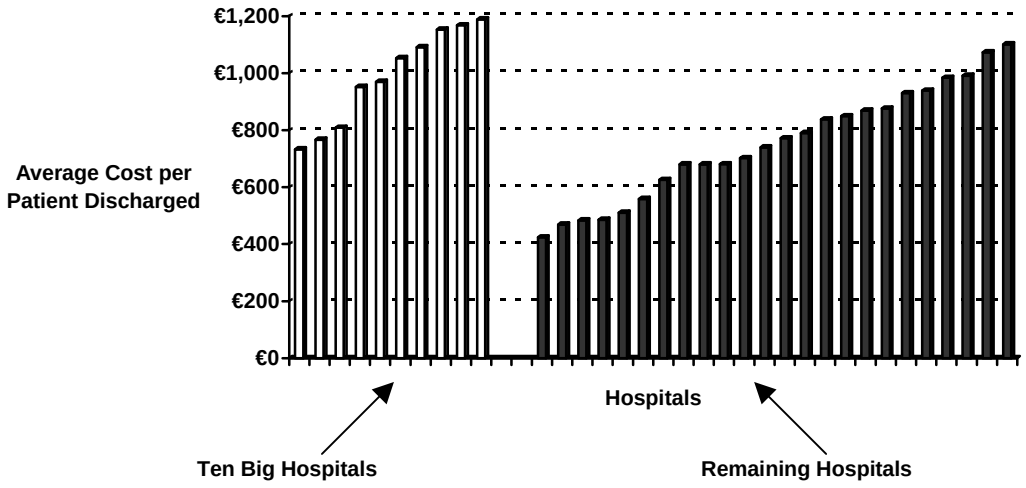
38.59 A cost per patient discharged indicator would show how much an average patient's visit to the hospital costs and allow hospitals to track efficiency over time and compare with peer providers.

38.60 A further refinement would be to break down the components of cost between medical pay costs, non-medical pay costs and non-pay costs.

38.61 The January 2009 cost per discharge for each hospital has been calculated for the purpose of this examination. The results graphically displayed in Figure 140 reveal a difference between the ten large hospitals which vary from €733 to €1,189 with an average of €986 per discharge as compared with the remainder who vary from €424 to €1,101 with an average of €742.

38.62 The calculation of the Casemix adjusted base price included in HealthStat in relation to each hospital estimates the cost of a standard unit of care for each hospital. However, it only includes in-patient discharges which results in the exclusion of significant activity groupings such as day case discharges, out-patient encounters and non-admitted ED throughput.

Figure 140 Average Cost[a] per Patient Discharged[b], January 2009



Notes:

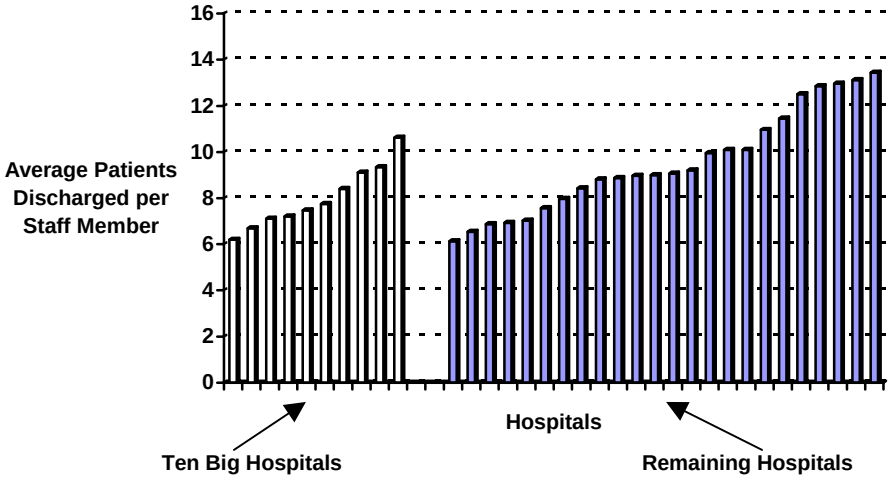
a The indicator is calculated by allocating total expenditure for the period over the number of patients discharged in the period to arrive at an average cost.

b Patients discharged include in-patient and day cases, non-admitted ED and out-patient attendances.

Activity per Whole Time Equivalent Staff Member

38.63 The compilation of an indicator that demonstrates the average throughput of patients per member of staff and its comparison with peer providers and over time could give a picture of where efficiencies might be gained. Using discharges as a surrogate for throughput, the discharges per whole-time equivalent staff for January 2009 is outlined in Figure 141.

Figure 141 Patients Discharged[a] per Staff Member[b], January 2009.



Notes:

a Patients Discharged include in-patient and day cases, non-admitted ED cases and out-patient attendances.

b The indicator is calculated as the total number of patients discharged in the period divided by the total staff for the period.

38.64 Again there is a difference between the ten big hospitals and the remaining hospitals. In the ten big hospitals, patient throughput per staff member varied from 6.2 to 10.6 with an average of 7.9. The corresponding figures for the remaining hospitals ranged from a low of 6.1 to a high of 13.4 with these hospitals on average having 9.2 patients discharged per staff member.

Opportunities for Development of Indicators

The indicators outlined above would provide useful measures of overall efficiency. In their current form these indicators are crude and there is scope to develop them further to provide more meaningful information by taking account of complexity of hospital caseload. In addition, while information is available on patients discharged by type of care, (in-patient and day case, out-patient and ED), the associated expenditure and staff numbers are not similarly broken down.

In time, the indicators could be enhanced and refined by

- using the casemix weighting to standardise discharges into standard units of care
- using cost centres to break total expenditure between in-patient and day case discharges, ED attendances and out-patient attendances
- reporting by groups of peer hospitals, thus facilitating improved peer comparison.

Transfer of Good Practice

38.65 The objective of the Forum, established in association with HealthStat, is to compare performance by peers, focus on improvement actions and disseminate good practice of high performing hospitals. The Forum provides an opportunity to identify good practice across a range of activities by requesting hospitals with good performance in particular areas to identify the drivers of that performance.

38.66 During the pilot phase of HealthStat the National Director of Hospitals and the eight network managers represented hospitals. The first Forum was held in February 2008. It looked at the ten largest hospitals. It was planned that once the pilot phase was well underway, hospitals would be represented by their CEOs, general managers and clinical directors and this happened for the first time in November 2008 when the performance of five hospitals was examined. In each subsequent Forum between four and six hospitals have been examined and by March 2009 hospitals were returning for a second visit. Hospital specific performance improvement action plans have formed part of the dialogue from the outset in February 2008.

38.67 The aim is to invite each hospital three times per year. The format of the meeting is a dialogue where the improvement or deterioration in performance is discussed and Forum members attempt to identify, with network and hospital managers, hospital CEO's and clinical directors the reasons their hosptials are performing better or worse than peer providers. Where appropriate, a hospital manager is advised to discuss with managers of those hospitals with good performance how best to improve in a particular area.

38.68 Management in the hospitals visited during this examination welcomed the Forum's focus on continuous improvement as opposed to apportioning blame for poor performance. In general, they found the tone of the Forum meeting to be constructive.

38.69 However, hospital management went on to say that the learning objective was being pursued in an ad hoc manner through informal contact between personnel in individual hospitals. They were of the opinion that there was room for a more structured approach to the dissemination of good practice.

38.70 To date, the Forum has facilitated two improvement projects. The projects were

- Absenteeism – In this case new absenteeism guidelines were issued.
- Out-patients — There is an ongoing investigation of the administrative process in order to make it more efficient.

38.71 There is a high level of variation in the performance of individual hospitals across a range of measures, in particular, in areas like their proportion of day cases, the level of public activity and the number of bed-days lost through delayed discharges. The Forum could do more to identify the determinants of good performance in those areas with a view to transferring that knowledge to hospitals with lower than average performance. Combining centrally generated good practice guidance with existing peer learning appears to be the optimum approach to achieving this.

38.72 Some hospitals visited expressed reservations in relation to the scope for HealthStat to contribute to improved performance in their individual cases as they already had performance management systems that were more sophisticated than HealthStat.

38.73 While it is accepted that, as a national system, HealthStat has scope for development and that overlap with systems already developed by some hospitals is inevitable, in any enhancement of the system there may be scope to review the strengths of hospitals' existing models.

Opportunities to Transfer Good Practice

A more structured approach to the identification and transfer of good practice might include

- identification of areas for national roll-out of good practice guidance
- combining the current peer learning with a more structured approach to the dissemination of lessons learned through the development over time of good practice guides, developed centrally which set out the approaches that have contributed to good performance in particular areas.

Realising Added Value from Performance Measurement

38.74 As well as providing a mechanism, through the Forum for the transfer of good practice, a complementary approach could be to link performance measurement more closely with other initiatives including the HSE value for money drive, which is outlined below.

The HSE Value for Money Programme

In its recent Statements of Strategy the HSE has committed to undertake qualitative and quantitative analysis of value for money in order to identify

- Cost containment measures — quantitative savings in terms of reduced costs e.g. procurement savings.
- Productivity Gains — Quantitative savings by producing the same outputs for fewer inputs or more output for the same input.
- Value Gains — Qualitative gains in terms of the same or better outcomes for less or the same inputs.
- Benchmarking — Produce 'benchmarked' standards or resource levels relative to population and their needs and compare them alongside existing staffing and funding levels.
- Health Technology Assessments (HTA) — Inform decisions by identifying technologies that deliver best results for the resources allocated.

38.75 To date the primary focus of the value for money drive has been on cost containment measures. This has operated by identifying savings in consultation with business units. The value for money unit is likely to be hampered in its pursuit of value due to resource constraints following a recent recruitment ban.

Opportunity to Link Measurement and the Pursuit of Value

One obvious way of cost effectively driving the value agenda is to base some of the value for money unit's work on a rolling review of HealthStat indicators

- probing the reasons for the performance reported through independent examinations
- identification of norms and standards for future operations taking account of complexity
- quantifying potential efficiencies and validating their achievement.

Data Reliability

38.76 Reliable and accurate data is critical in ensuring the credibility of any performance measurement system. While tests carried out for the purpose of this audit, in general, confirmed the accuracy of the data, some reliability risks were identified during the visits to individual hospitals including the following

- While a HealthStat user guide has been developed, hospitals were interpreting the data required to calculate the indicators supplied differently in areas such as the definition of the number of beds and the definition of patients waiting for elective procedures.
- Data capture methods impacted on the capacity of hospitals to supply accurate information. This varied with the size of the hospital with large hospitals, in general, having well developed ICT systems whereas small hospitals relied largely on manual systems.
- In a small number of cases the data supplied was inaccurate. The HSE is confident that inconsistencies arising from errors in the data supplied are captured during reasonableness checks and are corrected before inclusion in HealthStat.
- In some cases, in particular in relation to the calculation of Whole Time Equivalent staff documentation was not retained and the data supplied could not be verified during the visits to the hospitals.

Opportunity to Improve Data Reliability

There is scope for more precise definition of the data to be supplied in calculating the indicators.

There is a need to enhance the reliability of data through the conduct of periodic audits to verify the accuracy of data supplied.

In the longer term, there is scope for the development of central protocols in relation to data collection, verification and reporting.

Planned Enhancements

38.77 The HSE intends to establish a Planning and Performance Directorate by the end of 2009. This Directorate will produce performance information for the hospitals funded by the HSE as well as those in the community services area. It will also have responsibility for ensuring that data produced is accurate and for further enhancing and developing integrated performance data.

38.78 Currently, an aggregate rating is given for each type of indicator (Access, Integration and Resource) and for the hospital overall. This aggregation does not weight the individual indicators. The HSE has stated that a weighting mechanism is being developed at present.

Overall Conclusions

The institution by the HSE of a system to monitor performance of its hospital network is an important first step in moving the organisation towards accountability for performance and facilitating improvement.

Overall, the audit review concluded that

- while some refinements have been suggested in this Chapter, the types of measure being reported are relevant to the hospital service
- the continued extension of relevant indicators to other parts of the service will be useful
- the periodic linking of indicators, perhaps as part of occasional in depth studies could help illuminate connections and dependencies, for instance, between access issues such as elective waiting times and factors such as the extent of daycase work performed or the extent of delayed discharges
- the basic material could be used to create more efficiency indicators such as cost per patient discharged and generally deepen the performance debate – moving further along a spectrum from output measurement to performance management.

Indicators must be based on a bank of consistent, reliable data. The review suggests that the HSE needs to ensure that all hospitals produce comparable base data to common standards.

Overall, the various measures and the range of performance they report could be a fertile area for exploration by the HSE's internal value for money unit.

Annex A The HealthStat System

A user guide describes each indicator and identifies the source of the underlying data, the reporting frequency, the owner of the data and the reporting entity. It also sets out the formula for calculating each indicator and the target set.

Indicators

HealthStat is based on three key types of indicator, Access, Integration and Resource. Access indicators measure waiting times for various health services, Integration indicators measure patient throughput and Resource indicators measure resource utilisation. The indicators included under each type are set out in Figure 142.

Figure 142 Indicators included in HealthStat

Access	Waiting Times for Elective Procedures
	Waiting Times for Admission from Emergency Department
	Waiting Times for Out-patient Clinics
Integration	Average Length of Stay
	Day Case Rates
	Delayed Discharge
	Admission on Day of Procedure
	Appropriateness of Admission and Care
	Discharges entered on HIPE
Resource	Finance and Resource Usage
	Activity v Service Plan for Total, Out-patients, Daycase and In-patients
	Staff WTE Variance from Staff Ceiling
	Percentage Hours Lost Through Absenteeism
	Distribution of Staff
	Consultant v NCHD Ratio
	Allied Healthcare Professionals Activity (e.g. Physiotherapists)
	Hospital Diagnostic Activity per relevant Staff WTE
	Patients as a Percentage of Out-patient Clinics
	Public : Private Split of Activity
	Day Case as a Percentage of Total Activity

Targets were set by the HSE based on a variety of sources. International targets informed nine indicators and specific national targets were set for eight others. Where international or national targets did not exist for indicators, two in all, the best performance being achieved in Ireland was selected as the target. This applied to indicators such as average length of stay and allied healthcare professional activity.

At the reporting stage, a 'traffic light' system is used to rate performance in relation to each indicator. Performance within 15% of the target signifies very good performance and this is represented with a green light. A deviation from target of between 15% and 35% is rated as average performance with room for improvement and is assigned an amber light. Performance of 35% or more below the target is categorised as unsatisfactory performance requiring urgent attention and this is demonstrated by a red light. An aggregate rating is given for each type of indicator (Access, Integration and Resource) and for the hospital overall.